ALERT TODAY — ALIVE TOMORROW

Duluth, Winnipeg & Pacific Railway

BE ALWAYS CAREFUL — CANADIAN NATIONAL — WORK SAFELY

TIME 30 TABLE

BE ALWAYS CAREFUL — CANADIAN NATIONAL — WORK SAFELY

Taking effect at 12:01 a.m., Sunday, April 26, 1953

GOVERNED BY CENTRAL STANDARD TIME

☛ CHECK DAYS OF WEEK WITH CARE

For the Information and Government of Employees Only

Read Special Rules and Instructions Carefully; Important Changes Have Been Made

The Superior Direction is East or South, and Eastward or Southward Trains are Superior to Trains of the Same Class in the Opposite (Inferior) Direction

DESTROY ALL FORMER TIME TABLES

The Company's Operating Rules are Printed Separately in Book Form. Employees Whose Duties are Prescribed by These Rules Must Have A Copy of Them Accessible and A Copy of the Current Time Table, and Supplements thereto if Any, With Them While on Duty

J. R. McMILLAN, VICE-PRESIDENT, WINNIPEG, MAN.

F. H. KEEFE, GENERAL MANGER, WINNIPEG, MAN.

R. A. CRAVEN, GEN. SUPT. TRANSPORTATION, WINNIPEG, MAN.

T. S. SULLIVAN, GENERAL SUPERINTENDENT, WINNIPEG, MAN.

F. MUSGRAVE, SUPERINTENDENT TRANSPORTATION, WINNIPEG, MAN.

Taft Subdivision Footnotes

1. *Times shown at Duluth are for convenience only and do not convey any authority on N. P. Ry. or on C. St. P. M. & O. Ry.
2. Trains are governed by time table and rules of the C. St. P. M. & O. Ry. between C. St. P. M. & O. Ry. station Duluth and Garfield Avenue, and by time table and rules of the N. P. Ry. between Garfield Avenue and D. W. & P. Jct.
3. The main track switch at West End, West Duluth Yard is in normal position when set for the yard.
4. Positive stops for inspection of freight trains:
   Eastward.....Shaw
   Westward.....Bartlett
5. Rule 9 of **special rules governing the handling of air brakes** applies to eastward freight trains between Simar and West Duluth Yard.
6. The switch at South Loop is in normal position when set for direct movement to West Virginia.
7. No. 19 must obtain terminal clearance at West Duluth.
8. Trains 19 and 20 will not register at West Duluth Yard but will leave a register ticket there.

Speed Restrictions

Passenger trains: Between West Duluth and Nopeming.....30 miles per hour.
Passenger trains: Between Nopeming and Virginia.....40 miles per hour.
Freight trains: Between West Duluth Yard and Harney.....20 miles per hour.
Freight trains: Between Harney and West Virginia.....25 miles per hour.
All trains: Through tunnel, mileage 7.4.....15 miles per hour.
All trains: Bridge 52.7 50% Consols, 52/53% Mikados.....10 miles per hour.
All trains: Over public crossings at grade at Second, Third and Eighth Streets South Loop Track, Virginia.....5 miles per hour.
All Trains: Through interlocking limits.....25 miles per hour.

YARD LIMIT SIGNS are located as follows:

Virginia, West Virginia.....1530 feet east of switch at South Loop.
Shaw.....5300 feet east of siding east switch. 5300 feet west of siding west switch.
Bartlett.....5300 feet east of siding east switch. 5300 feet west of siding west switch.
Simar.....3500 feet east of siding east switch. 3000 feet west of siding west switch.
D. W. & P. Jct.....4910 feet west of yard west switch. West Duluth Yard.

Railway Crossings at Grade

With D. M. & I. R. Ry.	Mileage	66.8	Automatic Interlocked
With D. M. & I. R. Ry.	"	70.7	Interlocked
With D. M. & I. R. Ry. (Loop Track)	"	73.0	Non Interlocked
With D. M. & I. R. Ry. (Loop Track)	"	73.6	Non Interlocked

Commercial Spurs

	Mileage	Capacity	Connected
Wentworth	41.4	17 Cars	east and west

Tunnel

Mileage 7.4, length 520 feet, width 16 feet, clearance from top of rail, 22 feet.

WESTWARD TRAINS Inferior Direction		Miles From D. W. & P. Jct.	Symbols	TAFT SUBDIVISION	Train Order Office or Telephone	Office Signals	Car Capacity		EASTWARD TRAINS Superior Direction		
Third Class	First Class						Sidings	Other Tracks	First Class	Fourth Class	Fourth Class
417 Time Freight Daily	19 Psgr. Daily Ex. Sun.			STATIONS					20 Psgr. Daily Ex. Mon.	418 Time Freight Daily	936 Freight Daily
	L 7.15PM	3.6	K	*DULUTH (C. St. P. M. & O. Station)					A 9.05AM		
				1.1							
		2.5		GARFIELD AVE.							
				2.5							
	7.35	0.0		D. W. & P. JCT. Jct. with N. P. Ry. Interlocked					8.45		
				0.7							
	s 7.39	0.7	R	WEST DULUTH	D	WN			s 8.43		
				1.1							
L 9.00PM	7.42	1.8	CKWZ	WEST DULUTH YARD	DN	DU		Yard	8.40	A 8.15AM	A12.15AM
				7.6							
	f 7.58	9.4		NOPEMING	P			14	f 8.24		
				3.1							
10.00	s 8.05	12.5		HARNEY	P		41		s 8.18	7.35	11.35PM
				7.3							
10.25	f 8.19	19.8	YZ	SIMAR	DN	SI	89	75	f 8.04	7.16	11.15
				4.6							
10.35	f 8.26	24.4		TWIG				16	f 7.57	7.06	10.57
				2.6							
10.46	f 8.31	27.0	WZ	BARTLETT	P		90		f 7.52	6.59	10.46
				6.2							
11.00	f 8.41	33.2		TAFT	DN	FR	42		f 7.42	6.45	10.15
				8.4							
11.22	f 8.56	41.6	WZ	SHAW	P		40		f 7.28	6.25	9.55
				5.0							
11.36	f 9.05	46.6		WHITEFACE			40		f 7.19	6.00	9.30
				5.1							
11.50PM	f 9.14	51.7		MELRUDE	P		94	4	f 7.10	5.45	9.14
				4.4							
12.01AM	f 9.21	56.1		CENTRAL LAKES	P			10	f 7.02	5.30	8.35
				6.4							
12.15	f 9.32	62.5		PEARY			40		f 6.51	5.15	8.15
				6.7							
12.32	f 9.43	69.2		DEFOREST				5	f 6.40	4.55	7.55
				2.6							
12.40	9.50	71.8	Z	SOUTH LOOP					6.35	4.45	7.45
				1.5							
A12.45AM		73.3	CKW	WEST VIRGINIA	DN	WS		Yard		L 4.30AM	L 7.30PM
				2.2							
	A10.00PM	74.0	K	VIRGINIA	DN	DE		1	L 6.25AM		
Daily 417	Daily Ex. Sun. 19			CENTRAL TIME Rule 41 Applicable					Daily Ex. Mon. 20	Daily 418	Daily 936

Train Order Offices Are Open as Follows:

West Duluth, 8:00 A.M. to 12:00 Noon—1:00 P.M. to 5:00 P.M. and for No. 19, daily except Sunday.
West Duluth Yard, 3:00 P. M. to 11:00 P. M., daily.
Simar, 4:00 P. M. to 12:00 Midnight, daily except Saturday and Sunday.
Taft, 6:30 A. M. to 12:00 Noon—1:00 P. M. to 3:30 P. M., daily except Saturday and Sunday.
West Virginia—Continuous.
Virginia—Continuous.

J. Conery, Superintendent, Virginia, Minnesota

A. O. Hudson, Master Mechanic, West Duluth, Minnesota

Dispatchers office, Virginia, Minn. Telegraph Call "DE"

H. G. Engstrom, Chief Train Dispatcher

T. J. Plunkett, W. J. Mason, W. W. Blake, M. H. Jauhola, W. E. Heikkila — Train Dispatchers

E. F. Shepard, K. G. Erickson — Relief Train Dispatchers

WESTWARD TRAINS Inferior Direction					CUSSON SUBDIVISION			Car Capacity		EASTWARD TRAINS Superior Direction				
Fourth Class	Third Class	First Class	Miles From D. W. & P. Jct.	Symbols	STATIONS	Train Order Office or Telephone	Office Signals	Sidings	Other Tracks	First Class	Fourth Class	Fourth Class	Fourth Class	Fourth Class
513 Way Freight Mon., Wed., Fri.	417 Time Freight Daily	19 Psgr. Daily Ex. Sun.								20 Psgr. Daily Ex. Mon.	820 Freight Daily	514 Freight Daily	822 Freight Daily	418 Time Freight Daily
		L10.10PM	74.0	K	VIRGINIA	DN	DE		1	A 6.20AM				
					1.2									
L 7.15AM	L 2.55AM		73.3	CKW	WEST VIRGINIA	DN	WS		Yard		A 9.30AM	A 2.30PM	A 5.35PM	A 2.50AM
					0.9									
7.20	3.00	10.15	74.2	Z	NORTH LOOP					6.15	9.25	2.25	5.30	2.45
					8.3									
7.45	3.25	f 10.31	82.5		BRITT	DN	BR	44	12	f 5.59	9.00	2.00	5.05	2.21
					5.1									
8.00	3.38	f 10.41	87.6		FORSMAN	P		58		f 5.49	8.45	1.45	4.50	2.05
					3.7									
8.10	3.47	f 10.46	91.3		IDINGTON			33		f 5.43	8.35	1.35	4.40	1.55
					2.6									
8.25	3.54	s 10.52	93.9		ANGORA	DN	G	38	12	s 5.38	8.25	1.25	4.30	1.48
					6.1									
9.15	4.17	s 11.04	100.0	WZ	COOK	DN	CK	59	49	s 5.28	7.55	1.00	4.15	1.21
					4.3									
9.25	4.27	f 11.12	104.3		HALEY	P		40		f 5.18	7.40	12.35	4.05	1.06
					5.7									
10.00	4.42	s 11.22	110.0	YZ	GHEEN	DN	GH	60	40	s 5.09	7.25	12.25	3.50	12.53
					4.6									
10.10	5.01	f 11.30	114.6		GLENDALE	P		59		f 5.01	7.12	12.10	3.37	12.38
					1.4									
10.45	5.05	s 11.35	116.0	Z	ORR	DN	DO		18	s 4.58	7.08	12.06PM	3.33	12.31
					3.4									
10.55	5.14	f 11.41	119.4		CUSSON	P			17	f 4.52	7.00	11.57AM	3.25	12.21
					1.9									
11.00	5.18	f 11.44	121.3		ELSDON			62		f 4.49	6.55	11.50	3.20	12.15AM
					7.1									
11.30	5.40	f 11.59PM	128.4	CWZ	ASH LAKE	P		56		f 4.36	6.35	11.30	3.00	11.59PM
					5.4									
11.45	5.51	f 12.07AM	133.8		KINMOUNT	P		53		f 4.27	6.15	11.15	2.40	11.35
					4.1									
11.55AM	6.03	f 12.14	137.9		ARBUTUS			59		f 4.20	6.03	11.05	2.30	11.25
					4.9									
12.05PM	6.17	f 12.22	142.8		HEISIG	P		59		f 4.12	5.40	10.50	2.15	11.10
					5.9									
12.30	6.33	s 12.34	148.7		RAY	DN	AY	49	6	s 4.01	5.25	10.35	2.00	10.55
					7.6									
12.50	6.55	s 12.48	156.3		ERICSBURG	P		53	2	s 3.47	5.05	10.15	1.40	10.35
					8.1									
1.20	7.25	1.03	164.4	YZ	FALLS JCT.				Yard	3.32	4.45	9.55	1.20	10.15
					Jct. with M. D. & W. Ry.									
A 1.25 L 1.45	A 7.30 L 7.40	A 1.05 L 1.25	165.2	ZKW	0.8 RANIER	DN	RI	85	15	L 3.30 A 3.10	L 4.30 A 3.50	L 9.30 A 8.50	L 1.05 A12.35	L 9.35 A 7.50
A 1.55PM	A 7.45AM	A 1.30AM	167.0	RZ	1.8 DULUTH JCT.	P				L 3.05AM	L 3.45AM	L 8.45AM	L12.30PM	L 7.45PM
					Jct. with C. N. Rys.									
Mon., Wed., Fri.	Daily	Daily Ex. Mon.			CENTRAL TIME Rule 41 Applicable					Daily Ex. Mon.	Daily	Daily	Daily	Daily
513	417	19								20	820	514	822	418

Train Order Offices Are Open As Follows:

Virginia—Continuous.
West Virginia—Continuous.
Britt, 6:30 A. M. to 11:30 A. M.—12:30 P. M. to 3:30 P. M. Daily except Sunday.
Angora, 6:30 A. M. to 11:30 A. M.—12:30 P. M. to 3:30 P. M. Daily except Sunday.
Cook—Continuous.
Gheen, 9:00 A. M. to 5:00 P. M.—10:45 P. M. to 6:45 A. M. Daily except Sunday.
Orr, 8:00 A. M. to 4:00 P. M.—11:00 P. M. to 7:00 A. M. Daily except Sunday.
Ray—9:00 A. M. to 5:00 P. M.—9:30 P. M. to 5:30 A. M., daily.
Ranier—Continuous.

Cusson Subdivision Footnotes

1. D. W. P. trains originating at Fort Frances must obtain terminal clearance O. K.'d by D. W. P Dispatcher and will not obtain terminal clearance at Duluth Jct.
2. No. 20 must obtain terminal clearance at Ranier.
3. Nos. 19 and 20 will stop on flag at Leander Spur to entrain and detrain passengers.
4. Positive stops for inspection of freight trains:
   Eastward.....Ash Lake and Cook
   Westward.....Cook and Ash Lake
5. The switch at North Loop is in normal position when set for through movement to West Virginia.
6. Draw bridge, mileage 165.4, will not clear a man riding on top or sides of cars or engines.
7. Trains 19 and 20 only will register at Duluth Junction.

Speed Restrictions

Passenger trains	40 miles per hour.
Freight trains	25 miles per hour.
All trains: Bridge mileage 74.2 loop track	10 miles per hour.
All trains: Through interlocking limits	25 miles per hour.
All trains: Mileage 73 to mileage 76	20 miles per hour.
All trains: Virginia to North Loop	20 miles per hour.
Eastward freight trains: Draw bridge mileage 165.4	5 miles per hour.
Westward passenger trains: Draw bridge mileage 165.4	20 miles per hour.

YARD LIMIT SIGNS Are Located as Follows:

Duluth Jct.	2000 feet east of C. N. R. main track switch.
Ranier	4455 feet west of siding west switch. 4000 feet east of Falls Jct. yard east switch.
Ash Lake	3850 feet west of siding west switch. 2000 feet east of siding east switch.
Orr	2545 feet west of west switch. 4250 feet east of east switch.
Gheen	3670 feet west of siding west switch. 3200 feet east of siding east switch.
Cook	2350 feet west of siding west switch. 2930 feet east of siding east switch.
Virginia West Virginia	6865 feet west of switch at North Loop.

Railway Crossings at Grade

With G. N. Ry. (Main Track)	Mileage	74.1	Automatic Interlocked
With D. M. & I. R. Ry. (Main Track)	"	74.5	Interlocked
With G. N. Ry. (Loop Track)	"	74.6	Interlocked
With D. M. & I. R. Ry. (Loop Track)	"	74.9	Non Interlocked

Commercial Spurs

	Mileage	Capacity	Connected
Forsman Spur	87.5	5 Cars	east
Leander	95.9	6 Cars	west
Haley Spur	105.0	3 Cars	east
Gundersen	115.7	13 Cars	east and west
Brown	124.2	50 Cars	east and west
Brewery	166.1	5 Cars	west

SPECIAL RULES GOVERNING THE HANDLING OF AIR BRAKES

TO ALL EMPLOYEES

1. Employees must be thoroughly conversant with the Brake and Signal Equipment and Instructions issued in connection therewith, and must report promptly any trouble or defects.

RESPONSIBILITY

2. The Engineman and Conductor are responsible for knowing that the prescribed test of train brakes has been made before starting from terminal stations, also from any point where consist of train has been changed or hose uncoupled. Engineman must personally handle brake valve when making all tests.

TERMINAL, ROAD AND RUNNING TESTS

3. These must be made strictly in accordance with the instructions contained in Form GT 8914, issued June 1941.

DOUBLE HEADING, ASSISTING AND PUSHER SERVICE

4. When two or more engines are used in any train all hose must be coupled, and brakes tested and operated from the leading engine. Maximum air pressure must be maintained on all engines, and brake valve cut-out cocks closed on all except the leading engine. In case of the leading engine giving up the train short of the destination of the train, a test of the brakes must be made to see that the same are operative from the engineman's valve of the engine remaining with the train.

OBSERVING AIR GAUGES

5. Air gauges on engines and cabooses must be observed frequently to see that maximum pressure is being maintained.

SETTING OUT CARS

6. When cars are set off at any point between terminals, auxiliary reservoirs must be bled before the hand brakes are applied.

STANDING ON GRADES

7. When the engine, either with or without cars, is to be uncoupled from the train on a grade, a sufficient number of hand brakes must first be applied to hold the portion of the train to be left standing. After recoupling, hand brakes must not be released until it is known that the train air brake system is fully charged.

CALLING FOR BRAKES

8. A call for brakes when running must be promptly responded to by each Trainman opening a Conductor's valve and then applying hand brakes.

RETAINING VALVES

9. Retaining valves must be used when descending the grades designated in special instructions.

OPERATIVE BRAKES

10. All trains must have 100% of brakes operative when leaving terminals, except in case of emergency, and must not be run with less than 85% at any time. When cars with brakes cut out are moved in trains, not more than two of such cars shall be handled together unless they are at the rear of the train ahead of the caboose.

GENERAL SPEED RESTRICTIONS

Where a speed restriction is prescribed either by time table, train order or bulletin, specified speed must not be exceeded in any one mile.

Unless further restricted by train order or special instructions the following speed restrictions must be observed:

	Miles Per Hour
Engines running tender first (except specially constructed suburban engines)	20
Yard engines under steam	20
Light engines	30
Engines from which engine truck, pony truck, or all side rods have been removed	15
Yard engines not under steam	15
Disabled engines from which three or more side rods have been removed on one or both sides, either dead or under steam	15
Dead engines just out of shop after repairs, over first Subdivision	15
Disabled engines with main rod only disconnected but with side rods on all wheels, dead or under steam, either light or hauling train	25
Trains handling dead road diesel freight engines designed for maximum speed of sixty miles per hour or over	50
Trains handling other dead diesel engines, no restriction unless specified by train order.	
Trains handling dead engines other than those specified above	25
Trains handling pile drivers, steam shovels, hoist cranes, wrecking cranes (except when moving to derailments) steam ditchers or drag lines loaded on flat cars (see item No. 2, special instructions)	20
Trains picking up mail at catch posts	20
Spreaders in service (see item No. 11, special instructions)	15

SPECIAL INSTRUCTIONS

1. Standard Time will be transmitted daily from 9.58 A. M. until 10.00 A. M. Central Standard Time.

2. Wrecking cranes handled in any trains must not be moved at speed exceeding the following—

Where speed restriction for freight trains is forty miles per hour or over—restriction thirty-five miles per hour.

Where speed restriction for freight trains is twenty-five to, but not including forty miles per hour—restriction twenty-five miles per hour.

Where speed restriction for freight trains is less than twenty-five miles per hour—restriction twenty miles per hour, or as much below this as is necessary to safety.

Care must be exercised in handling on down-grades and rounding sharp curves. During all movements in trains, boom of wrecking cranes must be secured.

Pile drivers, steam shovels, hoist cranes, rail loaders or any other work equipment moving on its own wheels must not be moved in trains unless the boom is disconnected, the travel mechanism put out of gear, and engine and boiler blocked to car and secured by safety chains which must also be wired. This will not necessitate the taking off of cable, but ample slack must be left in cable to allow for free movement of cars.

Unless further restricted by special instructions, trains handling such equipment must not exceed twenty miles per hour. Speed must always be regulated to safety limit when rounding curves.

When possible at least three cars must be placed between this equipment and engine handling train.

Pile drivers, steam shovels, scale test cars, boarding, advertising or other cars occupied by employees or passengers, must be placed immediately ahead of caboose when handled on freight or work trains, and immediately ahead of passenger equipment when handled on mixed trains, except that when occupied boarding cars are equipped with steel underframes they may be handled in any location in work, freight, or mixed trains.

Jordan spreaders handled in trains must have wings secured and must, whenever possible, be headed in the direction of train's movement, and speed restricted to twenty-five miles per hour. In cases in which these machines must be handled with rear-end forward speed restriction of twenty miles per hour must be observed.

Caterpillar machines of all types, hoists, drag lines, or any other equipment which is moved on cars in trains must be loaded and secured in accordance with existing A. of A. R. rules governing the loading of commodities on opentop cars, Supplement No. 2, effective August 1, 1949.

Conductors will be held responsible for strict observance of this rule.

Exceptions covering movements in work trains: When any of the above equipment is moved in work trains to or from or at point of work, the above requirements as to securing of equipment or method of loading do not apply. In such movements the equipment must be secured and handled in a manner that will ensure of safety. This exception does not apply to wrecking cranes which must, in all cases, be secured and moved as required in paragraph one of this rule.

3. Freight trains must be inspected within thirty (30) miles after leaving a Terminal. Thereafter an inspection must be made at least every thirty (30) miles. On subdivisions where positive inspection points are shown, they will govern instead of the foregoing, except that where a stop is made and inspection requirement is complied with at the station immediately in advance of the one shown as an inspection point, it will not be necessary to stop again at such designated inspection point for inspection.

4. Before moving or coupling on to boarding outfit cars, snow plows, flangers or other units of work equipment and dead engines, stop must be made and persons in, on, or about them must be warned to avoid injury.

5. Unless otherwise directed, dead engines handled in trains must be handled with the pilot end ahead, must be placed at least five cars from the train engine, and if more than one dead engine is handled in train they must be separated by at least five cars.

These instructions do not apply to movement of dead diesel-electric locomotives which may be handled coupled together.

6. Following rules are prescribed for the marshalling of passenger trains:

There shall be a buffer car between the locomotive and first coach carrying passengers. In local and mixed train services a combination baggage or express car with passenger compartment shall be considered a buffer car within the meaning of this rule, if the baggage or express end of such car is next to the locomotive.

No wooden mail, express or baggage car occupied by any employee or other person shall be marshalled between the locomotive and steel equipment, or between other steel units.

All passenger trains shall be marshalled in such a manner that no wooden coaches carrying passengers are placed between cars of steel construction and that all wooden coaches are placed on rear of the train.

A car or coach with steel underframe shall not be deemed to be a wooden car or coach within the meaning of this Order.

7. Air brakes must be in service while switching occupied passenger equipment, also when switching equipment on or off occupied passenger equipment. Before making a coupling to or between passenger equipment, any of which contains passengers stop must first be made not less than six and not more than twelve feet from the point where coupling is to be made.

When auxiliary cranes, hoists, pile drivers, snow plows, spreaders, passenger coaches, or other equipment are placed on turn-tables, air brakes or hand brakes must be applied or such equipment properly blocked before engine is uncoupled, to ensure full control and safe handling.

8. Train Register Check, Form 736, must be made out and delivered to the Engineman by the Conductor of every train before leaving a station where information required by Rule 83 is obtained from Train Register.

9. Whenever it is necessary after arrival for a mixed train to back up the passenger cars away from a station platform in order to perform switching, unloading of freight, or other service, a second stop must be made at such platform before final departure if there are any passengers to detrain or entrain.

11. When spreaders are being used for spreading snow, ballasting and other operations, the speed of the train must not exceed fifteen (15) miles per hour, and frequent inspection must be made of the equipment to see that everything is in order. (Refer to Rule 110.)

12. Backup air hose equipped with air whistle must be in service on rear platform of all passenger trains moving backwards and whistle sounded approaching public crossing at grade or when necessary to warn persons crossing or approaching the track.

13. When cars are left on a main track under train order protection torpedoes must also be placed a sufficient distance on each side of the obstruction as an additional warning to approaching trains, and should these be exploded by other than the train removing the obstruction they must be replaced by them.

14. In all cases of derailments or accidents to passenger cars lighted with Pintsch or Commercial Acetylene Gas, the supply of gas must be shut off, if possible, by closing the stud valves in storage tanks underneath the body of car. Key for this purpose is located in the gauge box underneath the car.

15. Following regulations will govern the operation of diesel road locomotives in back-up movements: Single "A" Units, or "A" and "B" Units with latter the leading unit, Engineman and Fireman will remain in operating cab.

Multiple, with "A" Unit at each end—where conditions are such as not to permit safe movement without Engineman and Fireman being at the leading end, they will both transfer to and operate from leading end in direction of movement.

To provide advanced warning to maintenance of way forces during daylight hours diesel locomotives in road service must burn their headlight at full power.

16. Automatic Interlocked Railway Crossings at Grade. Rules 501 — 519 govern "Approach Signals." Rules 601 — 681 govern "Home Signals." When complying with Rule 672, Trainmen must unlock box marked "DW&P" on signal case at crossing and after assuring himself that no conflicting movement is evident, push button. This will clear signal after the expiration of a predetermined time interval providing there is not an open switch, or broken rail ahead or between home signals of the intersecting railway. If home signal does not clear in the predetermined time, train may proceed under flag protection. Signal failures must be reported to Chief Train Dispatcher from first open telegraph office.

Switch at North Loop is equipped with electric lock and must be operated in accordance with instructions posted at the switch.

INSTRUCTION TO PASSENGER TRAIN CONDUCTORS AND TRAINMEN

On passenger and mixed trains, vestibule doors and platforms of coaches must be closed between stations. Tail gate, chain or bar at the rear of last car on train must invariably be kept closed and securely fastened, and the appliance at the rear of the last passenger car must also be kept closed and securely fastened when a baggage car, flanger or caboose is immediately behind it.

On Passenger and Mixed Trains, when the car immediately ahead of the first passenger-carrying car is of the non-diaphragm type, the tail gate, chain, or crossbar at the forward end of the passenger-carrying car should be kept in closed position while the train is in motion.

Toilet doors must be locked before arrival at terminals or important stations.

INSTRUCTIONS GOVERNING MOVEMENT OF TRAINS OVER SPRING SWITCHES

Spring switches are indicated by signpost with letters "S. S."

Do not operate spring switches by hand until the points are closed. Heavy springs are compressed when wheels force the switch points open. If handle of switch stand is released with springs compressed, the force in the spring will be transmitted to the trainman and may cause injury. If absolutely necessary to deviate from the above instructions, trainmen must exercise great care to keep away from the handle when it is being released.

Trailing movements may be made over spring switches without operating the switch by hand.

PERSONAL INJURIES

1. Whenever passengers or employees are injured, everything must be done to care for them promptly. If they are able to be moved, take them for treatment to the nearest place at which the Company has a surgeon. If they cannot be moved, call the nearest Company surgeon. If the case is urgent and the Company surgeon cannot be immediately procured, the conductor, agent or officer in charge is authorized to call the nearest surgeon available to administer first aid and care for the patient until the Company surgeon can take charge of the case.

No surgical operation must be performed until the arrival of the Company surgeon unless it may be required for the immediate safety of the patient.

2. In cases of serious accidents to trains, conductors, after making everything safe, must give their undivided attention to the care and comfort of their passengers, especially to those who are injured. Bedding and linen may be taken from sleepers for this purpose, the conductor keeping careful account of all material so taken, and its return or safe keeping attended to; and, when necessary, injured persons may be put in the sleepers.

When a number of persons are injured, the service of competent surgeons in the vicinity should at once be secured, and every possible effort made to care for the injured, the Company Surgeon being notified by wire to come immediately to the place of the accident.

3. If persons are killed in train operation, the trainmen who are aware of the circumstances may remove the bodies from the railway right of way and transport same to the nearest station, if possible within the same municipality, where the Coroner should be notified immediately.

If a body is found on or near the right of way by sectionmen or train crew, it is permissible to make an examination of the body to ascertain if any signs of life are present, and, if so, immediate first aid should be given and the nearest available doctor called, or, if able to be moved safely, the patient taken to his office. If the person is dead and no delay in traffic will be caused, a guard should be left with the body until the Coroner is notified and instructions obtained by him as to disposal. This applies particularly to cases where there may be a question of foul play, poisoning, etc.

4. A report of all accidents must be made, and immediately sent by wire to officers stated on Form 3903, giving all information.

In reporting accidents to trains carrying passengers, conductors should give the correct names of the injured and uninjured, the addresses and destinations of all persons on the train, and of the injured, the extent of their injuries. This information Must be obtained on form 3904.

5. Every effort must be made to procure the names and addresses of all persons, outsiders as well as employees, who witnessed the accident, especially when persons are injured within the corporate limits of any city, town or village, or when crossing the tracks at a public highway.

6. In every case of personal injury in any Department, a full and complete report must be made at once by every employee immediately present, no matter whether he considers his statement of importance or not, answering every question as fully as possible.

7. When persons are injured by an accident which may have been caused by defective appliances, tools or machinery, the car or appliance, tool or machinery must be immediately examined by the person in charge to ascertain its condition, and report made of the inspection, giving the numbers and initials of cars examined, with names, occupation and addresses of the persons making the inspection. This inspection must be made before the car or engine leaves the place where the accident occurred, and afterwards at the first district terminal by the inspector, foreman or Master Mechanic at such point, the Superintendent to notify such person of the necessity of making such examination. When an accident is caused by the breaking of machinery, tools, appliances or rails, the broken parts must be so marked as to be readily identified and immediately turned over to the Superintendent.

8. This Company will not recognize any responsibility for board, medicine, nursing or surgical attention furnished by other than Company Surgeons, except for the emergency service required under Rules 1 and 2, unless authorized by the Superintendent, General Claim Agent, or a general officer of the Company, and when so authorized the General Claim Agent should at once be notified.

INJURIES TO PERSONS OTHER THAN PASSENGERS AND COMPANY'S EMPLOYEES

1. In assisting in providing medical relief for persons injured, the Company has in view humanitarian considerations and desire for the general welfare of the service, but such action is not to be regarded as an admission or evidence of liability.

2. In performance of this humanitarian duty in cases of injury to persons other than passengers or employees while upon the Company's premises, the assistance is to be limited to rendering first aid only. First aid means such medical and surgical services as are known to relieve the immediate danger or suffering of the injured person, and to make it safe and comfortable for such person to be removed from the Company's premises. Under no circumstances should it mean the performance of surgical operations or elaborate surgical dressings such as setting fractures, etc. The further disposal of the injured person must rest with the Transportation Officer on duty. This officer is usually the Chief Train Dispatcher of the Division.

3. The employees of the Company immediately handling the case should make every effort to see that the injured person is given in charge of friends or the Municipal Authorities.

4. Where the injuries are of such a character as to require hospital treatment this should be arranged for by the friends or the Municipal Authorities.

5. Where it is impossible to reach friends or Municipal Authorities such as in cases occurring in the night or in rural districts, the Chief Transportation Officer on duty may arrange for the injured person to be taken by train to the nearest general hospital. At the same time all concerned, including the Hospital Authorities, should be advised of the circumstances under which application for admission is being made and particulars of this should appear on the casualty report.

6. The instructions of the Transportation Officer should be given in writing, or by telegraph if necessary, so that a copy may accompany the medical accounts for first aid or such other medical services as may be authorized, for the information of our Chief Medical Officer and the Auditor.

7. Employees of the Company, whether authorized to do so or not, when calling for the services of a physician, should notify said physician that the call is for first aid duty only, and will not include services rendered subsequent to the first dressing on the Company's premises or adjacent thereto.

8. The services of a Company's physician must be requisitioned when practicable.

9. In cases of accidents proving immediately fatal, see instructions under heading "Personal Injuries," paragraph three.

RULES FOR FIRST AID TREATMENT OF INJURIES

REMEMBER—Keep the patient lying down.
Locate all injuries. Remove clothing only where necessary.
Treat most dangerous conditions first in the following order:
(1) Stoppage of breathing. (Apply artificial respiration.)
(2) Severe bleeding. (Use a constrictive bandage.)
(3) Broken bones. (Tie to body to prevent movement.)
Always Treat for Shock. (Keep patient warm. If possible, give stimulant except in severe bleeding or head injury.)
Do not more patient unnecessarily,
If necessary, send for doctor or ambulance.

IMPORTANT—Do not let bleeding go unchecked.
If constrictive bandage is used, loosen every 15 to 20 minutes.
Do not neglect treatment for shock.
Don't give liquids to an unconscious person.
Avoid any possible further injury to patient.

SEVERE HEMORRHAGE (BLEEDING)

With a sterile gauge pad or the inside fold of a clean handkerchief, apply pressure **Directly** over the wound. Hold dressing in place with a firm bandage.

If bleeding does not stop, apply additional pads on top of the first one. If this does not control the hemorrhage, place a constructive bandage above the wound tight enough to stop further bleeding using a triangular bandage, handkerchief, tie, rope, etc. Be sure to loosen this constrictive bandage every 15 to 20 minutes and retighten if necessary.

Secure medical assistance as soon as possible.

SLIGHT HEMORRHAGE (BLEEDING)

Expose wound.
Do not disturb blood clots.
Clean wound of any loose and easily removed foreign objects.
Apply an antiseptic.
Apply a sterile dressing andb andage firmly.

FRACTURES (BROKEN BONES)

Unless life is in immediate danger from some other cause, attend to the fracture **On the Spot,** keeping in mind the following rules:

Steady and support the injured parts.

In the case of a fractured arm or leg, place it with great care in as natural a position as possible, without using force or increasing pain.

To prevent movement of broken bone, tie firmly the injured arm to body or the injured leg to good leg with padding and bandages.

INSENSIBILITY (UNCONSCIOUSNESS)

If face is pale, keep head low and turned to one side.
If face is flushed or if head is injured—raise head slightly turned to one side.

If both conditions, loosen clothing, allow an abundance of fresh air and make sure air passage is clear.

Give no fluid by mouth while unconscious.
Cover up, keep warm and send for a doctor or ambulance.

BURNS AND SCALDS

Do Not Break Blisters

Exclude air by covering with clean dry dressing and secure with bandage. If possible, give large quantities of warm fluids.

Keep patient warm and obtain medical assistance as soon as possible.

CLASSIFICATION AND PERCENTAGE RATING OF LOCOMOTIVES

CANADIAN NATIONAL RAILWAYS

(Western Region)

Class	Type	Engine Nos.	Superheater	Rating
J- 1-a	Pacific	5000-5003	S	35%
J- 4-a	"	5080-5083	S	34%
J- 4-b	"	5085, 5088, 5089	S	34%
J- 4-c	"	5090-5099	S	34%
J- 4-e	"	5125-5141	S	38%
J- 4-f	"	5145-5150	S	38%

DULUTH, WINNIPEG AND PACIFIC RAILWAY

Class	Type	Engine Nos.	Superheater	Rating
M- 8-a	Consolidation	1981-1984	S	44%
N- 2-a	"	2455, 2458-2460, 2464	S	50%
N- 2-6	"	2466, 2472, 2475, 2478, 2479	S	50%
S- 1-F	Mikado	3425	S	52%

REGIONAL MEDICAL OFFICER

Winnipeg, Man. ..... *Dr. Emmet Dwyer

MEDICAL DEPARTMENT

Virginia, Minn.	Chief Surgeon	*Dr. E. N. Peterson
	District Medical Officers	Dr. W. S. Neff
		Dr. H. B. Cope
		Dr. O. Benell
		Dr. David A. Sher
		Dr. J. R. Pierce
		Dr. E. A. Johnson
		*Dr. H. E. Law
West Duluth, Minn.	District Medical Officers	*Dr. O. L. McHaffie
		Dr. Karl Emanuel
		Dr. S. N. Litman
		Dr. A. O. Swenson
International Falls, Minn.	Surgeon	Dr. F. H. Walter
Cook, Minn.	Surgeon	Dr. William C. Heiam

*Also Eye, Ear and Physical Examiners.

HOSPITALS

Virginia, Minn. ..... Municipal Hospital

Duluth, Minn. ..... St. Luke's / St. Mary's

SPEED TABLE

Speed per Hour	1 Mile in Min. Sec.	Speed per Hour	1 Mile in Min. Sec.
5	12.	30	2.
10	6.	35	1.42
15	4.	40	1.30
20	3.	45	1.20
25	2.24	50	1.12

WATCH INSPECTORS

Name	Address	Location
L. J. Gish	320 Chestnut St.	Virginia, Minn.
Hursts Jewelry	301 North Central Ave.	West Duluth, Minn.
H. E. Wells	208 West 1st St.	Duluth, Minn.
D. Brockie		Fort Frances, Ont.

EQUATED TONNAGE RATINGS

GENERAL INSTRUCTIONS

1. The equated tonnage of any train is determined by multiplying the number of cars in the train by the car factor and adding the result to the sum of the tare and contents.

Example—(1) 42 Cars.....Total Gross Weight.....2100 Tons
Car Factor....10x42 Cars..... 420 Tons

EQUATED TONS...2520

(2) 84 Cars.....Total Gross Weight.....1680 Tons
Car Factor....10x84 Cars..... 840 Tons

EQUATED TONS...2520

2. The car factor is an allowance for frictional car resistance and varies on different subdivisions according to the ruling grade, the principle being that on low gradients the frictional resistance is a higher proportion of the total resistance than on steeper gradients. By use of the car factor the trainload is so adjusted that the resistance is the same for all trains of equal equated tonnage whether composed of fully loaded, partly loaded or empty cars.

3. Established ratings will be exceeded by 1% if by so doing another car can be handled in the train.

4. The equated ratings shown are "A" or fair weather. These ratings will be reduced as authorized by ratings "B" to "K" for temperature.

TONNAGE REDUCTIONS

TEMPERATURES	Weather Condition Modifications	
	RATING	Reduction in tonnage
To 25°F. above	A	Nil
24°F. above to 11°F. above (or bad rail)	B	5%
10°F. above to Zero	C	10%
Zero to 10°F. below	D	15%
11°F. below to 20°F. below	E	20%
21°F. below to 25°F. below	F	25%
26°F. below to 30°F. below	G	30%
31°F. below to 35°F. below	H	35%
36°F. below to 40°F. below	I	40%
41°F. below to 45°F. below	J	45%
46°F. below to 50°F. below	K	50%

The Chief Train Dispatcher will issue special instructions in case of storm or temperatures lower than those shown.

5. New engines or engines out of shops after receiving medium or heavy repairs will be loaded 20% light on first outward trip and 10% light on second Subdivision or return trip. Locomotive Foreman will advise Chief Train Dispatcher and Yardmaster in such cases.

6. Any other necessary adjustment in ratings shown herein will be made by the General Superintendent of Transportation.

7. When an engine of different capacity from those shown in the tables is used, the proper equated tonnage will be arrived at by taking the rating for the 100% engine and reducing this figure to the percentage rating for the engine in question. This is done by multiplying the equated tonnage of the 100% engine by the percentage of the engine in question and striking off the last two figures.

Example—To find the equated tonnage for a 38% engine.
Equated tonnage for a 100% engine = 5835.
5835 x 38 = 2217.30
Equated tonnage for 38% engine is therefore 2217

8. To determine proper tonnage for pusher, double-header or helper engines, unless special rating is given, add to equated rating of the first engine 100% of the equated rating in effect for each class of helper.

9. In making up trains, weights must be obtained by taking tare and contents from the waybill. When tare weights are not available, car weights may be taken as under:

Passenger Cars—4 wheel trucks	40 tons	Stock Cars	18 tons
Passenger Cars—6 wheel trucks (Baggage, Colonist and Coach)	70 tons	Hopper Cars	24 tons
		General Service Cars	23 tons
Passenger Cars—6 wheel trucks (Tourist, Sleepers, etc.)	87 tons	Steel and Steel Frame Gondola Cars	27 tons
		Steel Underframe Gondola Cars	20 tons
Express Refrigerator Cars	40 tons	Hart Convertible Cars	21 tons
Freight Refrigerator Cars	30 tons	Flat Cars	18 tons
Steel Automobile and Box Cars	25 tons	Depressed Flat Cars	28 tons
Steel Frame Automobile and Box Cars	21 tons	Caboose	20 tons
Wooden Frame Automobile and Box Cars	18 tons		

10. In computing tonnage, fully loaded cars of grain, coal, rails, ties, lumber, pulpwood, etc., for which weights are not shown on waybill, will be considered as carrying the marked carrying capacity of the car, except that where weight agreement weights are shown on way bills covering cars of pulpwood, such weights will govern.

11 When dead engines are included in a train, four times the car factor will be added to the actual weight of each engine.

12. The ratings given in the rating table are for the ruling grade; excess tonnage will be handled when it is to be set out short of or picked up beyond the ruling grade.

13. When an engine is unable to handle the authorized rating, a joint message, signed by Conductor and Engineman, will be sent to the Chief Train Dispatcher, advising the reduction made and giving the reason for same.

14. Yardmasters and Conductors will be held responsible for their trains being loaded to full authorized rating, less the proper reduction for weather or rail condition, when tonnage is available.

EQUATED TONNAGE RATINGS

Westward (Read Down)							Eastward (Read Up)					
Car Factor	44% Eng.	50% Eng.	52% Eng.	53% Eng.	100% Eng.		100% Eng.	53% Eng.	52% Eng.	50% Eng.	44% Eng.	Car Factor
TAFT SUBDIVISION												
						BETWEEN						
5	1115	1270	1320	1345	2540	**West Duluth** and **Harney**						
5	1920	2185	2270	2315	4370	**Harney** and **Simar**	10570	5615	5495	5285	4650	12
10	2730	3410	3545	3615	6820	**Simar** and **Virginia**						
CUSSON SUBDIVISION												
						BETWEEN						
6	1410	1600	1665	1695	3200	**Virginia** and **Britt**	3640	1930	1890	1820	1600	6
6	1830	2080	2165	2205	4160	**Britt** and **Forsman**	3640	1930	1890	1820	1600	6
6	1830	2080	2165	2205	4160	**Forsman** and **Ash Lake**	4000	2120	2080	2000	1760	6
9	2665	3030	3150	3210	6060	**Ash Lake** and **Ray**	4000	2120	2080	2000	1760	6
9	2665	3030	3150	3210	6060	**Ray** and **Fort Frances**	6060	3210	3150	3030	2665	9

HANDLING AND MARSHALLING CARS CONTAINING EXPLOSIVES AND CARS PLACARDED "DANGEROUS" AND "POISON GAS" IN TRAINS

General Instructions

Cars containing "Explosives Class 'A'," "Poison Gases or Liquids Class 'A' " and tank cars requiring "Dangerous" placards, must not be handled in a passenger train. Such cars may be transported in mixed trains but only at such times and between such points where there is no regular freight train service.

Cars placarded "Explosives," "Dangerous" or "Poison Gas" must have air and hand brakes in service.

Train and engine crews must be advised in writing of the presence and location in train of cars placarded "Explosives." At intermediate points, where crews change off or are relieved, this information must be transferred from crew to crew.

Cars placarded "Explosives" must not be placed in train next to: engine; occupied passenger; combination car or caboose except when occupied by gas handlers or military personnel accompanying shipments; car placarded "Dangerous" or "Poison Gas"; wooden underframe car; loaded flat car; open top car when lading extends above or beyond ends or sides; car equipped with automatic refrigeration of gas burning type; car containing lighted heaters, stoves or lanterns; car loaded with live animals or fowl occupied by an attendant.

A placarded loaded tank car must not be placed in train next to: engine (except when train consists only of placarded loaded tank cars); occupied passenger or combination car other than car occupied by gas handlers accompanying shipment; occupied caboose (except when train consists only of placarded loaded tank cars); car placarded "Explosives" or "Poison Gas"; wooden underframe car; loaded flat car; open top car when lading extends above or beyond ends or sides; car equipped with automatic refrigeration of gas burning type; car containing lighted heaters, stoves or lanterns; car loaded with live animals or fowl occupied by an attendant.

"A car containing Radioactive Material and placarded "DANGEROUS—CLASS D POISON" must not be placed in train next to cars placarded explosives or next to carload shipments of undeveloped film.

In the event of breakage of container, wreck, fire or unusual delay involving a shipment of radioactive material in cars placarded "DANGEROUS—CLASS D POISON" the car and any loose radioactive material must be isolated as far as possible from danger of human contact and no persons must be allowed to remain close to car or contents needlessly, until qualified persons are available to supervise handling. The Board, shipper and the Bureau of Explosives must be notified immediately.

Cars, buildings, areas, or equipment in which Class D Poisons have been spilled must not be placed in service or occupied until decontaminated by qualified persons.

In the event of accident involving a car containing radioactive material placarded "DANGEROUS—CLASS D POISON," the instructions contained in the Board's Circular No. 269 should be observed."

In the event of derailment or accident involving a car placarded "Explosives" or "Dangerous," instructions as contained in Bureau of Explosives Pamphlet No. 22 should be observed.

On Through, Local Freight Trains, and Mixed Trains, the Following Also Applies

In a freight train, or a mixed train, a car placarded "Explosives" shall, when length of train permits, be placed not nearer than the sixteenth car from both the engine, occupied passenger car or caboose, and when length of train will not permit, it shall be placed near the middle of train. When helper power is cut in, it must be separated from the helper by at least six cars. When a freight train is marshalled in "Blocks" or classification, such car shall be placed near the middle of the "block" in which moving, but not nearer than the sixth car from both the engine or occupied caboose. On local freight or mixed trains, performing pickup and/or set off service, it shall be placed not nearer than the second car from both the engine, occupied passenger car or caboose.

Placarded loaded tank cars in freight trains or mixed trains shall, when the length of the train permits, be not nearer than the sixth car from the engine or occupied caboose. When length of train will not permit, it shall be not nearer than the second car from the engine or occupied passenger car or caboose. This does not apply when train consists of loaded tank cars only.

Note—Car placarded "Poison Gas," or a car placarded "Explosives" and "Poison Gas" shall at all times be next to and ahead of the car occupied by the gas handling crews when accompanying such cars.

A car placarded "Explosives" shall at all times be next to and ahead of the car occupied by military personnel when accompanying such cars.

Switching Cars Placarded "Explosives" or "Dangerous"

A car placarded "Explosives" or "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 "Poison Gas." No freight car placarded "Explosives" or "Poison Gas" shall be coupled into with more force than is necessary to complete the coupling.

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.

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 crossing, nor in or alongside of passenger sheds or stations except for loading or unloading purposes.