Seconds	Miles	Seconds	Miles
per Mile	per Hour	per Mile	per Hour
40	90	62	58.1
42.4	85	63	57.1
45	80	64	56.3
46	78.3	65	55.4
47	76.6	66	54.5
48	75	67	53.7
49	73.5	68	52.9
50	72	69	52.2
51	70.6	70	51.4
52	69.2	75	48
53	67.9	80	45
54	66.7	85	42.4
55	65.5	90	40
56	64.3	100	36
57	63.2	120	30
58	62.1	144	25
59	61	180	20
60	60	240	15
61	59	360	10

CHICAGO, MILWAUKEE, ST. PAUL AND PACIFIC RAILROAD CO.

MILWAUKEE TERMINAL DIVISION

TIME TABLE No. 3

Taking effect at 12:01 A. M. Central Standard Time

Thursday, June 1, 1967

For the government and information of employes only

R. H. LOVE, Superintendent. R. A. HUMMER, Assistant Superintendent.

Q. W. TORPIN,
General Superintendent of Transportation.

D. O. BURKE, Assistant General Manager. L. V. ANDERSON, General Manager.

FIRST SUBDIVISION—WESTWARD 2 Capacity FIRST CLASS FIRST CLASS TIME TABLE 27 5 153 3 147X 149 239 55 No. 3 Distance from K. K. Bridge Telegraph calls C&NW C&NW C&NW C&NW June 1, 1967 Passenger Passenger Passenger Passenger Passenger Passenger Passenger Passenge Daily Ex. Sat. Sun. Other STATIONS Daily Ex. Sun. Daily Daily Daily Daily Ex. Sun. & Holidays only A.M. 11.44 P. M. A.M. 12.45 K. K. BRIDGE 10.12 Yard 0.0 1.46 7.25 WASHINGTON ST. 9.40 10.00 Yard 1.0 12.54 (Menomonee Drawbridge A10.20 A11.50 A12.59 A 1.53 s A. M. s A. M. s P. M. s P. M. A12.55 A 7.30 A 9.45 A10.05 S A. M. S A. M. S A. M. Yard DI 2.1

Passenger trains must not exceed maximum speed of 40 miles per hour, other trains 25 miles per hour.

MUSKEGO YARD

3.2

C. T. C. Is in use between K. K. Bridge and Milwaukee and is controlled by the Train Dispatcher at Milwaukee.

Yard

WH

- Two main tracks are in use between K. K. Bridge and Milwaukee. Beginning at the north the main tracks are numbered No. 1 and No. 2 main tracks.
- A. B. S. is in use between K. K. Bridge and Milwaukee.
- The Station Limits at Milwaukee extend from Menomonee Drawbridge on the east to Twelfth Street on the west. Between these points there is no superiority of trains and all movements must be made at reduced speed.
- Rule 83(B) does not apply at K. K. Bridge and Washington St. and does not apply to Eastward C&NW trains at Milwaukee.
- Holidays mentioned in schedules include New Years, Memorial Day, Independence Day, Labor Day, Thanksgiving and Christmas.
- Double track freight main tracks (located to the south of the No. 1 and No. 2 main tracks) and an A. B. S. on those tracks are in use between K. K. Bridge and Burnham Bridge at the east end of Muskego Yard.
- The west limits of the A. B. S. on the westward freight main track is just west of Reed Street Yard Office and 1000 feet east of Reed Street Yard Office on the eastward freight main track.

FIRST SUBDIVISION—EASTWARD

FIRST CLASS					TIME TABLE	FIRST CLASS					
56	4	152	24			No. 3	206	214	12	6	
Passenger	Passenger	C&NW Passenger	Passenger	Train Order Office Hours	SEE RULE 6-A	June 1, 1967	C&NW Passenger	C&NW Passenger	Passenger	Passenger	
Daily	Daily	Daily Ex. Sunday	Daily Ex. Sunday			STATIONS	Daily	Daily	Daily	Daily	
A.M. A 3.25	A.M. A 6.10	- N	A.M. A 7.55	No Office	PY	K. K. BRIDGE	—A. M.—	_A M _	A. M. A11.35	P. M. A 1.30	
		-A.M A 7.45		No Office	JPY	WASHINGTON ST.	A 9.01	A11.01			
3.20 A. M.	6.05 A. M.	7.40 A. M.	7.50 A. M.	Continuous	BFKPRWY	(Menomonee Drawbridge) MILWAUKEE	8.58 A. M.	10.58 A. M.	11.30 A. M.	1.25 P. M.	
				Continuous	BFKPQRTWYZ	MUSKEGO YARD					

Passenger trains must not exceed maximum speed of 40 miles per hour, other trains 25 miles per hour.

FIRST SUBDIVISION—WESTWARD 3 FIRST CLASS TIME TABLE 209 121 57 125 1 9 No. 3 Passenger C&NW Passenger C&NW Passenger

C&NW Passenger Passenger June 1, 1967 Passenger STATIONS Daily Daily Daily P. M. 10.08 P. M. 11.52 K. K. BRIDGE P. M. 11.10 WASHINGTON ST. (Menomonee Drawbridge)

MILWAUKEE A10.20 A11.15 A11.59 s P. M. s P. M. MUSKEGO YARD

Passenger trains must not exceed maximum speed of 40 miles per hour, other trains 25 miles per hour.

Passenger

Daily

P. M. 8.42

FIRST CLASS

23

Daily

P. M. 5.38

Daily

P. M. 6.05

A 5.45 A 6.10 A 8.30 A 8.50 s P. M. s P. M. s P. M.

Daily

P.M. 8.25

FIRST SUBDIVISION—EASTWARD

FIRST CLA	SS			TIME TABLE	FIRST CLASS					
46	160	162X	164X	No. 3	2	216	58	168		
Passenger	C&NW Passenger	C&NW Passenger	C&NW Passenger	June 1, 1967	Passenger	C&NW Passenger	Passenger	C&NW Passenger		
Dally	Daily Ex. Sat. Sun. & Holidays	Daily Ex. Sun. & Holidays	Sunday & Holidays only	STATIONS	Daily	Daily	Daily	Sunday & Holidays only		
P. M. A 4.05				K. K. BRIDGE	P. M. A 6.10		P. M. A 8.15			
	P. M. A 4.15	P. M. 5 · 11	P. M. A 5.45	WASHINGTON ST.		P.M. A 7.43		P. M. A 8.18		
4.00 P. M.	4.10 P. M.	5.08 P. M.	5.40 P. M.	(Menomonee Drawbridge) MILWAUKEE	6.05 P. M.	7.40 P. M.	8.10 P. M.	8.15 P.M.		
				MUSKEGO YARD	_					

Passenger trains must not exceed maximum speed of 40 miles per hour, other trains 25 miles per hour.

4 SECOND SUBDIVISION—WESTWARD

FIRST CLASS				Ca iı	pacity cars			TIME TABLE			FIRST	CLASS	
1	55	149	239			100		No. 3	5	153	3	23	
Passenger	Passenger	C&NW Passenger	C&NW Passenger			aph calls	Distance from Milwaukee	June 1, 1967	Passenger	C&NW Passenger	Passenger	Passenger	
Daily	Daily	Daily Ex. Sunday	Sunday only	Sidings	Other	Telegraph	Distan Milwa	STATIONS	Daily	Daily	Daily	Daily Ex. Sat. and Sunday	
					Yard	WH	0.0	MUSKEGO YARD					
A.M. 12.14	A. M. 1.20	A. M. 10.00	A. M. 10·15		Yard	DI	0.0	MILWAUKEE	P. M. 12.01	P. M. 1 · 1 O	P. M. 1.58	P. M. 5.25	
					Yard	JN	2.0	CUT-OFF					
A12.21	A 1.28	10.07	10.22		Yard		3.2	GRAND AVENUE	A12.07	1.17	A 2.04 P. M.	A 5.31	
		10.18	10.33		Yard	RG	8.3	NORTH MILWAUKEE		1.28			
		A10.20	A10.35				9.9	CANCO		A 1.30			

Passenger trains must not exceed maximum speed of 50 miles per hour, other trains 40 miles per hour.

A. B. S. is in use between Milwaukee and North Milwaukee.

The Station Limits at Milwaukee extend from Menomonee Drawbridge on the east to Twelfth Street on the west. Between these points there is no superiority of trains and all movements must be made at reduced speed.

Westward C&NW trains will obtain C&NW Clearance at North Milwaukee.

Double track is in use between Milwaukee and North Milwaukee.

Rules 251, 253 and 254 are in effect on eastward and westward tracks between Milwaukee and North Milwaukee for movements with the current of traffic.

C. T. C. is in use between North Milwaukee and Canco controlled by the operator at North Milwaukee, under the supervision of the train dispatcher at Milwaukee.

SECOND SUBDIVISION—EASTWARD

FIRST CLASS			CLASS		TIME TABLE		FIRST CLASS			
56	10	4		No. 3		12	206	214	6	
Passenger	Passenger	Passenger	Train Order Office Hours	SEE RULE	June 1, 1967	Passenger		C&NW Passenger	Passenger Daily	
Daily	Daily	Daily		6-A	STATIONS	Daily Ex. Sat. and Sunday		Daily		
			Continuous	BFKPQRTWYZ	MUSKEGO YARD					
s A. M. A 3.00	s A. M. A 5.15	s A. M. A 5.40	Continuous	BFIKPRWY	MILWAUKEE 2.0	s A. M. A 7.40	s A. M. A 8.48	s A. M. A10.53	s P. M. A 1.20	
			Continuous	BJPWY	CUT-OFF					
2.48 A. M.	4.59	5.30 A. M.	No Office	IJPY	GRAND AVENUE	7.30 A. M.	8.39	10.44	1.07 P. M.	
	4.48		Continuous	BFIJKPRWYZ	NORTH MILWAUKEE		8.28	10.33		
	4.46 A. M.		No Office	JPY	CANCO		8.26 A. M.	10.31 A. M.		

Passenger trains must not exceed maximum speed of 50 miles per hour, other trains 40 miles per hour.

Rule 83(B) does not apply at Canco, North Milwaukee and Grand Avenue.

SECOND SUBDIVISION—WESTWARD SECOND CLASS THIRD CLASS FIRST CLASS TIME TABLE 233 209 121X 9 57 67 69 No. 3 June 1, 1967 Time Soo Line C&NW Passenger C&NW Passenger Freight Passenger Passenger Freight Freight STATIONS Daily Ex. Saturday Daily Ex. Saturday Daily Daily Daily Daily Daily P. M. 3.45 A. M. 9.00 9.30 MUSKEGO YARD P. M. 6.20 P. M. P. M. 9.20 10.40 MILWAUKEE 8.40 **CUT-OFF** 9.27 A10.47 6.27 8.47 **GRAND AVENUE** 9.50 A10.00 8.58 A 4.20 6.38 NORTH MILWAUKEE CANCO A 6.40 A 9.00 A 9.43

Passenger trains must not exceed maximum speed of 50 miles per hour, other trains 40 miles per hour.

Rule 83 (B) does not apply to No. 233 at Muskego Yards.

SECOND SUBDIVISION—EASTWARD

FIRST CLASS						TIME TABLE	SECOND CLASS	THIRD CLASS			
	162X	2	58	216	168	No. 3	82	234	182		
	C&NW Passenger	Passenger	Passenger	C&NW Passenger	C&NW Passenger	June 1, 1967	Time Freight	Soo Line Freight	Time Freight		
	Daily Ex. Sun. & Holidays	Daily	Dally	Daily	Sunday & Holidays only	STATIONS	Daily Ex. Sunday	Daily	Daily Ex. Saturday		
						MUSKEGO YARD	A 2.30	A 7.30	P. M. A11.15		
	s P. M. A 4.58	s P. M. A 5.55	s P.M. A 7.25	s P. M. A 7.30	s P. M. A 8.05	MILWAUKEE					
						CUT-OFF					
	4.49	5.45 P. M.	7.14 P. M.	7.21	7.56	GRAND AVENUE					
	4.38			7.10	7.47	NORTH MILWAUKEE	1.45	6.45 A. M.	9.45 P. M.		
	4.36 P.M.			7.08 P. M.	7.45 P. M.	CANCO	1.40 A.M.				

Passenger trains must not exceed maximum speed of 50 miles per hour, other trains 40 miles per hour.

LOCATION OF BULLETIN BOARDS

Adams Yard In Yardmaster's Office.
Air Line East End .. In Yardmaster's Office, 27th St.
Air Line West End .. In Yardmaster's Office at 35th St.
Air Line West End .. In Hump Office
Burnham Bridge ... In Yardmaster's Office.
Chestnut St. District . In Yardmaster's Office, Humboldt Ave.
Cut Off In Yardmaster's Office.
Gibson Yard In Yardmaster's Office on Richards St.
Glendale Yard In Yardmaster's Office at Capitol Drive.
Grand Ave. District .. In Yardmaster's Office on State St.

Menomonee Belt. In Yardmaster's Office on Burnham St.
Milwaukee Depot In Locker Room.
Muskego Yard. In Locker Room, Office Bldg.
Muskego Yard. In Yardmaster's Office, West Yard.
North Milwaukee In Locker Room, North Milw. Depot.
Reed Street. In Yardmaster's Office.
Round House In Locker Room.
Stowell. In Welfare Bldg., Stewart St.
West Allis In Depot.

LACROSSE DIVISION FREIGHT SUBDIVISION—EASTWARD TIME TABLE No. 3 June 1, 1967 **STATIONS** ELM GROVE FAIR GROUND WEST ALLIS HAWLEY ROAD SOLDIERS HOME AIR LINE YD.

All trains must not exceed maximum speed of 25 miles per hour.

ABS is in use between a point 600 feet west of the west switch at Soldiers Home Yard, Milwaukee and Elm Grove.

When the Eastward Automatic Stop signal at West Allis Depot displays a Stop Indication for a train or engine, Rule 240-A, after making stop, a trainman or the engineer must immediately communicate with the Yardmaster at the top end of Air Line Yard during the hours the Yardmaster is on duty and receive instructions from him before proceeding.

During hours a Yardmaster is not on duty, the trainman or engineer must communicate with the Phone Director and receive instructions from him before proceeding.

No Yardmaster on duty at top end of Air Line Yard from 11:00 p.m. Saturdays to 7:00 a.m. Sundays and from 3:00 p.m. Sundays to 3:00 p.m. Mondays.

Telephone for communicating with Yardmaster or Phone Director is located in entry way of freight house.

D. H. ORR

W. J. PETA B. M. CONNELL E. P. GALIHER

G. W. JOHNSON E. H. BLANCK

A. C. BLOCK Traveling Engineer,

Trainmaster

E. R. GROMACKI Stationmaster

Trainmasters

COMPANY SURGEONS ARE LOCATED AS FOLLOWS:

Location	Name	Residence and Phone	Office and Phone
Chicago§‡J Chicago§‡B	ames R. Hines, Asst. to Chief Bruce R. Bodell, Asst. to Chie	Surgeon	250 E. Superior St., 337-6500 Union Station, 236-7600.
Milwaukee§‡R	Robert J. Trettin		2212 W. State St., 344-6200.
Milwaukee §I	I. M. Mayer, Medical Consult Dr. R. P. Sproule, Oculist	ant	2212 W. State St., 344-1636. 1024 E. State St., 276-3873.
L	Or. R. T. Sproule, Oculist		1024 E. State St., 276-3873.
Milwaukee§‡I	Or. Elton Mendeloff	list	208 E. Wisconsin Ave., 273-7956. Union Depot, 271-6120, Ext. 246. 2212 W. State St., 344-6200.

§Indicates salaried Company surgeons who should be used whenever possible.

Indicates surgeons equipped to conduct physical examinations of employes for entrance into service, promotion or re-examination.

YARD LIMITS

Extend from approximately 2 miles east of K. K. Bridge to 2400 feet west of the junction switch at Grand Avenue; to 23,281 feet west of North Milwaukee Depot on Milwaukee Division Eleventh Suldivision; to 24,963 feet west of North Milwaukee Depot on Milwaukee Division Third Subdivision; and to 7000 feet East of Elm Grove Station on La Crosse Division via West Allis.

LOCATION OF PHONE DIRECTORS TELEPHONES

Stowell Yard Office. K. K. Bridge. Menomonee Bridge Office. Stationmasters Office. Superintendents Office. General Superintendents Office. Yardmasters Office Reed Street. Chief Dispatcher Milw. Div. Box Tannery Crossing. Box Fowler Side between 13th & 17th. Box Fowler Side-23rd St. Yardmasters Office Burnham Bridge. Levermans Office Burnham Bridge. Box West Yard 16th Street. Yardmasters Office West Yard. Switch Tender Office Junction Switch. Yardmasters Office Canal.—Adams.

Box West End Canal Yard. Yardmasters Office Cut Off. Switch Tender Office Cut Off. Cut Off Tower. Roundhouse Foremans Office. Switch Tender Office 5 Rings & Upper 5 Rings. Assistant Superintendents Office. Yardmasters Office East End Air Line. Yardmasters Office West End Air Line. Switch Tender Office West End Air Line. West Allis Depot. Bluemound Yard Office. Roundhouse Callers Office. Train Clerks Office. Yard Office Miller Brewing Co.

Box 35th Street. Box Lisbon Avenue. Box West End North Avenue Yard. North Avenue Scalehouse. Box East End West Plant 4. Scale House A. O. Smith. Yardmasters Office Capitol Drive. North Milwaukee Locker Room. North Milwaukee Tower. North Milwaukee Agents Office. Box Teutonia Avenue. Box Port Washington Road. Box Green Bay Avenue. Yardmasters Office Gibson Yard. Yardmasters Office Humboldt Yard. Yard Office Walnut Street Yard.

TRAIN DISPATCHERS TELEPHONES are located at or near the controlled signals at K. K. Bridge, Washington St. and Menomonee Drawbridge.

SPECIAL INSTRUCTIONS

ALL SUBDIVISIONS

G-1 In reference to Rule 2 of The Consolidated Code of Operating Rules, the following watches conform to the requirements this railroad

POCKET WATCHES

Hampden, Howard, Illinois, South Bend and Waltham, all of which must be 16 size-19 jewel or better, Hamilton-16 size-992-21 jewel, or 16 size-950-23 jewel Elgin-16 size-B. W. Raymond-21 jewel.

WRIST WATCHES

Elgin-13/0 size, 23 jewel B. W. Raymond. Elgin 21 jewel, B. W. Raymond Chronometer. Ball-13 ligne, 21 jewel, Official Railroad Standard. Bulova Accutron-Railroad Approved.

- G-2 In complying with Rule 3 of the Consolidated Code of Operating Rules, the prescribed form for yardmasters and foremen of yard engines to register the time when watches are compared will be the place provided on back of their time slip.
- G-3 The use of gasoline stoves and burners in Company's buildings and

equipment is prohibited.

The use of oil and bottled gas (Propane) stoves and burners for either cooking, heating or refrigeration is permitted only when authorized by the Company and when installation is made in accordance with Company standards.

The above does not apply to U. S. Army Field Ranges when installed under the supervision of a U. S. Army Commissioned Officer and operated

To avoid personal injuries and possible damage by fire, when lighting and operating caboose oil stoves, employes must be governed by the instructions which are posted in each caboose so equipped.

- G-4 Unoccupied outfit cars of steel underframe or steel center sill con-struction when inspected and passed by a Car Department inspector, may be hauled in any part of the train.

G-5 In addition to Consolidated Code Rule 806 about handling of occupied outfit cars, the following will also apply on this Railroad:

When occupied outfit cars are set on a siding, the switches at each end should be spiked to prevent any possibility of a train striking the cars.

The same principle will also apply when such cars are placed on other side tracks; but when for operating reasons, it is not practicable to have

the switches spiked, the train dispatcher must be notified.

When occupied outfit cars are standing on other than siding and the switches on each end are not spiked, a yellow signal must be displayed on each end of the outfit cars. Under such condition, the cars must not be moved except when necessary and then only after the man in charge has given his permission. When other cars are placed on the same track, the yellow signal must be moved to the end of the string of cars on that track where it can be plainly seen.

- G-6 For the comfort of the passengers, the air-conditioning on our air-conditioned passenger trains should be kept operating as long as pos-sible. When approaching stations where cars are to be picked up or set sible. When approaching stations where cars are to be picked up or set out between the engine and the rear car, the steam line must be blown out at the proper place and the steam shut off before the train stops. At the final terminal of the equipment, when no cars are to be set out between the engine and the rear car, the steam must be shut off as soon as the train stops in the station.
- G-7 When passenger trains are unusually delayed, passengers should be informed as to the cause and extent of delay.
 - Conductors will make suitable announcements to passengers on trains, or arrange for brakeman and sleeping or parlor car employes to do so. Agents or Station Masters will see that such announcements are made to passengers in stations when waiting for delayed trains.

 Public Address System should be utilized at stations when available.
- G-8 A yellow flag by day stenciled ELECTRIC CHARGE LINE and in addition, a yellow light by night, placed at one or both ends of a passenger car standing on a yard track, indicates that the battery of the car is connected to a charge line. When thus protected, it must not be coupled to or moved before the charge line has been removed. Other equipment must not be placed on the same track so as to intercept the view of the yellow signals without first notifying the workmen; in the absence of the workmen, the signals may be moved to the end of the equipment so placed to afford the necessary protection.
- G-9 In connection with Rule 920 of The Consolidated Code of Operating Rules, the engineer may permit other employees when competent, to handle the engine with the engineer being responsible.
- G-10 In case of heavy rain or violent windstorm, the operator must notify the section foreman.
- G-11 When a train order office is closed during the period authorized by time-table or bulletin, the light in the train order signal will be extinguished.
- G-12 Excessive use of sand at any point is prohibited and its use must be restricted to actual necessity.

G-13 When diesel-electric or electric engines are handled dead in train, the following will apply:

-13 When diesel-electric or electric engines are nanuea used in train, the following will apply:

When engine handling the train is of the wagon type:—Single unit diesel-electric road switcher, yard switcher or wagon type units may be handled next behind the road engine.

When engine handling the train is of the road switcher or yard switcher type:—Wagon type units or series of such units may be handled next behind the road engine, but road switcher and yard switcher type engines must be separated from the road engine by at least one car and must be separated from the road engine by at least one car and must be separated from each other by one or more cars.

Diesel-electric or electric engines will be handled dead in train on authority of Chief Dispatcher who will specify the train they are to be handled on and where they will be placed in the train.

When a 44 ton diesel engine is being handled dead in freight train, it must be placed at rear of train just ahead of the caboose and when a pusher engine is placed on the rear of the train, the 44 ton diesel engine must be placed behind the pusher. When there is a 44 ton diesel engine on the rear of the train, the train must not be pushed nor pulled from the rear and the dead diesel engine must not be pushed nor pulled from the rear and the dead diesel engine must not be handled in switching movements in conjunction with other cars.

- G-14 Diesel engines moving dead in train will come under the provisions of Rule 809 and when the doors of the engines are locked and the hand brake is not accessible, a freight car with operative hand brakes must be coupled to the diesel with uncoupling mechanism made inoperative.
- G-15 Passenger car equipment may be moved through water up to six inches above the top of rail without damage to the generators or battery and bearing boxes.

When necessary to move passenger car equipment through water from when necessary to move passenger car equipment through water from 3 to 6 inches above the rails, the equipment should be pushed through the water to a point where it can be reached from the opposite end by a power unit or other equipment and pulled on through the obstruction.

GENERAL SPEED RESTRICTIONS

G-16 Unless otherwise restricted, the following equipment must not be moved in excess of the maximum speed shown below and further reduction made where conditions require:

	IPH
Trains handling ore cars Loaded	35
Trains handling ore, except silicon ore, loaded in open top equipment other than ore cars	t
Trains handling loaded air dumps (must stop when meeting trains on double track)	1
Work trains with workmen or occupied outfit cars	25
Scale test cars on Branch Lines	25
The following diesel engines either dead in train or operating under own power:	•
690 AB to 696 AB. 950 to 977	55 45

- G-17 When freight cars (except cars that are equipped for passenger train If when freight cars (except cars that are equipped for passenger train service) are hauled in a passenger train, the maximum speed of that train will be that prescribed for freight trains in that territory unless a different speed is authorized by bulletin or train order.
- G-18 Diesel or Electric engines with unobstructed view in either direction may be operated at permissible speeds in either direction.

Diesel or Electric engines with restricted view in one direction must, when operated in that direction, reduce speed to the extent necessary for

G-19 The provisions of Rule 30 of the Manual of Rules and Instructions on Air Brake and Train Air Signals Form 2697 Revised, will apply as follows at the following points:

Aberdeen-Miles City-Deer Lodge-Othello..... St. Paul Freight Trains only St. Paul Freight Trains only
Minneapolis Passenger Trains only

- G-20 When making a backup movement with more than three diesel units in multiple, there is a danger of jack-knifing the units which may result in rail overturning under the engine. Before making backup movements with more than three units, the leading unit, or units, must be isolated and only the rear three units allowed to work power.
- G-21 When flat spots develop enroute on car or engine wheels, speed of train must be reduced to not exceed forty (40) MPH to the first available point of communication, where Conductor or Engineer will notify Chief Dispatcher and be governed by his instructions. If in the judgment of the Conductor or Engineer a lesser speed is deemed advisable, speed of the

train will be reduced in line with their judgment.

From tests made it develops that it is desirable, in order to reduce the impact, to operate cars or engines with flat spots at a speed either under seventeen (17) MPH or in excess of twenty three (23) MPH as the most severe impact occurs at speeds seventeen (17) to twenty three (23) MPH.

- G-22 When two locomotive tenders are handled in the same train, they must be separated from each other by one or more cars.
- G-23 Before shoving cuts of cars that include extra length cars measuring 60 ft. or longer, on sharp curves, or steep grades, it must be known that any such extra length cars are coupled.
- G-24 A train order or Clearance timed, dated and completed or OK'd before midnight, may be accepted after midnight and should be respected the same as if issued on date of departure of the train.
- -1 Trains handling wrecker derricks must not exceed the following speed limitations. The indicated maximum speeds must be further reduced on tangents and on curves where track is not in proper conditions for the specified maximum speeds.

On Tangent Curves 20 m.p.h.

Trains handling wrecking crane X-17 must not exceed 15 miles per hour assing over Arnold Avenue subway between the Air Line Yard and West

X-2 Trains handling locomotive cranes, Jordan spreaders, shovels, pile drivers, ditching machines, cut wideners and snow plows of all types except flangers must not exceed the speed limitations shown below. The indicated maximum speeds must be further reduced on tangents and curves where track conditions do not justify the specified maximum speeds. Engine and train crews will make frequent observations of how these machines are riding and when in damaged or questionable condition, or when this equipment is hauled in trains with heavy end trailing, the speed must be further reduced to insure safe movement.

On Tangent Track On Curves 20 m.p.h.

X-3 The speed of all trains or engines passing through turnouts must not exceed 13 miles per hour, except those turnouts laid with long frogs and designated by Special Instructions or bulletin where the speed may be increased to 25 miles per hour, unless otherwise authorized.

Turnouts laid with long frogs are located at: Location

Station

K. K. Bridge

Connections to eastward and westward freight main tracks. Crossover between No. 1 and No. 2 main tracks west of the Drawbridge. C&NW connection switch. Crossover between No. 1 and No. 2 main tracks. C&NW connection switches. Washington St.

Canco

X-3 (A) SPRING SWITCHES

Movement in facing point direction over a spring switch not equipped with a facing point lock must not exceed 25 miles per hour. When switch is equipped with a facing point lock, movement may be made at normal speed. If switch is lined for the turnout the allowable turnout speed must speed. If sw be observed.

Movement in trailing point direction over a spring switch on track for which the switch is lined may be made at normal speed.

Movement in trailing point direction which springs the points must not

exceed 40 miles per hour.

If movements is through the turnout the allowable turnout speed must be observed.

All spring switches except those indicated below are equipped with facing point locks. The speed must not exceed 25 miles per hour when moving against the points at the following spring switches:

Milwaukee Terminal Division..........None

X-4 Referring to Rule 922 of the Consolidated Code or Operating Rules,

(-4 Referring to Rule 922 of the Consolidated Code or Operating Rules, the following will apply:
 At points where mechanical forces are employed, the Mechanical Department will be responsible for knowing, when an engine is sent out for service, that it is in good working order and is adequately supplied with fuel, water, sand and other supplies including flagging equipment and signal appliances. Engineers will not be required to make inspection of engine at such points, except it must be known that adequate air pressure is being maintained and that air brake equipment is functioning properly. Hand brakes must be released on all units before engine is moved.
 Rules 1, 2, 3, 11 and 14 of the Manual of Rules and Instructions on Air Brake and Train Air Signals for Enginemen and Trainmen are modified accordingly.

accordingly.

X-4 (A) Speedometers on road engines in main line service must be checked by observing time between "Speed Test Section" signs.

Where there are not "Speed Test Section" Signs in use, the check must be made between mile posts at first opportunity after departure from point where engineer takes charge of engine. point where engineer takes charge of engine.
The location where test was made, speed at time of check and any variation must be shown on the work report.
"Speed Test Section" signs are located as follows:
Milwaukee Terminal Division.........None

X-5 Movements against the current of traffic must not be made without permission of the phone director, or authority conferred by Interlocking Signal indication.

Train orders covering conditions and movements against the current of traffic involving Milwaukee Division trains, LaCrosse Division trains, and Milwaukee Terminal trains between K.K. Bridge and Canco will be issued over the signature of Superintendent of the Milwaukee Division. Other orders covering conditions involving LaCrosse Division trains will be issued over the signature of Superintendent of the LaCrosse Division.

Passenger trains will be moved against the current of traffic between North Milwaukee and Grand Avenue, between Cut-Off and Milwaukee and westward passenger trains between Cut-Off and Grand Avenue by message from the Phone Director worded "Use (eastward or westward) main track between (station) and (station)."

Such movement will then be made under the provisions of Rule 93. To ascertain whether or not opposing first class trains due, have arrived, train involved must either check the train register or secure a Form V train order.

Eastward passenger trains will be moved against the current of traffic between Grand Avenue and Cut-Off on interlocking signal ONLY.

- X-6 Trains or yard engines handling CMStP&P Superdome or C&NW Dome Cars must not exceed 10 miles per hour on westward freight main track at Bridge B-0½ at Second Street highway under crossing 800 feet east of Reed Street yard office, Milwaukee.
- X-7 Speed restrictions (In addition to General speed restrictions)

	Maximum S	peed MPH
Location	Psgr. Trains	Other Trains
Between east end of curve Florida St. and Menomonee Drawbridge	30	25
Between Menomonee Drawbridge and Passenger Station Milwaukee	10	10
Unit grain trains around Florida Street curve on eastward and westward freight main tracks be- tween K. K. Bridge and Burnham Bridge		10 35

X-8 Switchtender at the Cut-Off railroad crossing located just east of the Falk viaduct is equipped with yellow signals. Authority for movement across the railroad crossing known as the Diamond, may be obtained by a proceed signal from this switchtender given with a Yellow flag or a Yellow light.

Proceed signals from switchtenders east or west of the railroad crossing provides authority for movement only up to the crossing.

- X-9 Five minutes fusees should be used in A. B. S. territory and 10 minute fusees should be used in other territories.
- X-10 Within the City Limits of Milwaukee, engineer will not sound the whistle except when necessary to prevent injury to persons or damage to property or when necessary to warn or signal employes or the public.
- X-11 Between North Avenue and North Milwaukee, when a westward train is observed standing on the westward main track west of Capitol Drive, the following freight train or light engine will contact yardmaster at Glendale yard for instructions.
- X-12 Transfers handling cars from one yard to another from sunset to sun-rise, or during foggy or stormy weather, an empty flat car must not be the leading car of cut being pushed.
- X-13 At North Milwaukee a color light type signal is located about 2600 feet west of the depot on the Chestnut Street Line. When this signal displays a proceed indication, eastward trains or engines may proceed to the tower at restricted speed; when this signal displays a stop indication, eastward trains and engines must stop and a trainman or engineman must communicate immediately by telephone with the Yard Director for instructions from him before proceeding. The indication of this signal does not tions from him before proceeding. The indication of this signal does not relieve trainmen and enginemen from observing the speed restrictions and other rules and instructions.

and other rules and instructions.
At North Milmaukee tower the train order signal is equipped with two
westward and one eastward arms. The eastward arm governs all train
movements. The upper westward arm governs Milmaukee Division Third
Subdivision trains and the lower westward arm governs Milmaukee Division

Eleventh Subdivision trains.

At North Milwaukee all trains will register by register ticket.

- X-14 Between Canco and North Milwaukee eastward freight trains will approach Villard Avenue prepared to be governed by indicator light on relay case just east of crossing. When light is not displayed such trains will stop short of crossing and a member of the crew will communicate with the operator at North Milwaukee for further instructions.
- X-15 Before cuts of cars are shoved through the Blue Mound or Soldiers Home yard they must be stretched to see that all couplings are properly
- X-16 Yard crews will not move any loaded car bearing a high-wide-long load tard crews will not move any loaded car bearing a high-wide-long load card between any station or between any yards within the Milwaukee Terminals without first checking the transfer and giving the Phone Director the car number of each car in the transfer bearing a high-wide-long load card securing his instructions on the route to be used before the movement is started.

Account narrow centers between freight main tracks in the area lying between Sixth Street Viaduct and Burnham Bridge, trains and engines handling high and wide loads on either main must not pass other trains and engines within these limits.

and engines within these limits.

No yard craw will move any loaded car bearing a high-wide-long load card from any industry or within any yard unless it is known definitely that the load can be moved with safety within that particular yard or locality without first consulting the Phone Director and securing his permission for such move.

No district yard engine will handle a high-wide-long load when it has no

No district yard engine will handle a high-wide-long load when it has no ticket on the car, when in their opinion the car is a high-wide-long load.

X-17 At Burnham Drawbridge, both switches of the crossover between the two main tracks located just east of the Drawbridge and the main track switch leading from the westward track to Reed Street Yard Lead are controlled by the Operator at Menominee Drawbridge.

These switches are of the electro-pneumatic type and are equipped for hand operation.

hand operation.

Indicators of the color light type located at the switches Indicate position of switches as follows:

Green—Switch is lined in normal position.
Yellow—Switches are lined for movement through the crossover or to the Reed Street Lead.
When no light is displayed, points may be open. In such case it must be

known that points are in proper position and it is safe for movement over or through switch.

Movements over the Drawbridge in either direction on either main track are controlled by the Operator at Menomonee Drawbridge. Signals governing such movements are of the color light type. Indications displayed as per Rules 240-A and 240-E.

- X-18 The General Split Corporation has a conveyor 14ft. 3 in. above the top of rall inside their building in the Reed Street District. Do not place cars exceeding this height inside the building with the exception of tank cars at first spot inside door.
- X-19 At Grand Avenue, when the Interlocking Signal governing eastward Milwaukee Division and Milwaukee Terminal movements displays a Stop-Indication, eastward trains, engines and yard transfers must stop at West State Street located 800 feet west of the signal.
- X-19A Unless otherwise instructed, all trains and transfers entering Blue Mound yard at Grand Avenue will use Blue Mound 1 to the Air line.
- X-19B Rule 275(A) does not apply to the crank type power switches at Grand Avenue. When necessary to operate such switches by hand, the following

- Remove crank from box located on relay house.
 Unlock cover on switch machine and where necessary move slide plate to clear the opening.
- 3. Insert crank and turn as far as possible in direction necessary to move switch points to desired position.
- When switch points are fully closed and properly lined, spike the switch. After switch is spiked, remove crank, leave slide plate in crank position, close and lock cover on machine, return crank to box and lock door.

X-20 REMOTE CONTROL INTERLOCKING:

Station Location By whom operated Both main track crossovers. Crossover between No. 1 K. K. Bridge Train Dispatcher at Milwaukee main track and elevation. Main track connections to eastward and westward

freight main tracks.
Washington St. C&NW Connection Switch and Crossover between No. 1 and

No. 2 main tracks. Milwaukee East and west end of passenger

station.
Grand Avenue All Switches. C&NW Connection Switches. Train Dispatcher at Mil-

Operator at Menomonee Drawbridge. Operator at Cut-off.

Operator at North Mil-

- X-21 All C&NW passenger trains originating at Milwaukee, will make Standard ATS Departure Test upon departure from depot.
- X-22 All movements must not exceed 5 MPH over the following Street Crossings:

ssings: Second, Cherry and Commerce Streets. Walnut, Palmer and Commerce Streets.

- X-23 Account narrow track centers on Tracks 1-2-3 and 4 in the "A" Yard in the Air Line, loads in excess of 12 feet wide must be handled through the "A" Yard on tracks 5-6 and 7 only.
- X-24 Automatic crossing protection signals of the flashing light type are in service on all tracks at Mitchell St. Crossing, Menomonee Belt, Milwaukee.

 The main track only is equipped with advance starting circuits 400 feet

The main tracks at Mitchell St. Crossing, Menomonee Belt, Milwaukee. The main track only is equipped with advance starting circuits 400 feet on either side of the crossing. On all other tracks the signals will be actuated when the leading wheels of the movement enters the crossing clircuit at the yellow painted insulated joints on either side of the crossing. Controls for the manual operation of the crossing signals are located in each quadrant of the crossing. The control in the northeast quadrant is of the push-button type located in red box on side of signal case and may be used to start or stop the signals in advance of a movement on the main track. If the "STOP" button is used to stop the signals from operating then the "START" button must be used to actuate the signals before the movement enters or leaves the crossing.

The controls in the northwest, southeast and southwest quadrants are of the switch key type and may be used to start or stop the signals in advance of a movement on any track other than the main track. When switch key is used, signals will operate for thirty (30) seconds and then stop unless the leading wheels of the movement pass the insulated joints.

No movement shall be made onto or over the crossing until the crossing signals are operating and crossing is clear of traffic or is protected by a member of the crew on the ground at the crossing (Rule 103).

CMStP&P and C&NW switch keys will operate switch key controls and will also open the lock on push-button box.

X-25 TRACK SKATES

TRACK SKATES WILL BE USED AS FOLLOWS: LOCATION YARD

PLACED ON

running onto leads. Skates must be placed 10 car lengths from east end of tracks 1 through 18

Skates must be placed 15 car lengths west of 27th Street viaduct on tracks 19 through 24 inclusive.

Skatemen when going on duty must check all tracks and see that skates have been properly placed on both rails on each track.
Skates must be placed on rail with point of skate a sufficient distance from inside of rail to prevent flange of wheel from striking the point of

A small amount of sand, gravel or dirt must be placed on the heel of the

When not in use track skates must be placed on the right along outside of rall.

of rail.

In event a car or cars should move beyond the fouling point skatemen must immediately contact yardmaster and take action to protect other movements until car or cars have been moved clear of the fouling point. Yardmen moving cars from tracks where track skates are used must remove them keeping sharp lookout for track skates that may be under

other than the head car.

Skatemen will set a hand brake on first car switched in on any track and also on following cars until sufficient hand brakes have been set to keep the cars from running out when cars are switched in from the west end or when track is being coupled.

when cars are placed on or switched into any track from the east end the skateman must, if possible, remove skates from original position and replace them east of the east car. If skateman is not available a member of crew must comply with these instructions.

Crews shoving or pulling down tracks on east end of airline must set sufficient hand brakes to keep cars from running out onto leads.

Yardmaster at east end of airline is responsible for knowing that tracks are properly protected with skates or sufficiently secured with hand brakes

to prevent cars from running out onto leads.

Crews shoving cars in on Hump 25 track must place or see that skates are under rear wheels, that track is coupled, and in addition, must set sufficient hand brakes due to steep grade.

INSTRUCTIONS FOR OPERATION OF AIRLINE AUTOMATIC CLASSIFICATION YARD Road train or road engines will not operate over hump without instruc-

tions from the hump yardmaster.

Engines must not be moved through retarders in either direction when

retarders are in closed position.

Retarder Operator is in control of Hump Signals. Engine foreman in charge of engine humping will secure control of Hump Signals before humping begins and will operate signals, returning control of signals to Retarder Operator after humping has been completed. Engineer in charge of engine humping must keep careful lookout and comply with signal Indications.

signal indications.

SWITCH LIGHT INDICATORS

Lights at all switches in Hump and Classification yard show green for right hand movements and yellow for left hand movements in the facing

point direction.
SIGNAL INDICATIONS FOR HUMP AND HUMP REPEATER SIGNALS Color light signal indications through the Hump yard and leading from Blue Mound yard apply to Hump engines humping only. Also air whistle signals apply only to engines humping or trimming.

Stop. Red. Yellow..... Green.

. Hump Slow (2 MPH), . Hump Fast (6 MPH). . Hump Engine move in Westerly Direction. Flashing Red.

SIGNAL INDICATIONS FOR TRIMMER SIGNAL

Three short blasts ... Whistle Test. Four short blasts ... Call Signal Maintainer.

blast........Trimmer Engine Move Off Switch Circuit. Yardmasters and engine foremen will be careful to know that cars are moving over Hump at proper speed, so that Retarder Operator may properly handle without accident or damage. Attention must be given to the lading, weather conditions, etc., so that cars may reach proper classification track without damage to car or lading. Movements to or from the North and South Pocket tracks, to the classification yard, to the caboose track and to the Cut-Off must be made only on the authority of the varimaster.

on the authority of the yardmaster.

Tracks in the classification yard must not be shoved without communicating with the yardmaster or having a man on opposite end to avoid possibility of shove out accidents. Great care must be used to avoid cornering cars or engines.

When necessary for engine to go into classification yard, at least two

members of the ground crew should accompany the engine.

Engine foreman must call yard masters attention to cars found bad order or made bad order and not marked bad order on switch list. will instruct disposition to be made.

Fieldmen will set necessary hand brakes on cars humped to a clear track as instructed by yardmaster or engine foreman.

as instructed by yardmaster or engine foreman.

Before moving cars over hump, crew must know that cars are fully coupled. Hump Foreman should instruct their crew in this respect and know that it is complied with. When for any reason backup signal is given, Hump engine foreman must know that his helpers are in proper position before signal is again given to Hump. Cars must not be humped into Track 25.

Dragging equipment, broken flange and loose wheel indicators are installed just west of Hump Office. When Hump repeator signals indicate STOP unexpectedly, cars should be checked for defects and carman called if necessary.

Sand must not be used between clearance points at west end of Classification yard and crest of the hump.

No person will ride cars that are cut off at the crest of the hump when speed is to be controlled by automatic retarders.

Cars longer than 65 feet must be humped manually one at a time and other cars not permitted to leave the apex of the hump until the manually controlled cars have passed the clearance light.

