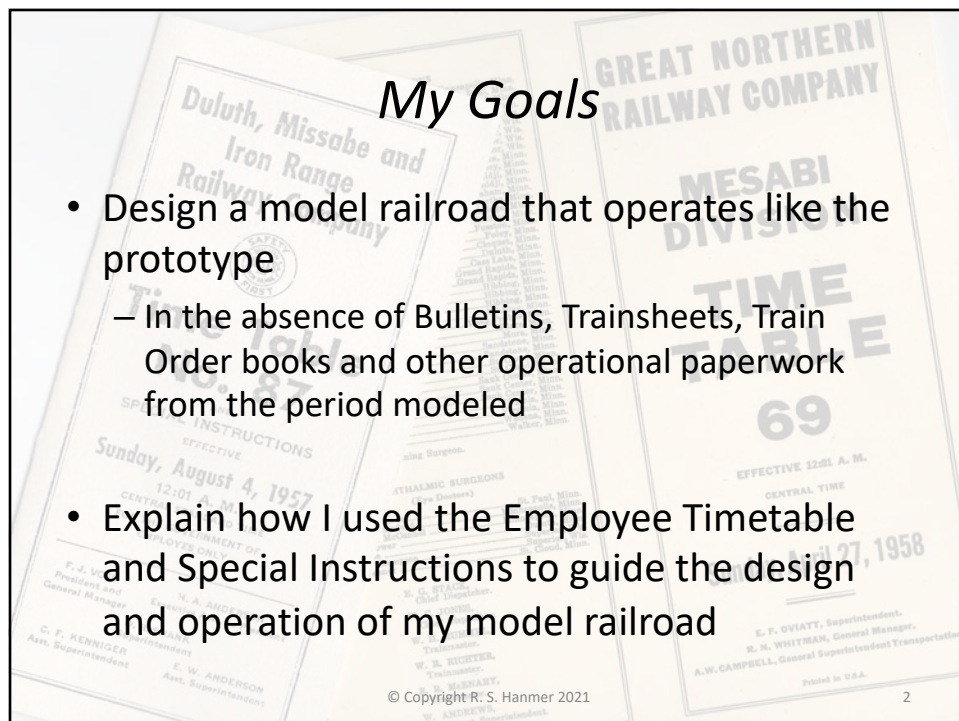
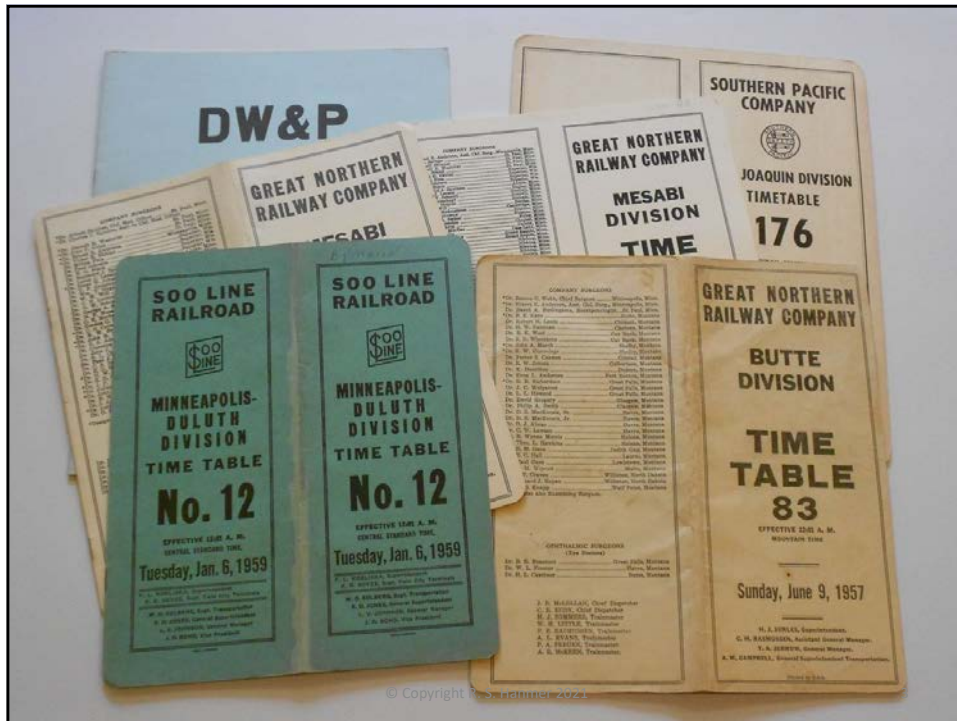


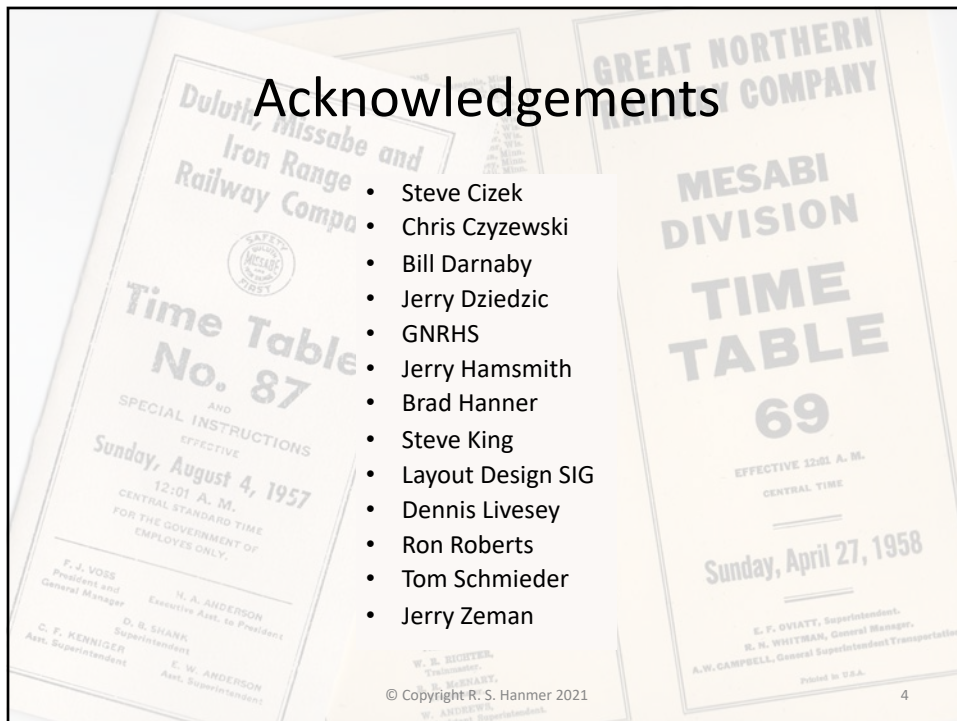
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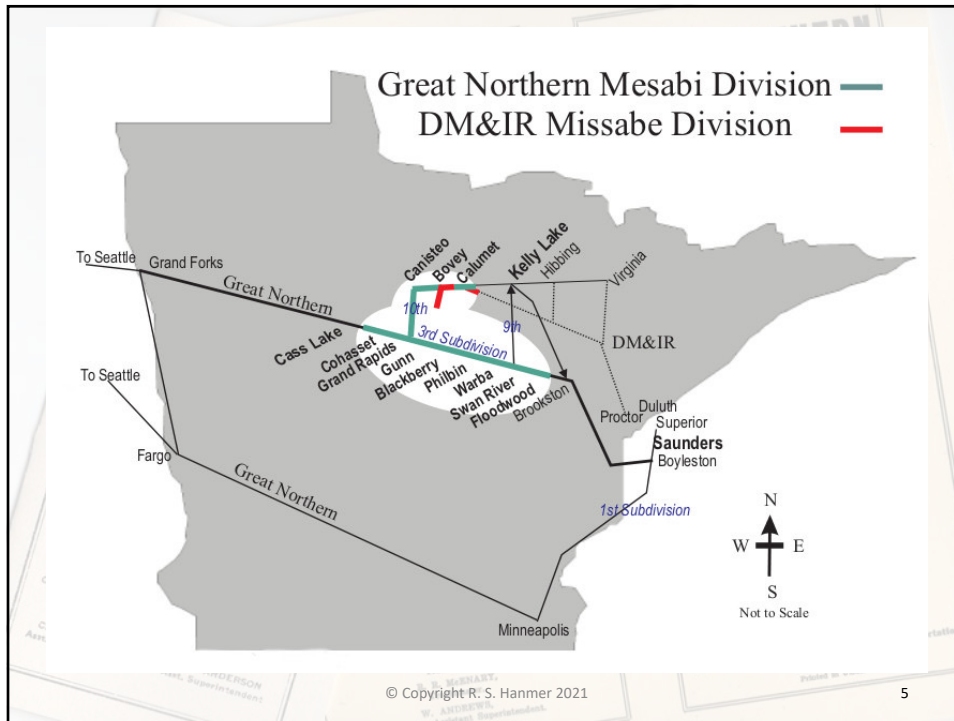
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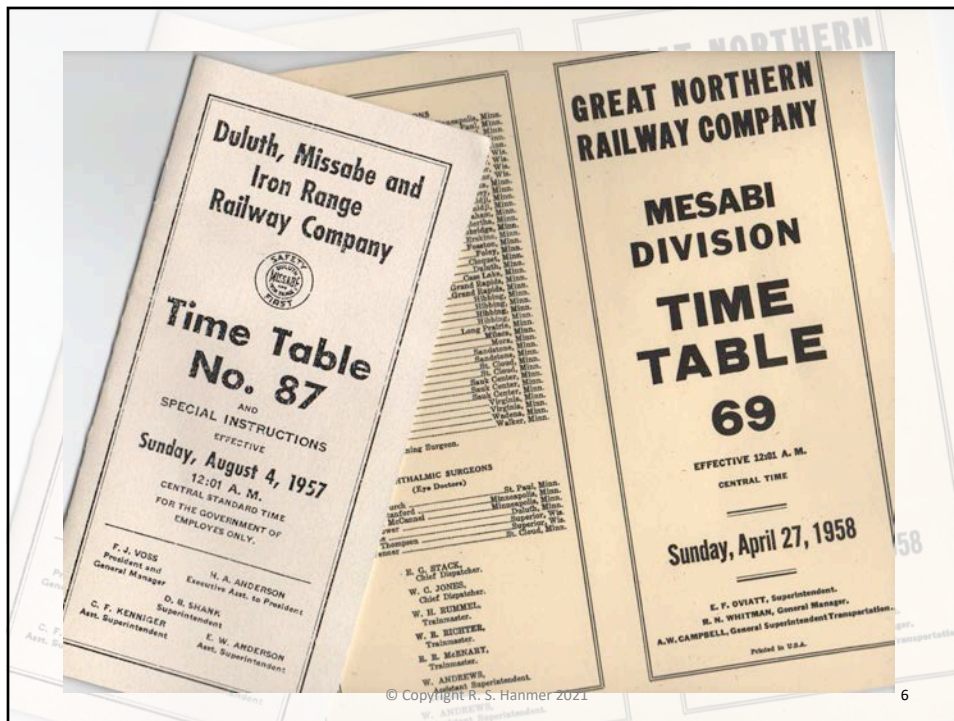
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4



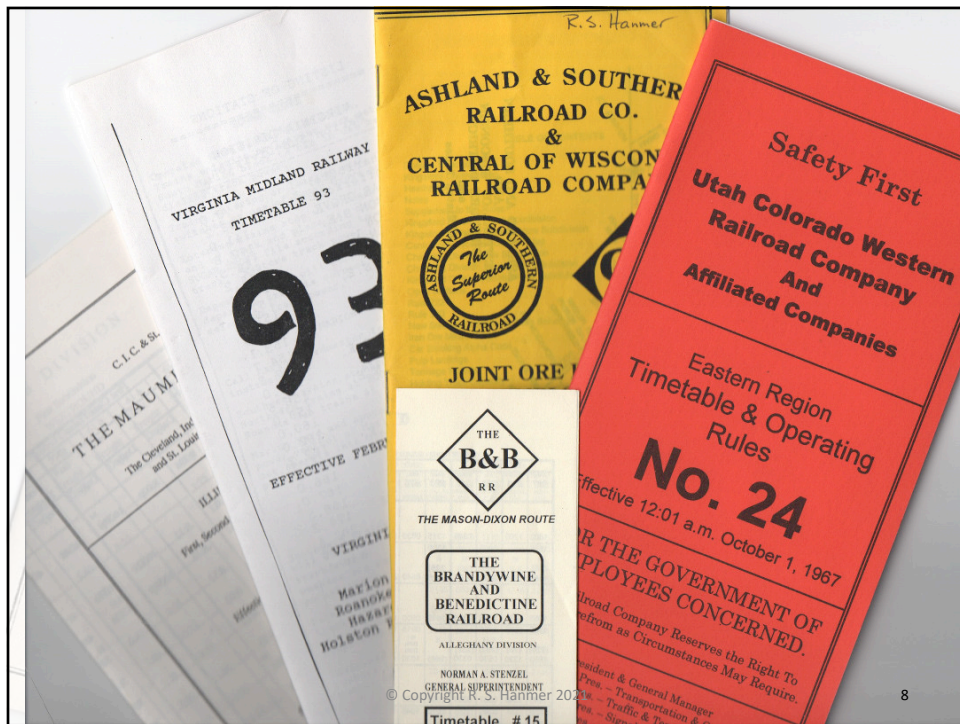
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6



7



8

Operate your layout using a prototype timetable



How to adjust time and distances for model railroad use

By Tony Koester • Photos by the author

model the 1950s, a time when the movement of trains by timetable and train-order rules was still common. The employee timetable included train schedules along with special instructions supplementing the book of rules, which was each railroad's bible.

...they ran an order that gave them right over a scheduled train, an extra train's crew had to find holes in the schedule that allowed them enough time to move between stations without interfering with a scheduled train.

Since the railroad I'm modeling operated under timetable and train-order rules, I needed to publish a timetable that my dispatcher and crews could use as the basis for train movements.

All the trains, only part of the run
I wanted to run the entire schedule of trains the Nickel Plate Road ran

...the part of the line I model in HO scale. The NKP's Clover Leaf District Timetable #3, of Sept. 26, 1954, shows two first-class passenger trains (9 and 10) and 10 second-class freights, including a local that ran westbound only. I knew the NKP commonly ran sections of its hot

The basis for safe and efficient train movements over Tony Koester's HO-scale Nickel Plate Road is the employee timetable. Here a late-running No. 96, left, waits in the siding as passenger train No. 9 leaves Linden, Ind., "on the advertised" at 1:11 a.m. Since distances are compressed, Tony uses a 5:1 fast-

...I wanted the little clock hands whirling around the dial. Experience on railroads such as Bill Darnaby's Maumee Route strongly suggested that slower ratios, no faster than 3:1 (one scale hour equals 20 minutes of real time), allowed more time for yard switching and both issuing and reading train orders. So 3:1 it was.

Adapting the timetable
The first chore was to use a stopwatch to time test runs of a few sample trains over the layout. This process

By Tony Koester

January 2009 Model Railroader

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Employee Timetables

- Station and schedule pages
 - Mandatory
- GN: “re-typeset”, copying all subdivn
- DM&IR:
 - High quality scan
 - Shading overlay
- Special Instructions
 - Some railroads separate into two documents
- GN: High quality scans
 - Any needed modifications are bulletins
- DM&IR: “re-typeset”, copying those of relevance

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	WESTWARD				TENTH SUBDIVISION				EASTWARD				
	Station Number	Car Capacity	Eligible	Other	Station	Stations	Stations	Stations	Stations	Stations	Stations	Stations	Stations
Prototype	YB 25	Yard	1329		4.02	KELLY LAKE	★	KY	31.43	BKONP			
	YD 64		14		4.86	KEEWATIN		KW	27.41	WYJAO			
	YD 69	90	45		9.39	MOORE		N	21.84	DPX			
	YD 74		320		11.87	NASHWAUK	★	N	21.84	DPX			
	YD 76	31	375		16.19	KEVIN		CU	15.24	JDPKV			
	YD 82		5		17.07	CALLUMET		CU	15.24	JDPKV			
	YD 86		3		20.58	MARBLE		RB	14.36	DPX			
	YD 87		3		21.60	HOLMAN JCT.		NI	10.85	JPI			
	YD 88		56		23.43	TACONTE JCT.		NI	9.83	JPV			
	YD 91		300		26.19	BOVEY		BY	8.00	DPX			
	Y 161	96	176		31.43	CANISTEO	★	GU	5.24	PXY			
						CUNN		GU		JPYDN			
Time Over Subdivision Average Speed Per Hour													
Westward trains are superior to eastward trains of the same class. SEE ADDITIONAL SPECIAL INSTRUCTIONS PAGES 4 THROUGH 11.													
Recreation	YB 25	Yard	1329		4.02	KELLY LAKE	•	KY	31.43	BKONP			
	YD 64		14		4.86	KEEWATIN		KW	27.41	DPX			
	YD 69	90	45		9.39	MOORE		N	21.84	DPX			
	YD 74		520		11.87	NASHWAUK	•	N	21.84	DPX			
	YD 76	31	375		16.19	KEVIN		CU	15.24	P			
	YD 82		3		17.07	CALLUMET		CU	15.24	JDPKV			
	YD 84	Yard	3		20.58	MARBLE		RB	14.36	DPX			
	YD 87		3		21.60	HOLMAN JCT.		NI	10.85	JPI			
	YD 88		4		23.43	TACONTE JCT.		NI	9.83	JPV			
	YD 91	Yard	10		26.19	BOVEY		BY	8.00	DPX			
	Y 161	Yard	176		31.43	CANISTEO	•	GU	5.24	PXY			
						CUNN		GU		JPYDN			
Time Over Subdivision Average Speed Per Hour													
Westward trains are superior to eastward trains of the same class. SEE ADDITIONAL SPECIAL INSTRUCTIONS PAGES 4 THROUGH 11.													

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12

WESTWARD		TENTH SUBDIVISION						EASTWARD				
Station Numbers	Car Capacity		SECOND CLASS		Time Table No. 69		STATIONS	Telegraph Calls	Distance from Elk River	SIGNS	SECOND CLASS	
	Sidings	Other Tracks			Effective April 27, 1958							
YB 25	Yard	1529			4.02		KELLY LAKE	KY	31.43	BRONP	A	11.30 pm
YD 64		14					KEEWATIN	KW	27.41	WYKJ		
YD 69		45			4.86		MOORE		26.57	DPX		
YD 74		520			5.59		NASHWALK	N	21.84	DPX		
YD 76		31			11.07		KEVIN		19.76	P		
YD 80	Yard	3			15.19		CALLUMET	CU	15.24	JRDW		11.20
YD 82		3			17.07		MARBLE	MB	14.36	DPX		
YD 84					20.58		HOLMAN JCT.		10.85	JRI		
YD 87					21.60		TACONITE JCT.	NI	9.83	JPV		11.15
YD 88		4			23.49		BOVEY	BY	8.00	DPX		
YD 91	Yard	10			28.19		CANISTEO		5.24	PKY		11.10
Y 161	Yard				37.43		GUINN	GU		JYDN		10.45 pm

Westward trains are superior to eastward trains of the same class.
SEE ADDITIONAL SPECIAL INSTRUCTIONS PAGES 8 THROUGH 17.

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6 WESTWARD		FIFTH SUBDIVISION						EASTWARD				
Station Numbers	Car Capacity		SECOND CLASS		Time Table No. 69		STATIONS	Telegraph Calls	Distance from Elk River	SIGNS	SECOND CLASS	
	Sidings	Other Tracks			Effective April 27, 1958							
G-28				305	Daily Ex. Sunday		ELK RIVER	ER	0.00	JRDNW	A	1.37 Pm
TRAINS BETWEEN N. P. RY. JCT. AND ELK RIVER WILL BE GOVERNED BY N. P. RY. TIME TABLE												
					8.54 Am	0.74	N. P. RY. JCT.	WR	0.74	IV	A	1.25 Pm

- Station Numbers
- Car Capacity
 - Sidings
 - "Other Tracks"
- Schedules: Westward and Eastward
- Station list
- Telegraph calls
- Distance from first station of Subdivn
- Rule 6A signs

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Prototype

4 WESTWARD THIRD SUBDIVISION EASTWARD

Time Table No. 69 Effective April 27, 1958

Train Number	Car Capacity	SECOND CLASS			FIRST CLASS			Stations	Signals	FIRST CLASS			SECOND CLASS		
		163	65	35	36	64	162			36	64	162			
1231	99	2			L 7:54a	13:43	BOYLSTON	P	A 6:13a						
1249					F 8:02	19:31	DEWEY	P	F 6:04						
					F 8:07	23:09	STATE LINE TOWER	S	DNPI	F 5:58					
						26:35	BRIDGE 25	IP							
1234	63	10			A 8:22	33:01	CARLTON	A	DNPI	A 5:41					
1239	239				A 8:33	38:07	CLOQUET	KH	FXR	A 5:29					
1213	89	81			A 8:58	45:41	BROOKSTON	BN	ZY	A 5:03					
1200	19				A 9:16	49:06	WHEAT	F	F 4:47						
1193	44				A 9:24	52:27	FLOODWOOD	OD	DP	F 4:40					
1174	81				A 9:47	60:33	SWAN RIVER	WA	JNPF	A 4:19					
200					A 9:59	64:28	PHILBIN	PI	PI	A 4:07					
1141	96	175			A 10:09	106:30	QUAN	GU	JYDNFX	A 3:57					
1139	92	240			A 10:23	109:34	GRAND RAPIDS	GR	DNXP	A 3:52					
1137	44	30			A 10:28	112:04	SEYTON	SK	FX	A 3:43					
1136	123	9			A 10:30	114:29	SOO JCT	JPV	DP	A 3:41					
					A 10:45	116:46	COHASSET	CO	DNPI	A 3:30					
					A 10:54	119:07	BALBLAR	B	F	A 3:20					
					A 11:10	143:40	WARBA	BA	DP	A 3:05					
					A 11:19	151:13	SCHLEY	P	F 2:56						
					L 8:43a	1:22	SOO JCT	JPV	DP	A 10:20a	A 3:30p				
1156	Yard	491			A 9:05	1:57	CASS LAKE	CS	DNPI	A 2:43	10:06	3:05			
1151	Y 86	49	10		A 9:14	2:04	PAUPORES	PA	F	A 2:32	9:58	2:50			
Y 96	49	10			A 9:24	2:11	ROSSY	R	F	A 2:25	9:51	2:38			
Y 90	70	191			A 9:35a	2:24a	BENJAMIN	BN	JNPF	A 2:18	9:42a	T 2:24a			
Y 84	70	10			A 9:45	2:32	WILTON	W	DP	A 2:03					
Y 78	28				A 12:18	19:24	SOLWAY	SO	DP	A 1:55					
Y 72	49	37			A 12:26	19:44	SPELWIN	SN	DP	A 1:47					
Y 62	72	76			A 12:35	20:14	HAILEY	HA	DP	A 1:38					
Y 58	101	27			A 12:44	21:44	ERD	ED	DP	A 1:29					
Y 52	70	23			A 12:52	21:44	LENGVY	L	DP	A 1:21					
Y 45	70	109			A 1:02	23:50	FOSTON	FO	DP	A 1:12					
Y 37	70	39			A 1:12	23:09	MINOTON	MO	DP	A 1:02					
Y 31	72	37			A 1:22	23:14	REAR	RE	DP	A 1:02					
Y 24	71	34			A 1:31	24:29	METZ	ME	DP	A 1:02					
Y 17					A 1:41	25:03	NESTON	NE	DP	A 1:02					
Y 12	70	29			A 1:48	25:17	BEATTY	BE	DP	A 1:02					
A359	Yard	559			A 2:05a	26:42	CROOKSTON YARD	CA	HTZ	L 12:14a					

TRAINS BETWEEN CROOKSTON YARD AND CROOKSTON WILL BE GOVERNED BY DAKOTA DIVISION TIME TABLE

No. 35 and No. 36 will stop at Warba and will stop on flag at Scanlon, Paupores, Island, Wawina, Blackberry and Burwell.

Subdivision is 255 miles long

Duluth, Missabe and Iron Range Railway

GREAT NORTHERN RAILWAY COMPANY

MESABI

4 WESTWARD THIRD SUBDIVISION EASTWARD

Time Table No. 69 Effective April 27, 1958

Train Number	Car Capacity	SECOND CLASS			FIRST CLASS			Stations	Signals	FIRST CLASS			SECOND CLASS		
		421	413	163	35	36	64			162	414	424			
1195	12	L 9:30 Pm	L 4:30 Am		L 9:38 Am	13:40	BOYLSTON	P	A 4:33 Am				A 5:50 Am	A 2:59 Am	
1174	28	A 9:42	4:40		9:47	87:80	FLOODWOOD	OD	DP	A 4:18			5:40	2:45	
1161	Yard	A 10:10 Pm	5:45		10:09	100:30	PHILBIN	GU	PI	4:05			5:30	L 2:30 Am	
1139	25	30	5:50		10:15	109:30	QUAN	GR	DNXP	A 3:52			4:40		
1137	12	10			L 9:43 Am	L 12:45 Am	GRAND RAPIDS	GR	DNXP	A 3:52					
1136	25	9			10:30	113:00	SOO JCT	JPV	DP	A 2:50 Pm	A 4:40 Pm				
1134	25	9			10:35	114:20	SEYTON	SK	FX	A 3:43					
1100	Yard		6:15	9:50	12:55 Pm	10:36	COHASSET	CO	DNPI	A 3:41			3:35		
			6:45	1:07	0:44	4:32	CASS LAKE	CS	DNPI	A 3:35	2:40	4:30	L 3:30 Am		

Westward trains are superior to eastward trains of the same class.

No. 35 and No. 36 will stop at Warba and will stop on flag at Scanlon, Paupores, Island, Wawina, Blackberry and Burwell.

SEE ADDITIONAL SPECIAL INSTRUCTIONS PAGES 4 THROUGH 15.

F. J. VOSS, President and General Manager
 C. F. KENNIGER, Asst. Superintendent
 N. A. ANDERSON, Executive Asst. to President
 O. B. SHANK, Superintendent
 E. W. ANDERSON, Asst. Superintendent

E. F. VIATT, Superintendent
 R. H. WHITMAN, General Manager
 A. W. CAMPBELL, General Superintendent Transportation

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Recreation		4 WESTWARD					THIRD SUBDIVISION					EASTWARD				
Train No.	Class	SECOND CLASS		FIRST CLASS		Station	Time Table No. 69	Station	Class	FIRST CLASS		SECOND CLASS				
		Day	Night	Day	Night					Day	Night	Day	Night			
		421	413	163	65				36	64	162	414	424			
		9:30 Pm	8:05 Am						4:53 Am			3:35 Am	2:45 Am			
Y251	2					BOYLSTON										
Y249	2					SEWLEY										
Y234	10					STATE LINE TOWER										
Y229	39					BRIDGE 29										
Y213	25	81				CARLTON										
Y200	12					CLIQUETT										
Y195	12					BROOKSTON										
Y178	4	9:42	8:15			MIRBAT										
Y161	28	4	9:55			FLOODWOOD										
Y159	25	30				SWAN RIVER										
Y157	12					PRULIN										
Y156	25	9				GURN										
Y145	22	14				GRAND RAPIDS										
Y138	15					SOUJCT										
Y136	10					SEYTON										
Y135	9					COMASSET										
Y134	10					DEER RIVER										
Y133	10					BALL CLUB										
Y132	9					MENA										
Y131	15					SOHLEY										
Y130	10					CASLAKE										
Y129	10					ASS										
Y128	9					PARIS										
Y127	10					ROBY										
Y126	10					SEMQUI										
Y125	10					WALTON										
Y124	10					SOLWAY										
Y123	12					SHEVLIN										
Y122	12					BAGLEY										
Y121	15					EBRO										
Y120	10					LENGBY										
Y119	10					FOSTON										
Y118	10					MONTOSH										
Y117	10					ERKONE										
Y116	10					MENTOR										
Y115	10					TILDEN JCT										
Y114	10					BENOT										
Y113	10					CROOKSTON										

Rule 6(A)

DM&I Operating Rules

Edition of 1955

D – Day telegraph or telephone station.

N – Night telegraph or telephone station.

DN – Day & night telegraph or telephone station.

W – Water station.

O – Track scales.

C – Fuel station.

Y – Wye.

R – Register station.

X – Yard limits.

Consolidated Code of Operating Rules

Edition of 1945

B – Bulletins.

C – Coal.

D – Day operator.

N – Night Operator.

DN – Day and Night operator.

H – Hog drenching.

I – Interlocking.

J – Junction.

K – Standard clock.

M – Railroad crossing protected by signals or gates;

O – Oil.

P – Telephone.

R – Train Register.

T – Turntable.

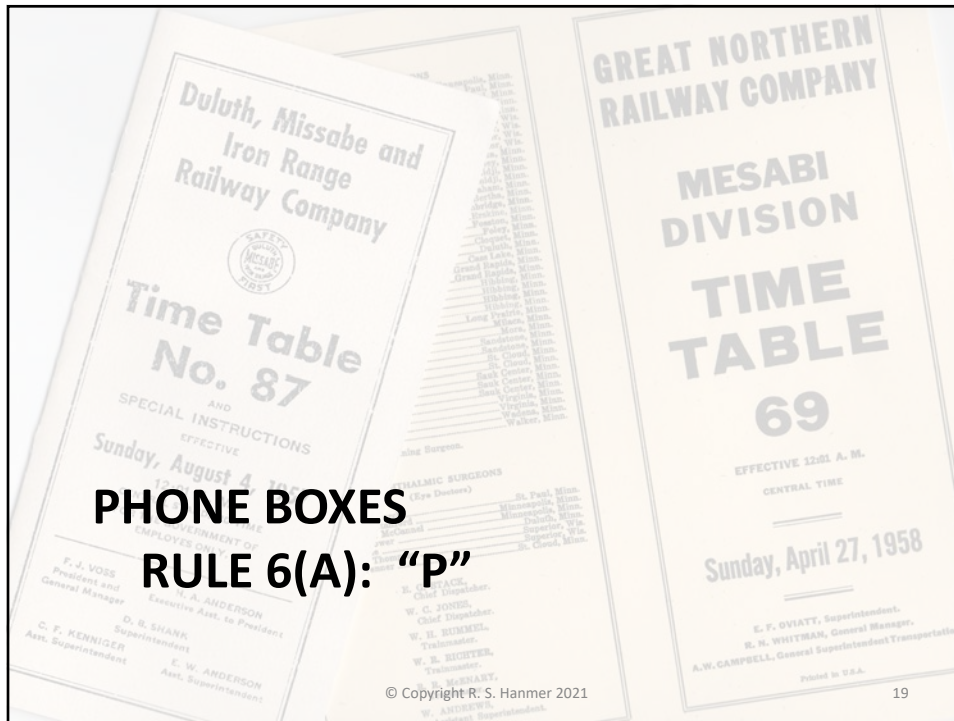
V – Track connection with foreign railroad.

W – Water.

X – Yard limits.

Y – Wye.

Z – Track scales.



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Prototype

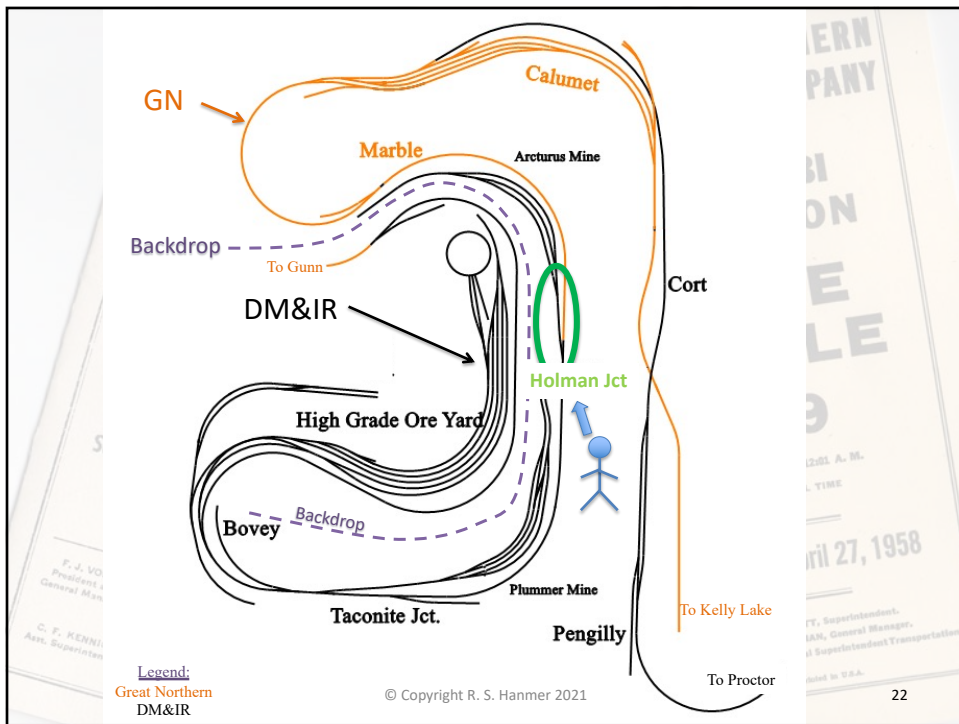
WESTWARD		NINTH SUBDIVISION		EASTWARD 7	
Time Table No. 69		Effective April 27, 1958		SIGN	
Station	Capacity	Station	Capacity	Station	Capacity
Y107	100	VA	20.00	DPXY	
Y108	100	VA	20.00	DPXY	
Y109	100	VA	20.00	DPXY	
Y110	100	VA	20.00	DPXY	
Y111	100	VA	20.00	DPXY	
Y112	100	VA	20.00	DPXY	
Y113	100	VA	20.00	DPXY	
Y114	100	VA	20.00	DPXY	
Y115	100	VA	20.00	DPXY	
Y116	100	VA	20.00	DPXY	
Y117	100	VA	20.00	DPXY	
Y118	100	VA	20.00	DPXY	
Y119	100	VA	20.00	DPXY	
Y120	100	VA	20.00	DPXY	
Y121	100	VA	20.00	DPXY	
Y122	100	VA	20.00	DPXY	
Y123	100	VA	20.00	DPXY	
Y124	100	VA	20.00	DPXY	
Y125	100	VA	20.00	DPXY	
Y126	100	VA	20.00	DPXY	
Y127	100	VA	20.00	DPXY	
Y128	100	VA	20.00	DPXY	
Y129	100	VA	20.00	DPXY	
Y130	100	VA	20.00	DPXY	
Y131	100	VA	20.00	DPXY	
Y132	100	VA	20.00	DPXY	
Y133	100	VA	20.00	DPXY	
Y134	100	VA	20.00	DPXY	
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Y137	100	VA	20.00	DPXY	
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Y139	100	VA	20.00	DPXY	
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Y146	100	VA	20.00	DPXY	
Y147	100	VA	20.00	DPXY	
Y148	100	VA	20.00	DPXY	
Y149	100	VA	20.00	DPXY	
Y150	100	VA	20.00	DPXY	
Y151	100	VA	20.00	DPXY	
Y152	100	VA	20.00	DPXY	
Y153	100	VA	20.00	DPXY	
Y154	100	VA	20.00	DPXY	
Y155	100	VA	20.00	DPXY	
Y156	100	VA	20.00	DPXY	
Y157	100	VA	20.00	DPXY	
Y158	100	VA	20.00	DPXY	
Y159	100	VA	20.00	DPXY	
Y160	100	VA	20.00	DPXY	
Y161	100	VA	20.00	DPXY	
Y162	100	VA	20.00	DPXY	
Y163	100	VA	20.00	DPXY	
Y164	100	VA	20.00	DPXY	
Y165	100	VA	20.00	DPXY	
Y166	100	VA	20.00	DPXY	
Y167	100	VA	20.00	DPXY	
Y168	100	VA	20.00	DPXY	
Y169	100	VA	20.00	DPXY	
Y170	100	VA	20.00	DPXY	
Y171	100	VA	20.00	DPXY	
Y172	100	VA	20.00	DPXY	
Y173	100	VA	20.00	DPXY	
Y174	100	VA	20.00	DPXY	
Y175	100	VA	20.00	DPXY	
Y176	100	VA	20.00	DPXY	
Y177	100	VA	20.00	DPXY	
Y178	100	VA	20.00	DPXY	
Y179	100	VA	20.00	DPXY	
Y180	100	VA	20.00	DPXY	
Y181	100	VA	20.00	DPXY	
Y182	100	VA	20.00	DPXY	
Y183	100	VA	20.00	DPXY	
Y184	100	VA	20.00	DPXY	
Y185	100	VA	20.00	DPXY	
Y186	100	VA	20.00	DPXY	
Y187	100	VA	20.00	DPXY	
Y188	100	VA	20.00	DPXY	
Y189	100	VA	20.00	DPXY	
Y190	100	VA	20.00	DPXY	
Y191	100	VA	20.00	DPXY	
Y192	100	VA	20.00	DPXY	
Y193	100	VA	20.00	DPXY	
Y194	100	VA	20.00	DPXY	
Y195	100	VA	20.00	DPXY	
Y196	100	VA	20.00	DPXY	
Y197	100	VA	20.00	DPXY	
Y198	100	VA	20.00	DPXY	
Y199	100	VA	20.00	DPXY	
Y200	100	VA	20.00	DPXY	

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P General

4A. During the daylight hours, headlights on diesel locomotives used in road service will be turned on while train is enroute.
 All other provisions of Rule 17, S17 and 17(b) will apply.
 D. Smoking or the use of open lights in the engine room of diesel locomotives is prohibited.

10. Bell telephone has been installed on a pole adjacent to railroad crossing, south end of Plummer Load Yard.
Crews returning from Plummer Mine must obtain information concerning conflicting movements, by calling Operator.
Box must be locked at all times when not in use.

23. All steam locomotives being serviced by engine crews at water stations or coal docks must be accompanied by a member of train crew.

MISSABE DIVISION ROAD

10. Bell telephone has been installed on a pole at railroad crossing, south end of Plummer Load Yard.
 Crews returning from Plummer Mine must obtain information concerning conflicting movements, by calling Operator.
 Box must be locked at all times when not in use.

11. Great Northern Railway has installed a telephone Switch, Coleraine.
 Crews returning from Oil Spur must call Great Northern Dispatcher regarding conflicting movements before fouling Main Line.

DM&IR SI: Recreation

BULLETIN
 NUMBER 15
 EFFECTIVE MAY 14, 1958

Bell telephone has been installed on a pole at south end of Arcturus Mine spur, adjacent to Main Line.
 Crews returning from Arcturus Mine must call Great Northern Dispatcher regarding conflicting movements before fouling Main Line.

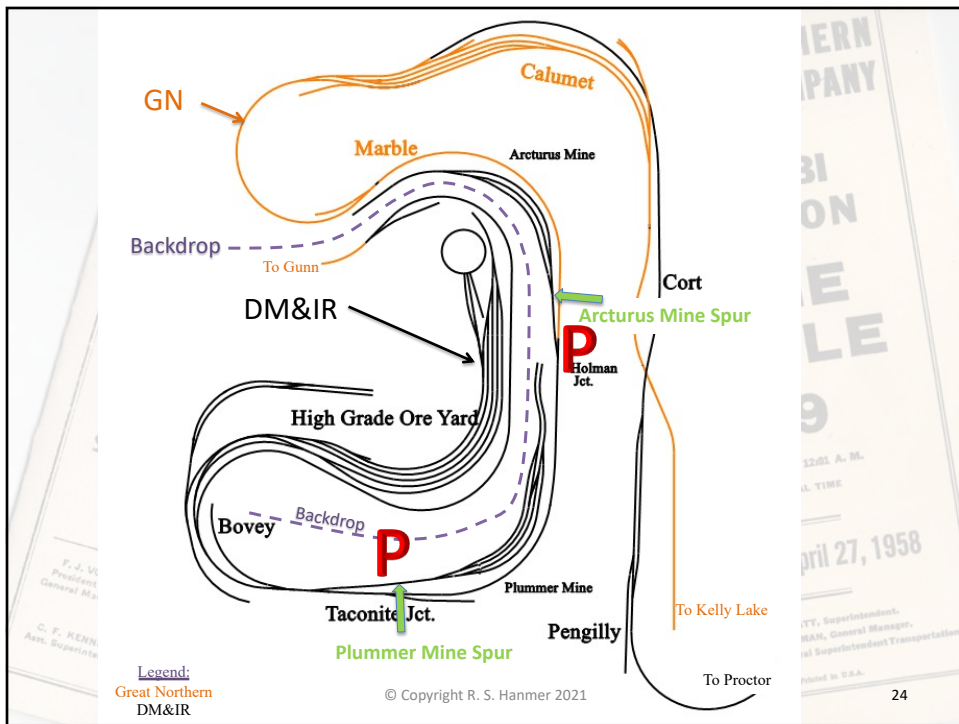
E. F. Oviatt

GN Bulletin: Recreation

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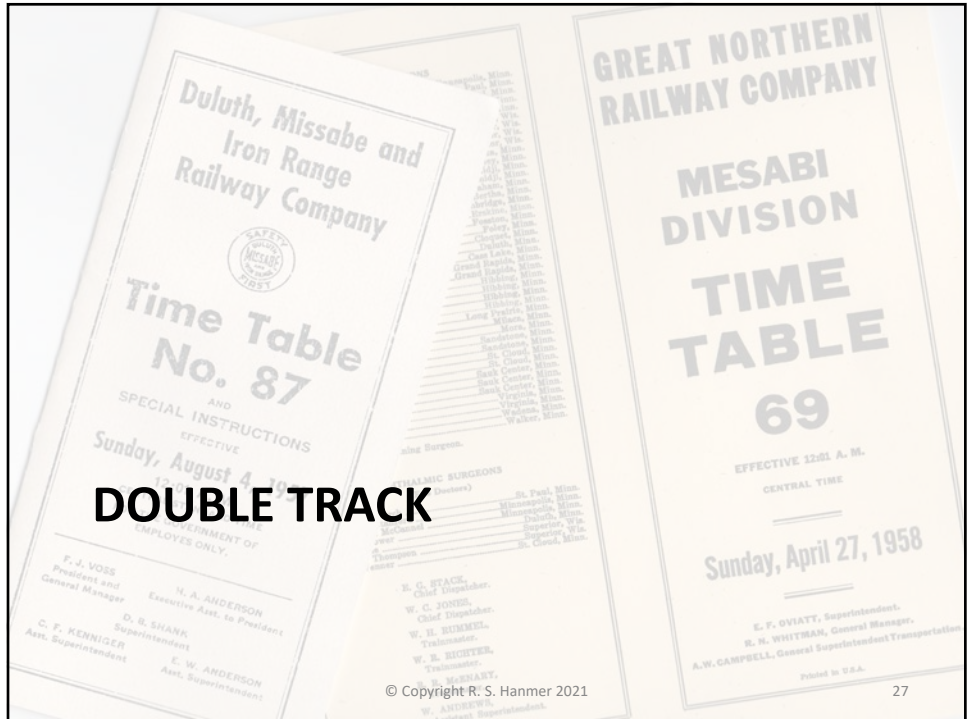
24



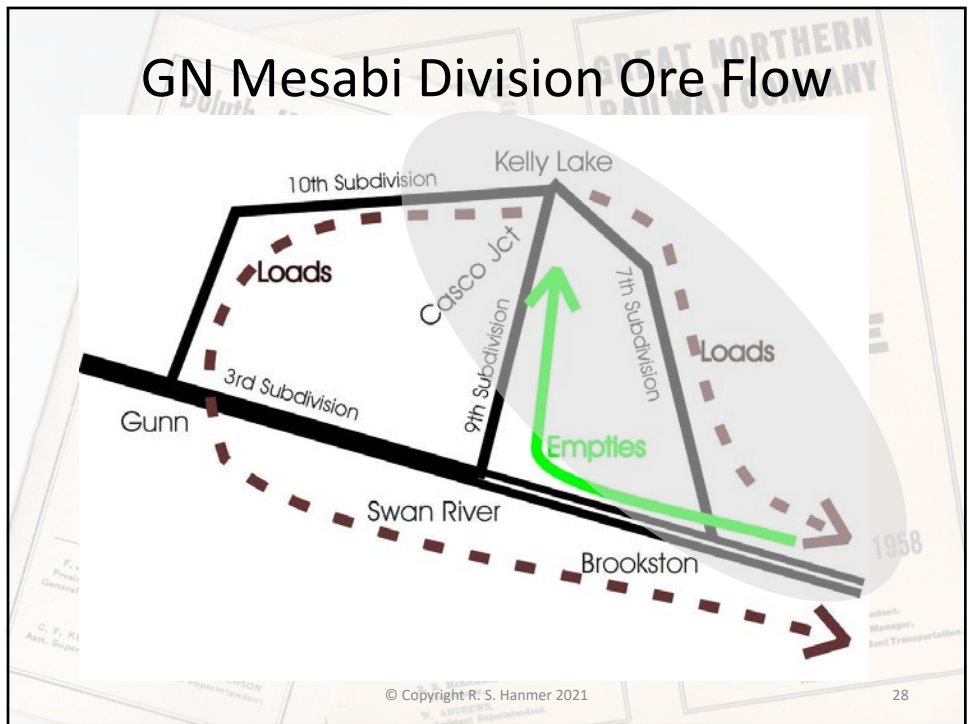
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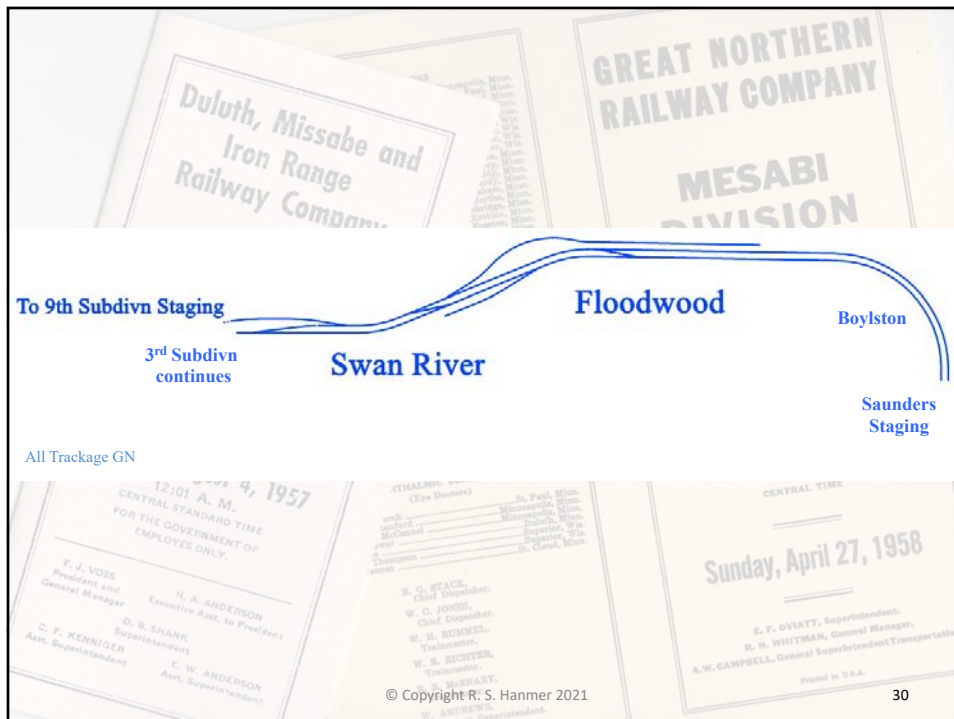
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Recreation

Train No.	Dir.	4 WESTWARD					THIRD SUBDIVISION					EASTWARD						
		Class	Sec. Class	1st Class	2nd Class	3rd Class	Class	Sec. Class	1st Class	2nd Class	3rd Class	Class	Sec. Class	1st Class	2nd Class	3rd Class		
Y251	20	2	421	413	163	65	35							36	64	162	414	424
Y254	30	10																
Y252	39																	
Y253	25	81																
Y256	12																	
Y255	12																	
Y257	12																	
Y258	4																	
Y259	25																	
Y260	22	14																
Y261	10	7																
Y262	9	8																
Y263	15																	
Y264	10																	
Y265	9	5																
Y266	10	3																
Y267	10	3																
Y268	12	12																
Y269	15	5																
Y270	10	23																
Y271	10	15																
Y272	10	5																
Y273	11	5																
Y274	10	5																
Y275	10	4																
Y276	Yard																	

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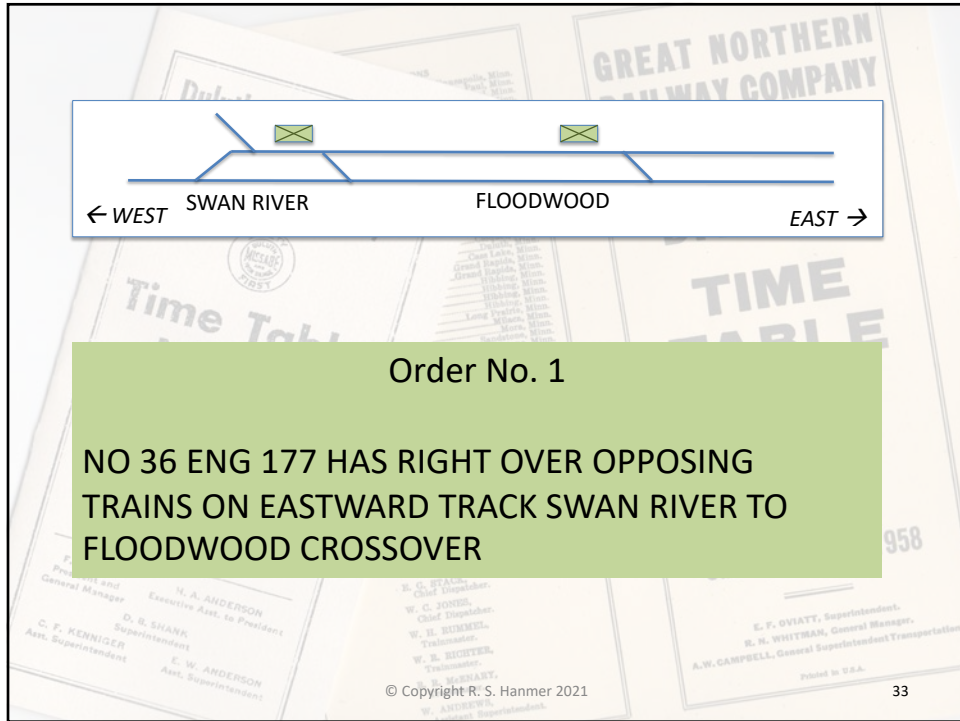
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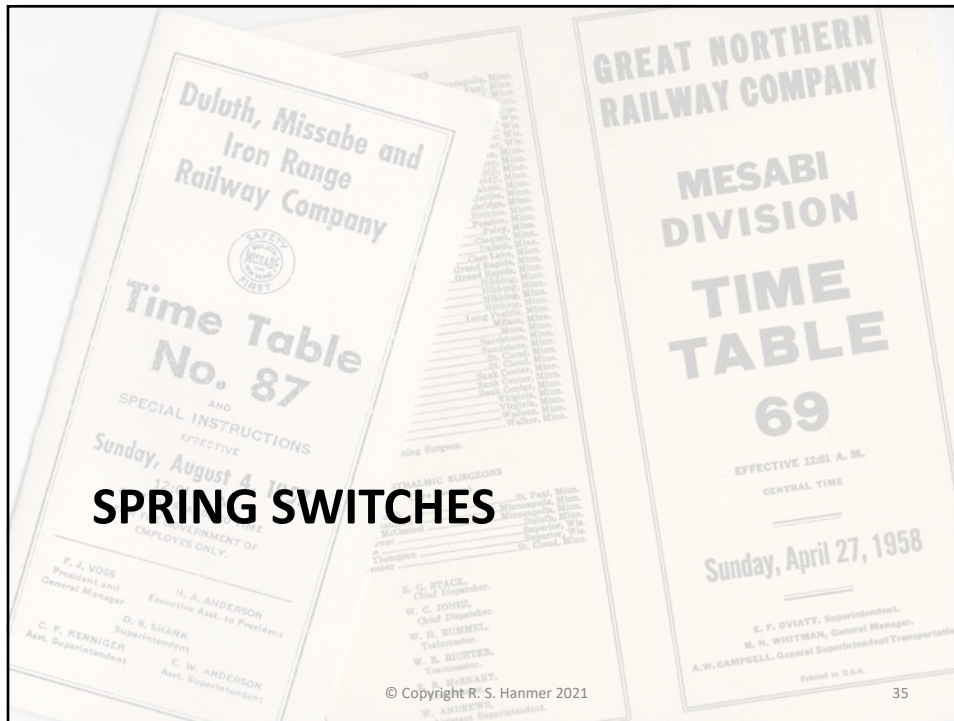
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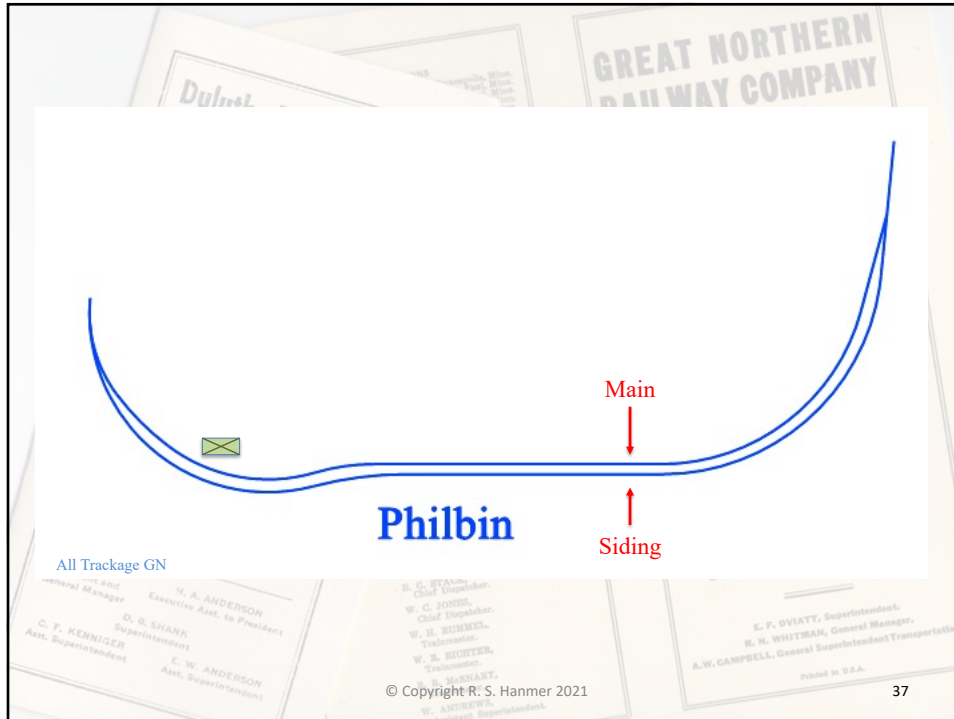
Prototype

4 WESTWARD		THIRD SUBDIVISION		EASTWARD	
Station	Time	Station	Time	Station	Time
1221	7:54a	BOYLSTON	13:43		
1222	8:02	DEWEY	13:51		
1223					
1224					
1225					
1226					
1227					
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1299					
1300					

TRAINS BETWEEN CROOKSTON YARD AND CROOKSTON WILL BE GOVERNED BY DAKOTA DIVISION TIME TABLE

No. 35 and No. 36 will stop at Warba and will stop on day at Scandia, Pappas, Island, Warba, Blackberry and Burwell.

36



37

Prototype

12

SECOND SUBDIVISION
(Main Line)

1. **MAXIMUM PERMISSIBLE SPEED FOR TRAINS.**
Between Brook Park Jct. and East St. Cloud 55 MPH
Passenger Freight 40 MPH

2. **SPEED RESTRICTIONS.**
Bridge 462, Mora 20 MPH
Bridge 463, Oyama 20 MPH
E. Green Home Signals of Interlockings at: 20 MPH
Brook Park Jct.
East St. Cloud.

3. **TRAIN REGISTER EXCEPTIONS.**
Miles, register only for trains originating and terminating.

4. **CLEARANCE PROVISIONS AND EXCEPTIONS RULE 83(B).**
(a) At Brook Park Jct., trains for which this point is initial station may proceed on authority of clearance under which such trains arrive.
(b) At Miles Jct., clearance under which Nos. 305 and 315 arrive will clear Nos. 316 and 306, respectively, at that point.

5. Crossings as herein shown at the following stations are equipped with automatic signals and switch-key controllers. When engines or cars are standing in clear but crossing not fouled, signals must be cleared for highway traffic by operating controllers. When crossing is to be fouled, controllers must first be operated to set signals at stop position against highway traffic. Mora, first crossing west of depot; and Highway No. 65, 2006 ft. east of depot.
Miles, first crossing west of depot.
East St. Cloud, I.R. Highway No. 10 crossing.

6. Between St. Cloud and East St. Cloud trains will be governed as follows:
Eastward trains to 2nd Subdivision must secure clearance at St. Cloud and must know before leaving there that route is clear at N. P. Ry. crossing, East St. Cloud.
Westward trains from East Side Line will be governed by interlocking signal at N. P. Ry. Jct.
Westward trains from 2nd Subdivision will be governed by the

7. **SPEED TEST BOARDS.**
Engines shall test speed of their trains passing following points as compared with Speed Tables:
Westward, between MP 86 and MP 87 approximately 4 1/2 miles west of Miles.
Eastward, between MP 87 and MP 86 approximately 2 miles east of Miles.
Eastward, between MP 86 and MP 87 approximately 2 miles east of Miles.
Westward, between MP 87 and MP 86 approximately 2 miles west of Miles.

8. Clocquet derris located near east end storage tracks Nos. 1 and 2 are not provided with derail signs.
Clocquet, cars left on G.N. tracks must not be closer than 60 ft. each way from 19th Street crossing east of depot.

9. Resolution, special signal consisting of horn and yellow light is located north of westward main track first west of crossing station to inform crews of eastward ore trains from Coaco and Guan Hous when carney have completed inspection and train is in position to proceed.

10. Swan River, train orders and messages delivered by hoop to eastward trains will be delivered from the south or right hand side.

11. Philbin, siding must be used by eastward trains only, unless otherwise authorized by train order.

12. Crossings as herein shown at the following stations are equipped with automatic signals and switch-key controllers. When engines or cars are standing in clear but crossing not fouled, signals must be cleared for highway traffic by operating controllers. When crossing is to be fouled, controllers must first be operated to set signals at stop position against highway traffic.
Carlton, Market Street, west of depot; Arch Street, west of depot; Northern Paper Mill crossing, one mile east of depot. Switch-key-controller on signal case. Arch Street, will clear Grand Rapids, Highway No. 85, one-half mile west of depot. Grand Rapids, Elkongona Avenue, first crossing east of depot; Swan River, Highway No. 85, first crossing west of depot. Controller for First Avenue West crossing located on dipol.
Cohasset, State Highway No. 6 crossing, about 800 ft. west of Cohasset.
Minnesota Power & Light Spur, State Highway No. 6, west of Cohasset.

11. Philbin, siding must be used by eastward trains only, unless otherwise authorized by train order.

THIRD SUBDIVISION
(Main Line)

1. **MAXIMUM PERMISSIBLE SPEED FOR TRAINS.**
Between Boylston and Minkat 50 MPH
Minkat and Crookston Yard 35 MPH
Passenger Freight 40 MPH

2. **SPEED RESTRICTIONS.**
Between Home Signals of Interlockings at: 20 MPH
Bernaji.
Crookston.
Crookston Yard.
Case Lake, on all tracks over footwalk crossing located just east of cooling station 8 MPH
Vehicle signal must be sounded as prescribed by rule. Crossing must be cut immediately. When this crossing is blocked by crossing signal, trainmen must remain at the crossing to prevent pedestrians from crawling through the cars.
Case Lake, all trains will run at restricted speed between Case Lake depot and home signal located 6500 ft. east of depot.

3. **TRAIN REGISTER EXCEPTIONS.**
Clocquet, register for trains 35 and 36 only.
Trains originating and terminating at Crookston Yard will register at Crookston Depot.

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Prototype

16. SPRING SWITCHES WITH FACING POINT LOCK.
 Brookston, east switch of crossover between main tracks.
 Normal position is for main track.
 west switch of crossover between main tracks.
 Normal position is for crossover.
 switch leading to Casco Line (7th Subdivision) from westward main track.
 Normal position is for main track.
 Swan River, end of double track.
 Normal position is for eastward main track.
 Philbin, east siding switch.
 Normal position is for main track.
 west siding switch.
 Normal position is for siding.
 Casco Lake, east yard switch.
 Normal position is for main track.

17. SPRING SWITCHES WITHOUT FACING POINT LOCK.
 Casco Lake, west crossover switch to roundhouse lead incoming roundhouse track
 Normal position is for tracks named.

18. DRAGGING EQUIPMENT DETECTOR INDICATOR.
 Eastward trains, on signal 30.2 approximately one mile west of Bridge 29.
 Westward trains on Signal 28.1 approximately 1 mile east of Bridge 29.

19. MANUAL INTERLOCKINGS.
 State Line Tower..... N. P. Ry. crossing
 Casco..... N. P. Ry. crossing
 Benish..... N. P. Ry. crossing
 Evidale..... MSP&SSM, RR. crossing
 Tilden Jet..... N. P. Ry. crossing

20. MANUAL INTERLOCKINGS WITH DUAL CONTROL SWITCHES.
 Swan River crossover and junction with 9th Subdivision

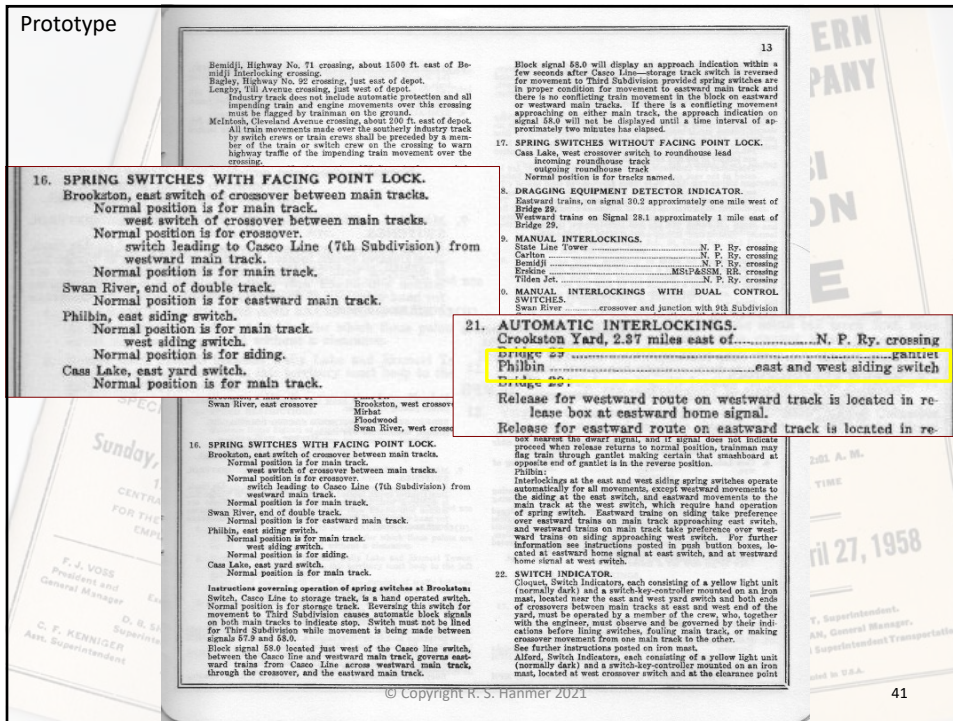
AUTOMATIC INTERLOCKINGS.
 Crookston Yard, 2.37 miles east of..... N. P. Ry. crossing
 Bridge 29..... east and west siding switch
 Philbin..... east and west siding switch
 Bridge 29:
 Release for westward route on westward track is located in release box at eastward home signal.
 Release for eastward route on eastward track is located in release box at westward home signal, and if signal does not indicate proceed when release returns to normal position, trainman may flag train through gantlet making certain that switchboard at opposite end of gantlet is in the reverse position.

21. Philbin:
 Interlockings at the east and west siding switches operate automatically for all movements, except westward movements to the siding at the east switch, and eastward movements to the main track at the west switch, which require hand operation of spring switch. Eastward trains on siding take preference over westward trains on main track taking preference over westward trains on siding approaching west switch. For further information see instructions posted in push button boxes, located at eastward home signal at east switch, and at westward home signal at west switch.

22. SWITCH INDICATOR.
 Closest, Switch Indicators, each consisting of a yellow light unit (normally dark) and a switch-key-controller mounted on an iron mast, located near the east and west yard switch and both ends of crossover between main tracks at east and west end of the yard, must be operated by a member of the crew, who, together with the engineer, must observe and be governed by their indications before lining switches, fouling main track, or making crossover movement from one main track to the other.
 See further instructions posted on iron mast.
 Allard, Switch Indicators, each consisting of a yellow light unit (normally dark) and a switch-key-controller mounted on an iron mast, located at west crossover switch and at the clearance point

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MINE SPUR LOCATIONS

46

Business Tracks not shown as start				Mine Spurs				
Name	Location	Party	Switch	Name	Location	Party	Switch	
First Subdivision	Rural Coop. Power Ass'n Spur	2.42 miles east of Cambridge	6 E	Third 5	Wabka	Blackburn		
Second Subdivision	R. E. A. Oil Spur	0.5 miles east of Milaca	3 W	Fourth 5	Midland	Goal Spur		
Third Subdivision	International Redistrict	1.69 miles west of Carter	40 E	Oil Tract	Dunwoody	0.99 miles east of Emmert	W	
Fourth Subdivision	Flint Pit	2.83 miles east of Brookston	120 E	Wacoatah	Chataco	0.74 miles west of Chisholm	W	
Spur	Whester Lumber Co.	1.25 miles west of Dunwoody	17 E	Keewatin	Judson, Michael	1.35 miles west of Buhl	W	
Mine Spurs	Stevenson, Lambertson, Mahoning	Concentrate, Warren	0.53 miles east of Kelly Lake	W	St. Paul Washer	St. Paul Washer	0.34 miles east of Moore	E
	Mahoning, Smith, N. Uno, Mahoning	ing Crp. IV, So. Agnew, Carm	0.72 miles east of Kelly Lake	W	Mesabi Chief Washer, Aromatic	Perry, Mississippi	1.17 miles west of Moore	W
	Hull Crusher	1.80 miles east of Kelly Lake	W	O'Brien	Hill Annex Washer	0.60 miles east of Calumet	E	
	No. Agnew	1.98 miles east of Kelly Lake	E	Hawkins Fines	0.37 miles east of Nashwauk	E		
	Seranton, Alworth	2.42 miles west of North Mitchell	W	York, Gairns	0.13 miles east of Nashwauk	E		
	Susquahanna, Weggum, Boeing	0.03 miles west of North Mitchell	E	Hawkins (MacKilian)	0.13 miles east of Nashwauk	E		
	Webb, Albany, Longyear, Bradford	0.81 miles east of North Mitchell	E	Harrison	0.78 miles west of Nashwauk	W		
	Dunwoody	0.99 miles east of Emmert	W	Majores, Draper Annex, Barbara	0.73 miles east of Calumet	E		
	Chataco	0.74 miles west of Chisholm	W	Hill Annex Washer	0.60 miles east of Calumet	E		
	Eibern	2.87 miles west of Buhl	W	Hill Annex Fines, Hill Trumbull Washer	0.69 miles east of Calumet	E		
	Judson, Michael	1.35 miles west of Buhl	W	Hill Spur	0.37 miles west of Calumet	E		
	Grant	1.22 miles west of Buhl	W	Rhude Media Spur	0.57 miles east of Holman Jct	E		
	North Shiras	0.78 miles east of Buhl	E	Arcturas	0.25 miles east of Holman Jct	W		
	Margaret	0.96 miles east of Buhl	E	Holman	1.82 miles east of Bovey	E		
	Wanless	1.38 miles east of Buhl	E	Holman Lean Ore	0.83 miles west of Bovey	E		
	Kinney, Atkins, Wade	0.50 miles west of Elliott Siding	E	Canisteo, Buckeye, Danube	Canisteo	E, W		
	Wacoatah	3.31 miles west of Virginia	E	West Hill	0.20 miles west of Canisteo	E		
	Hanna B. Pilot	2.64 miles west of Virginia	E	Jessie	1.60 miles west of Canisteo	W		
	Enterprise	0.83 miles west of Virginia	E	Greenway	2.42 miles west of Canisteo	W		
	Columbia	0.47 miles west of Virginia	E	Flora Hammer 2021	0.24 miles east of Seyton	W		
	Bennet-Russell, Carla	2.57 miles west of Kelly Lake	E					
	St. Paul	0.25 miles east of Keewatin	E					
	Sargent Shaft, Sargent Open Pit	0.34 miles east of Moore	E					
	St. Paul Washer	0.35 miles west of Moore	E					
	Chiefman	0.35 miles west of Moore	E					
	Mesabi Chief Washer, Aromatic	Perry, Mississippi	1.17 miles west of Moore					
	O'Brien	Hill Annex Washer	0.60 miles east of Calumet					
	Hawkins Fines	0.37 miles east of Nashwauk	E					
	York, Gairns	0.13 miles east of Nashwauk	E					
	Hawkins (MacKilian)	0.13 miles east of Nashwauk	E					
	Harrison	0.78 miles west of Nashwauk	W					
	Majores, Draper Annex, Barbara	0.73 miles east of Calumet	E					
	Hill Annex Washer	0.60 miles east of Calumet	E					
	Hill Annex Fines, Hill Trumbull Washer	0.69 miles east of Calumet	E					
	Hill Spur	0.37 miles west of Calumet	E					
	Rhude Media Spur	0.57 miles east of Holman Jct	E					
	Arcturas	0.25 miles east of Holman Jct	W					
	Holman	1.82 miles east of Bovey	E					
	Holman Lean Ore	0.83 miles west of Bovey	E					
	Canisteo, Buckeye, Danube	Canisteo	E, W					
	West Hill	0.20 miles west of Canisteo	E					
	Jessie	1.60 miles west of Canisteo	W					
	Greenway	2.42 miles west of Canisteo	W					
	Flora Hammer 2021	0.24 miles east of Seyton	W					

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Duluth, Missabe and Iron Range Railway Company

Time Table No. 87

SPECIAL INSTRUCTIONS AND EFFECTIVE

Sunday, August 4, 1958

EMPLOYMENT OF

F. J. VOSS, President and General Manager
C. F. KENNIGER, Asst. Superintendent
N. A. ANDERSON, Executive Asst. to President
O. E. SHANK, Superintendent
E. W. ANDERSON, Asst. Superintendent

GREAT NORTHERN RAILWAY COMPANY

MESABI DIVISION

TIME TABLE 69

EFFECTIVE 12:01 A. M. CENTRAL TIME

Sunday, April 27, 1958

E. F. OVIATT, Superintendent
R. H. WHITMAN, General Manager
A. W. CAMPBELL, General Superintendent Transportation

YARD LIMITS AT SEYTON

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Tioga 0.24 miles east of Seyton W

Prototype

106.30 GUNN	GU	JYIDNFX
109.34 GRAND RAPIDS	GR	DNXP
113.04	..... SEYTON .....	.....	FX
114.28	..... 1.19 .....	.....	.....

Rule 6(A)
P – Phone
X – Yard Limits

Recreation

10.15	106.30	7.80	GUNN	GU	R
12:01 A. M.	109.30	3.00	GRAND RAPIDS	GR	DNXP
10.23	112.00	2.70	SOO JCT	JPV
.....	113.00	1.00	SEYTON	FX
.....	1.20

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Tioga #2 mine

3RD SUBDIVN

CANISTEO

10TH SUBDIVN

SEYTON

GRAND RAPIDS

GUNN

← WEST

YARD LIMITS

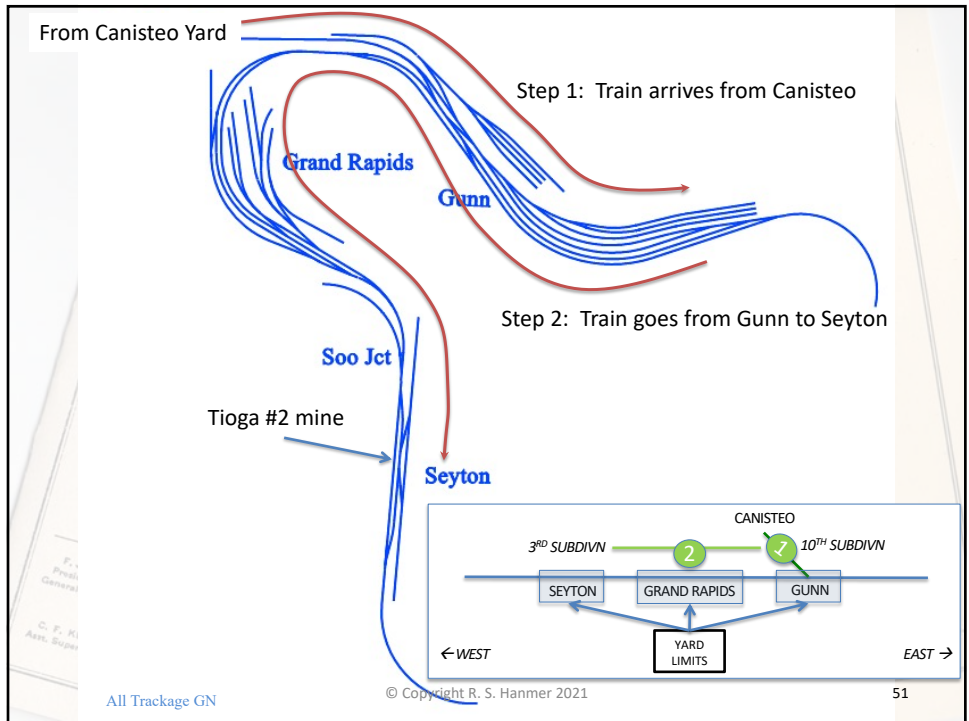
EAST →

7 Miles on Prototype

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50

50



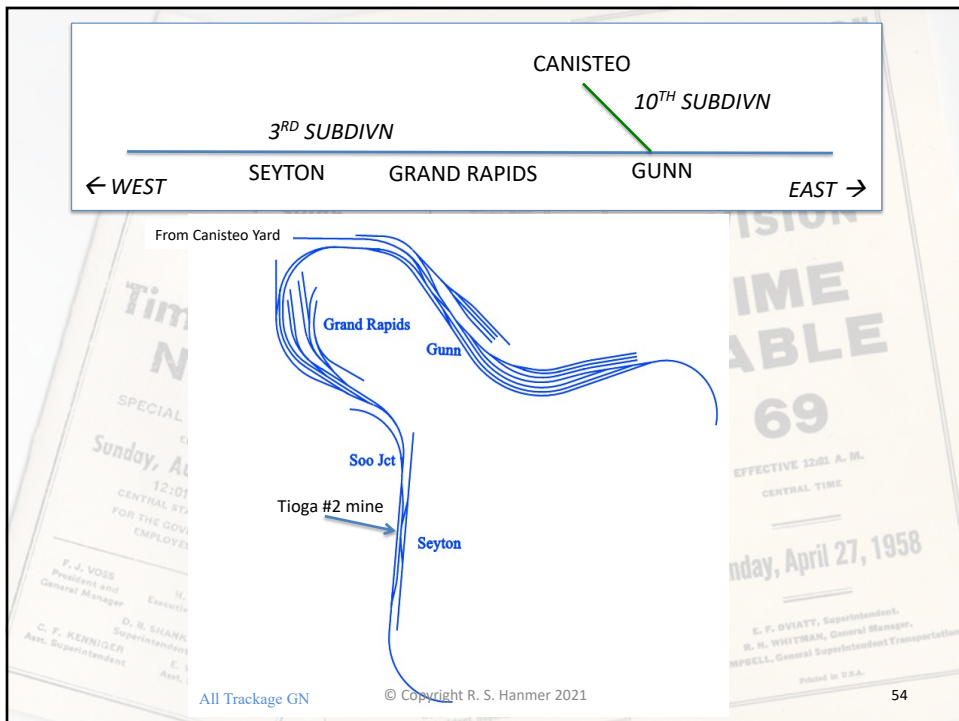
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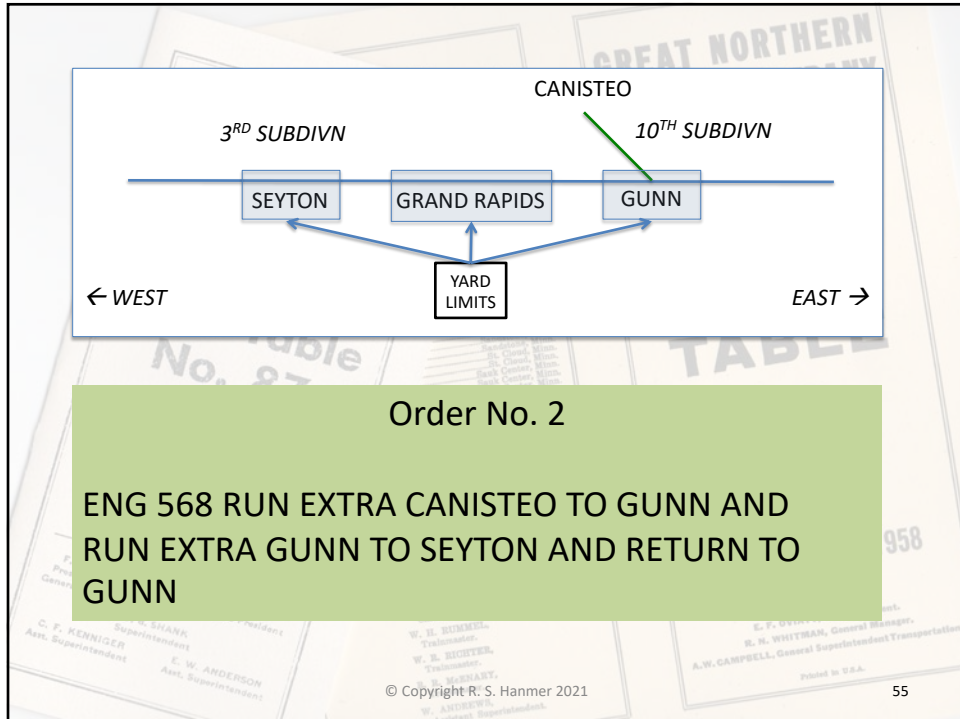
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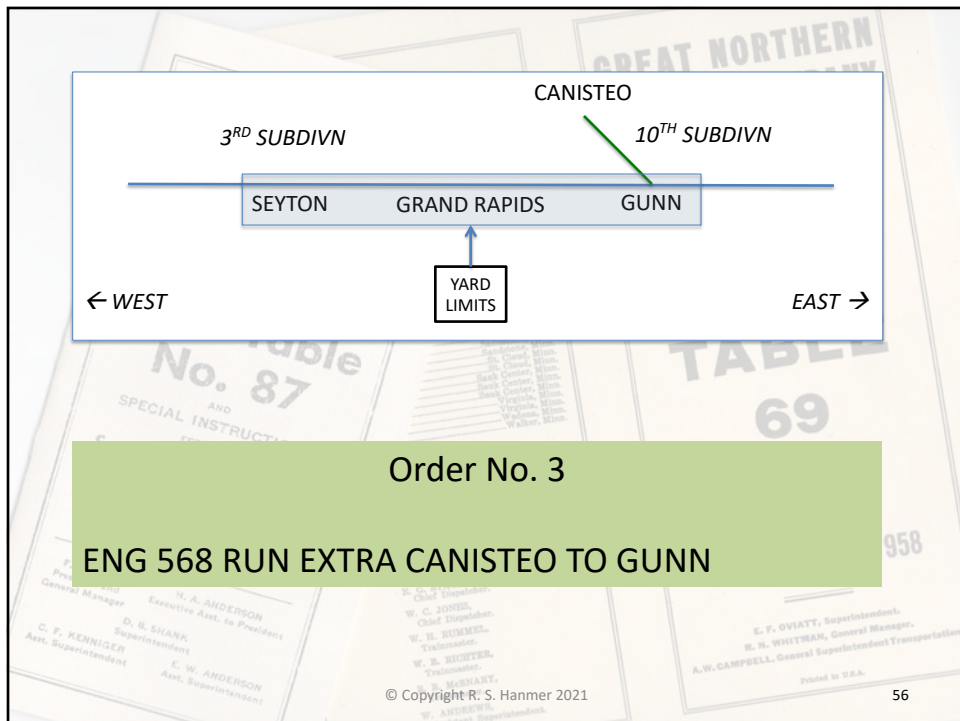
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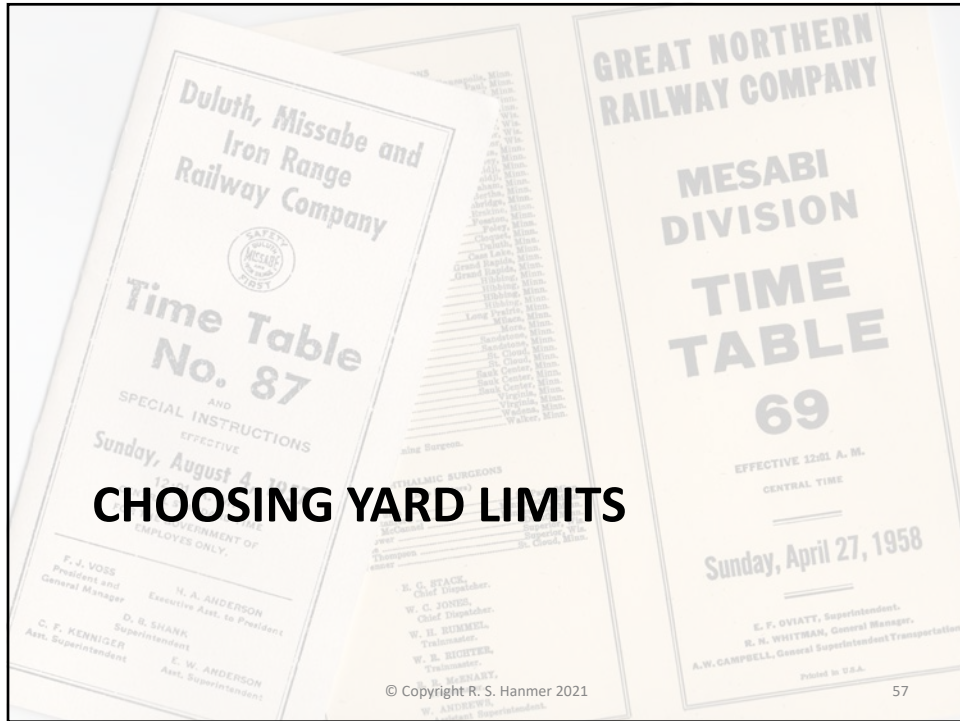
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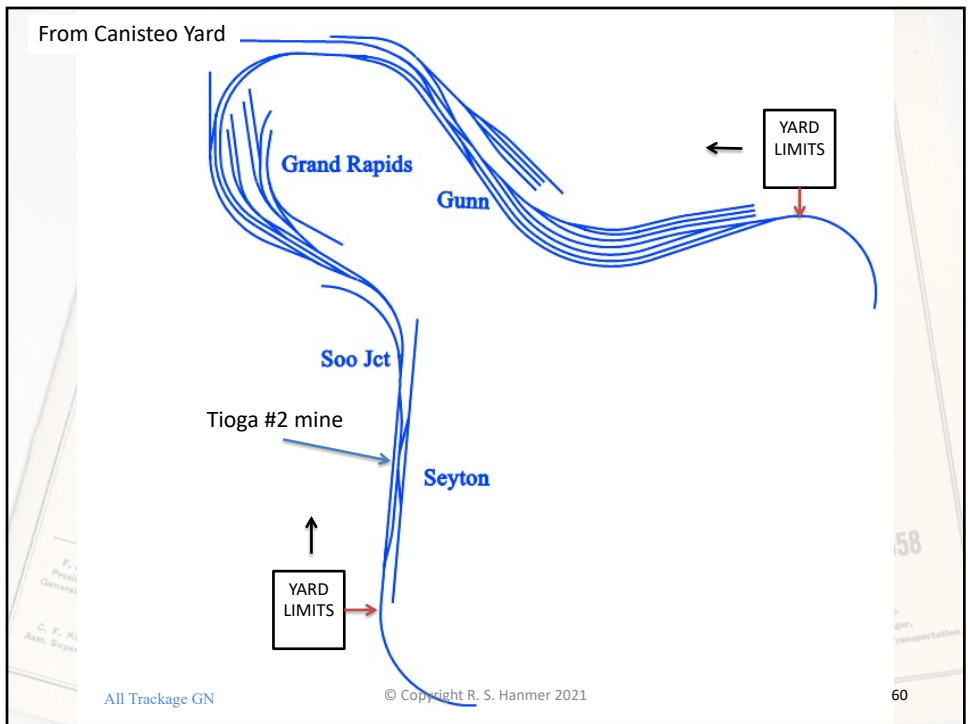
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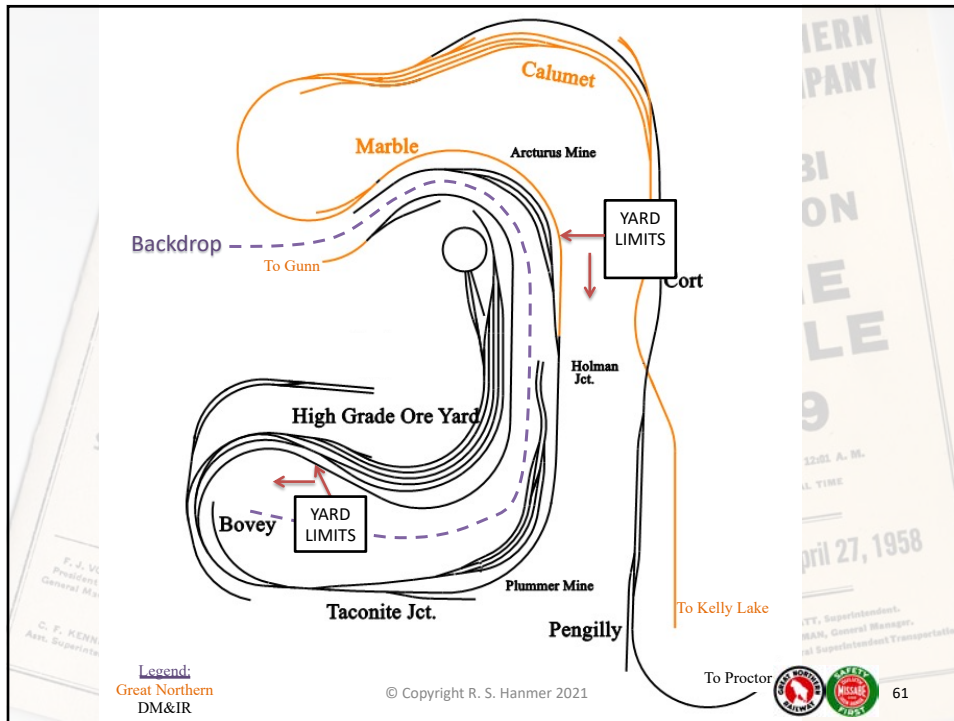
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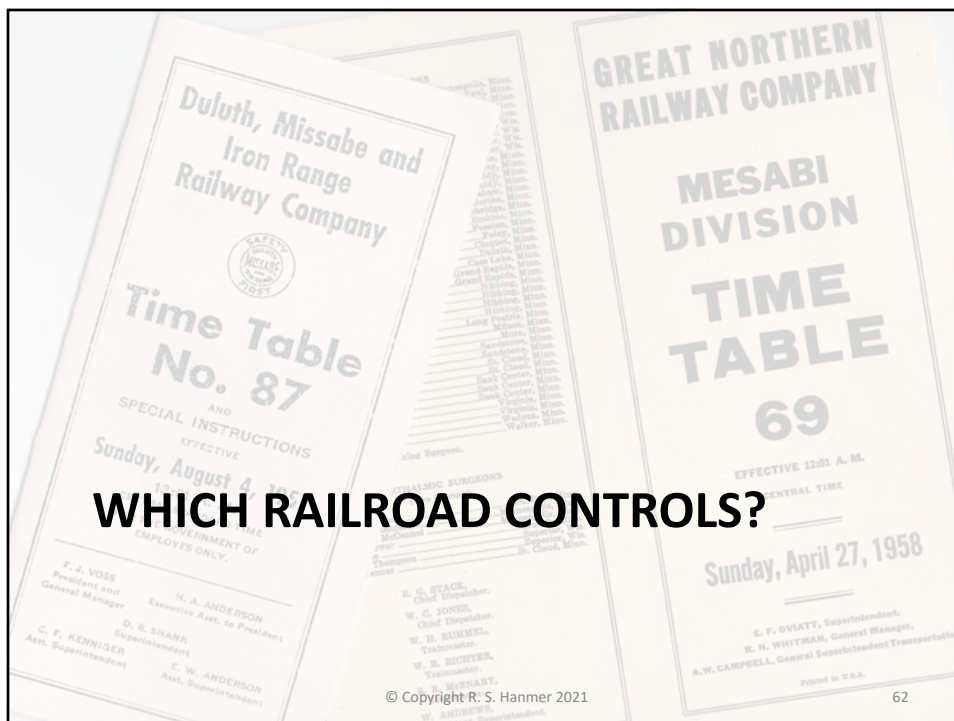
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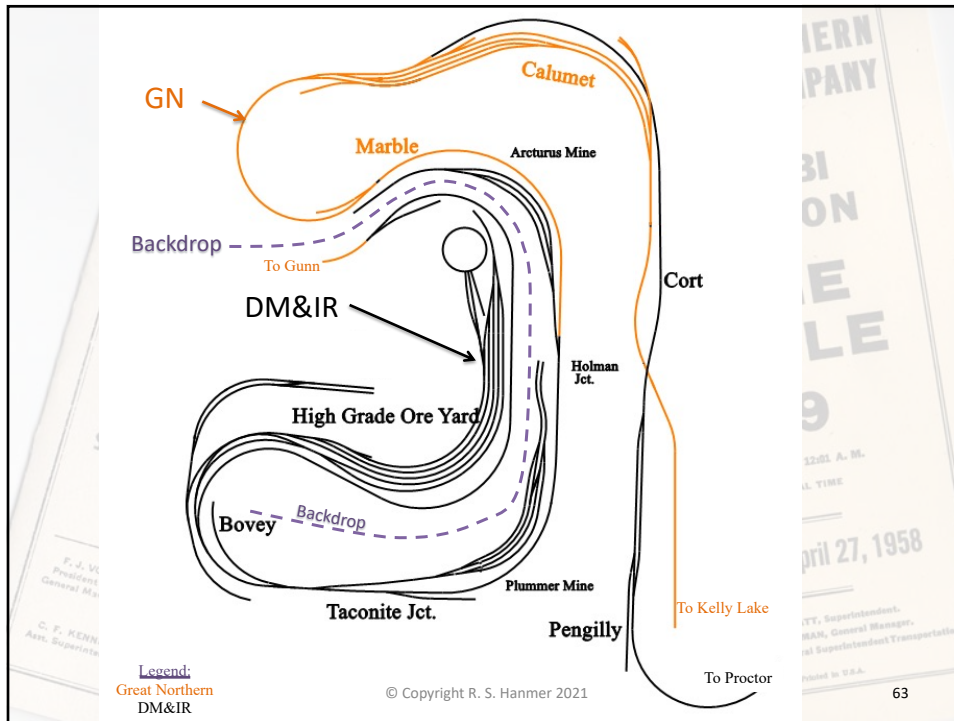
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61



62



63

Recreation

MISSABE DIVISION

North Bound ALBORN TO COLERAINE-BOVEY South Bound

Time Table No. 87
Aug. 4, 1957

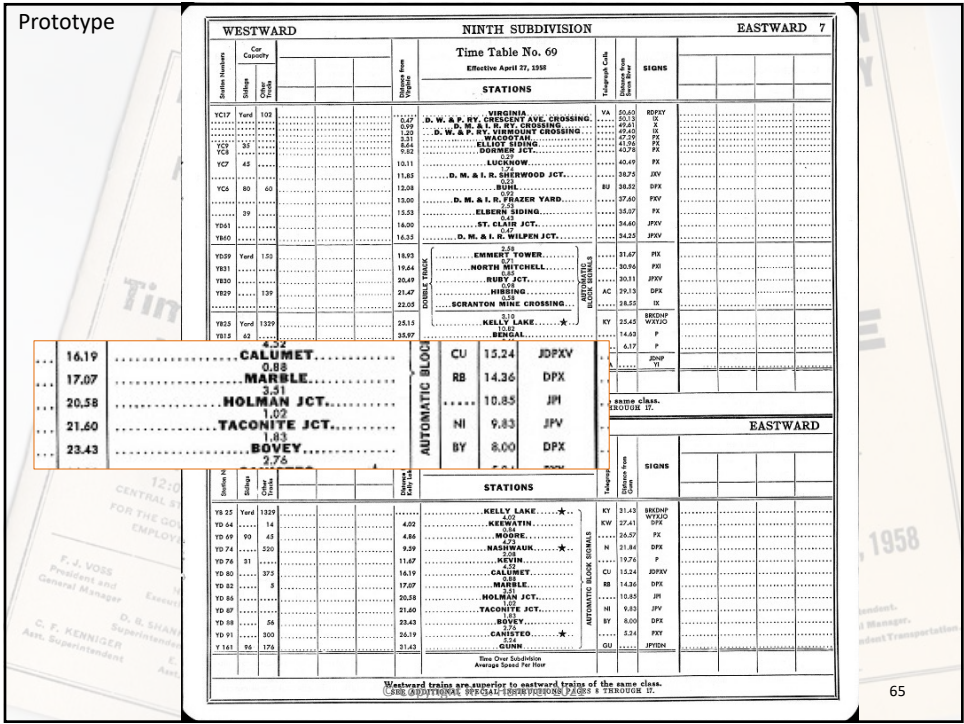
Class	Time	Stop	Notes	Class	Time	Stop	Notes
E43	43.80	0.44	Interlocker.....CALUMET.....Interlocker	CA			
E45	44.69	0.89	.....MARBLE.....	RB			
	48.01	3.32	Interlocker.....HOLMAN JCT.....Interlocker	HO			
		1.20	Automatic Block } TACONITE JCT. { Automatic Block	NI			
E49	49.21		.....TACONITE.....				
F 1	49.80	0.59	.....TACONITE.....				
E49	50.39	0.59	.....TACONITE JCT.....				
E52	52.21	1.82	A.....COLERAINE-BOVEY.....L V Y				

Southward Trains are superior to Northward Trains of same class.
D. M. & I. R. Trains are governed by G. N. Ry. Time Table, Signals, Rules and Instructions between Calumet and Coleraine-Bovey, and except as otherwise provided are dispatched by G. N. Ry.

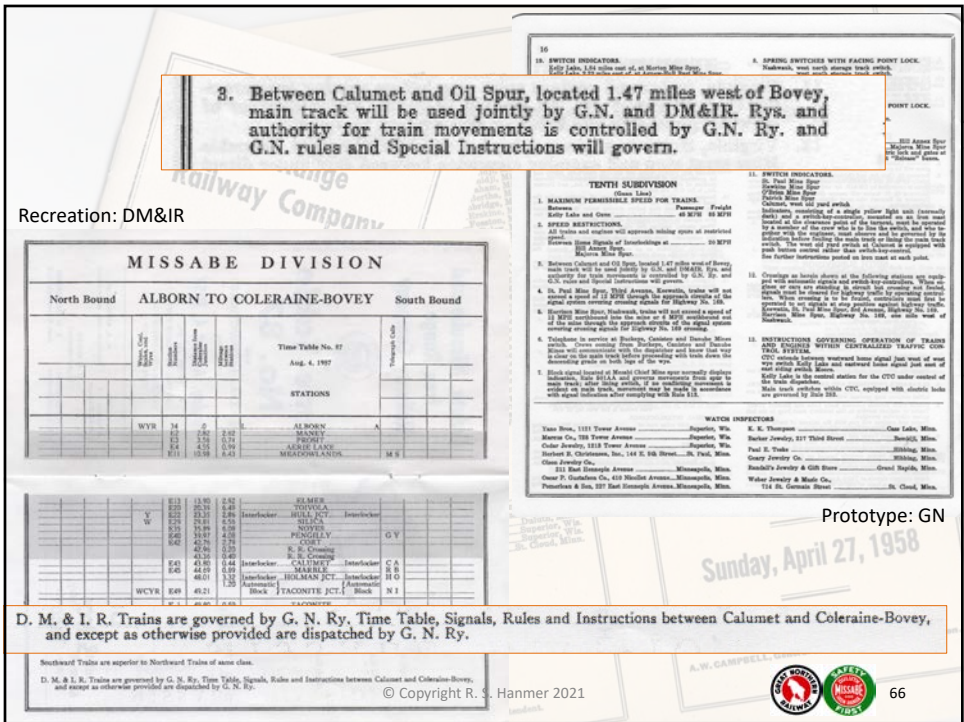
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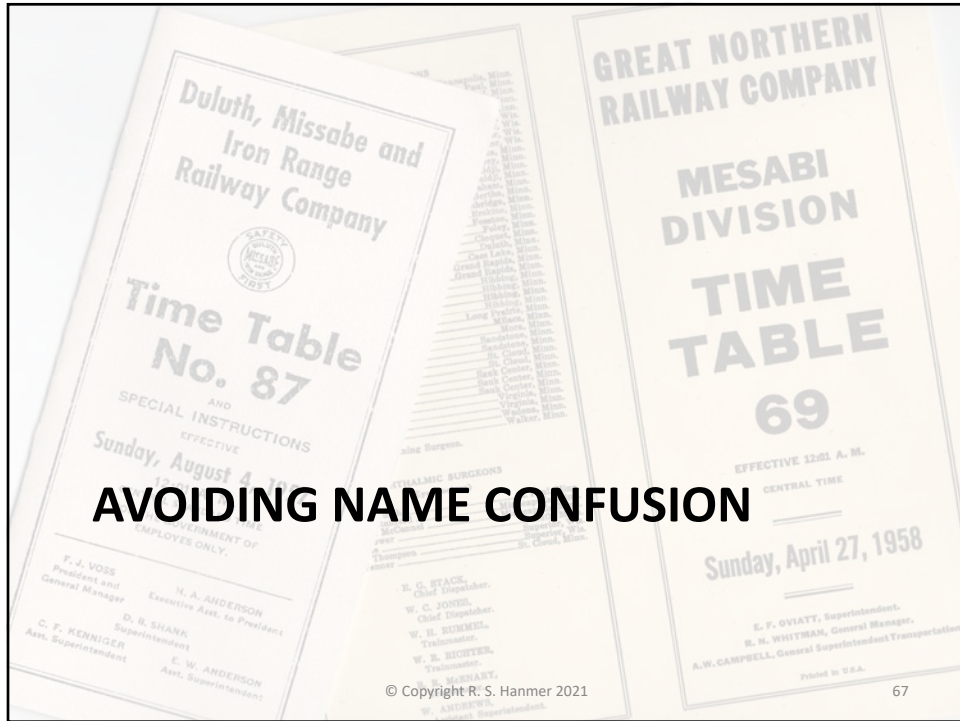
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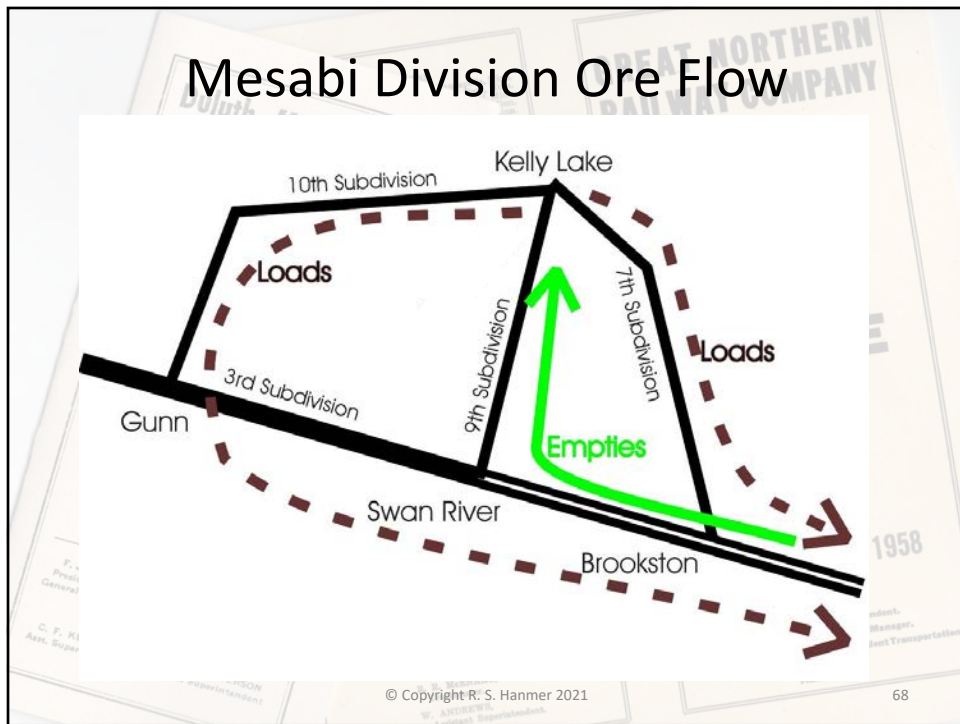
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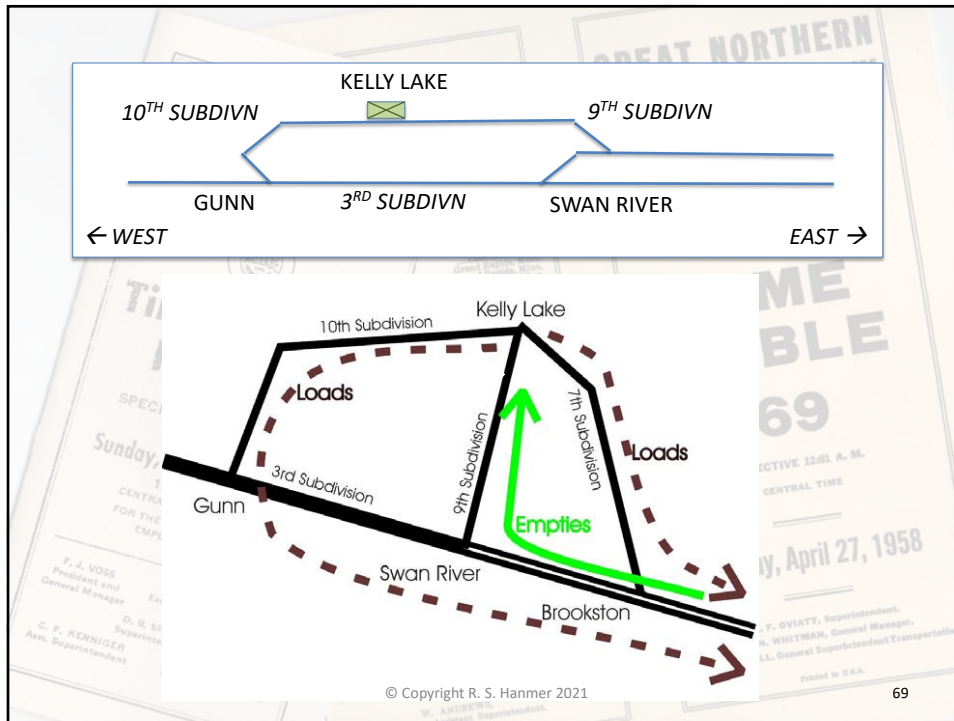
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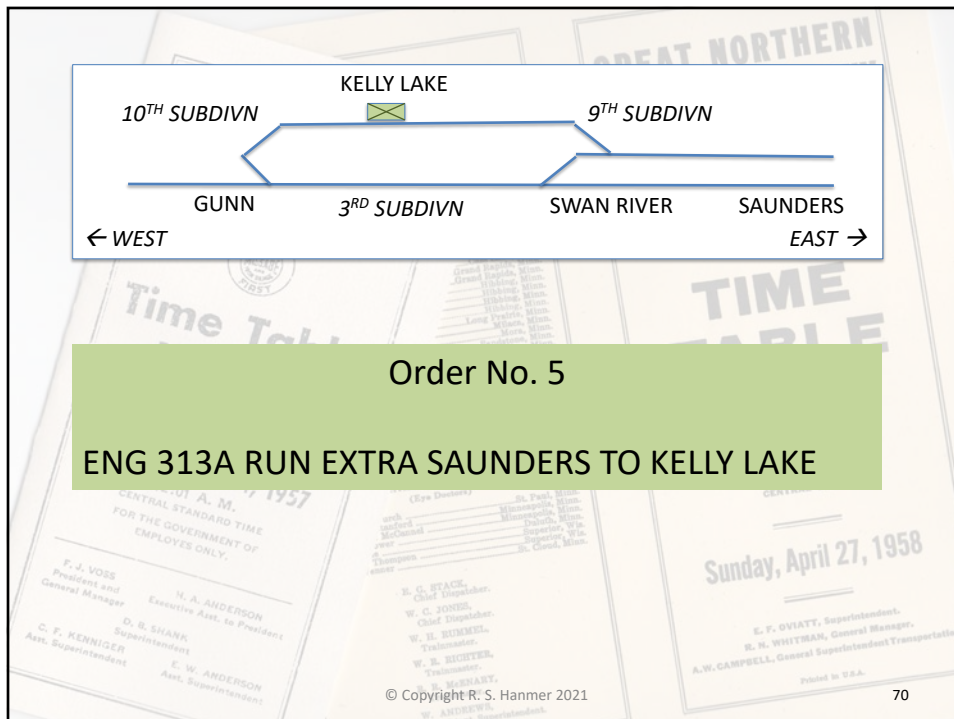
67



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69



70

Order No. 6

**ENG 313A RUN EXTRA SAUNDERS TO KELLY LAKE
VIA SWAN RIVER**

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Order No. 7

**ENG 313A RUN EXTRA SAUNDERS TO SWAN RIVER
AND RUN EXTRA SWAN RIVER TO KELLY LAKE**

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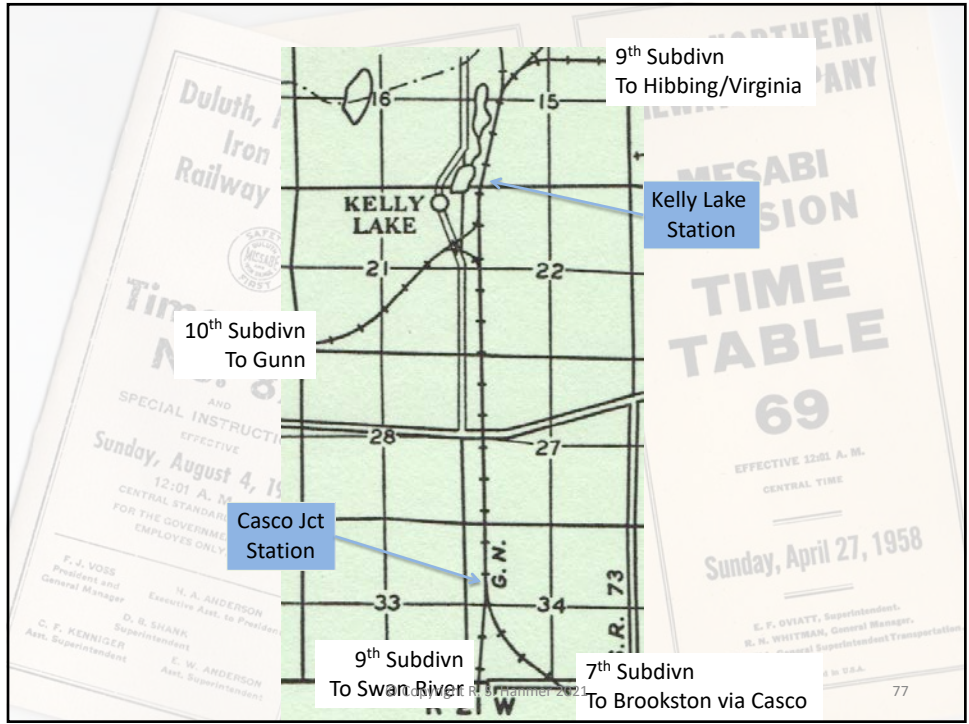
74



75



76



77

Recreation

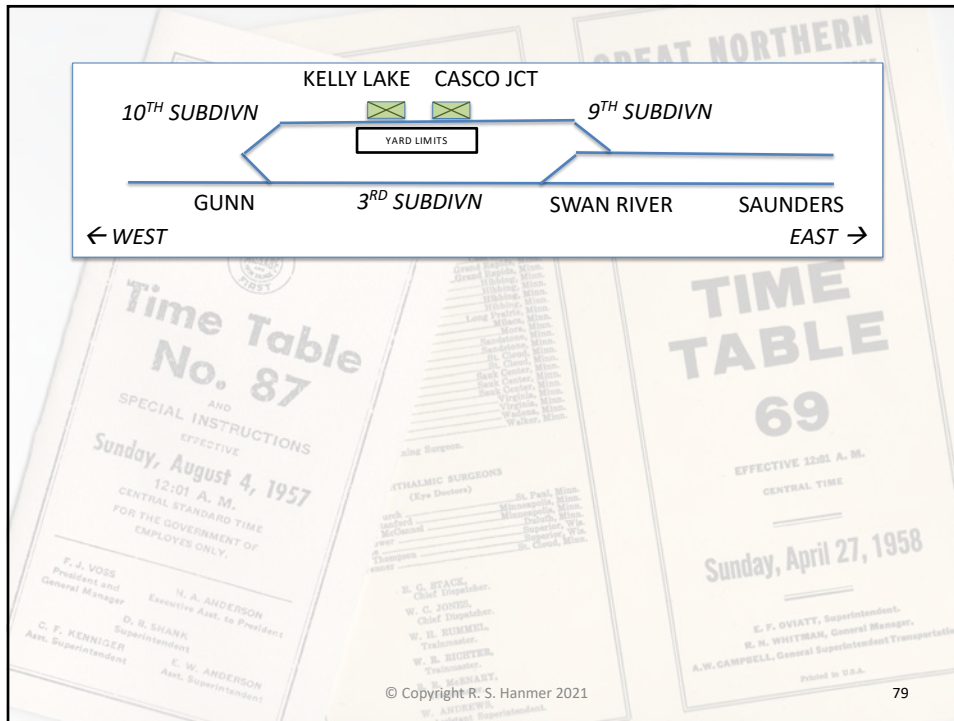
Time	Station	Block	Time	Station
22.05	SCRANTON MINE CROSSING	AU	28.55	IX
25.15	KELLY LAKE *	KY	25.45	BRKONP WKYJO
27.25	CASCO JCT.		14.63	JYP
35.97	BENICAL		14.63	P
44.43	GOODLAND		6.17	P JONP YI
50.60	SWAN RIVER *	WA		

Time Over Subdivision
Average Speed Per Hour

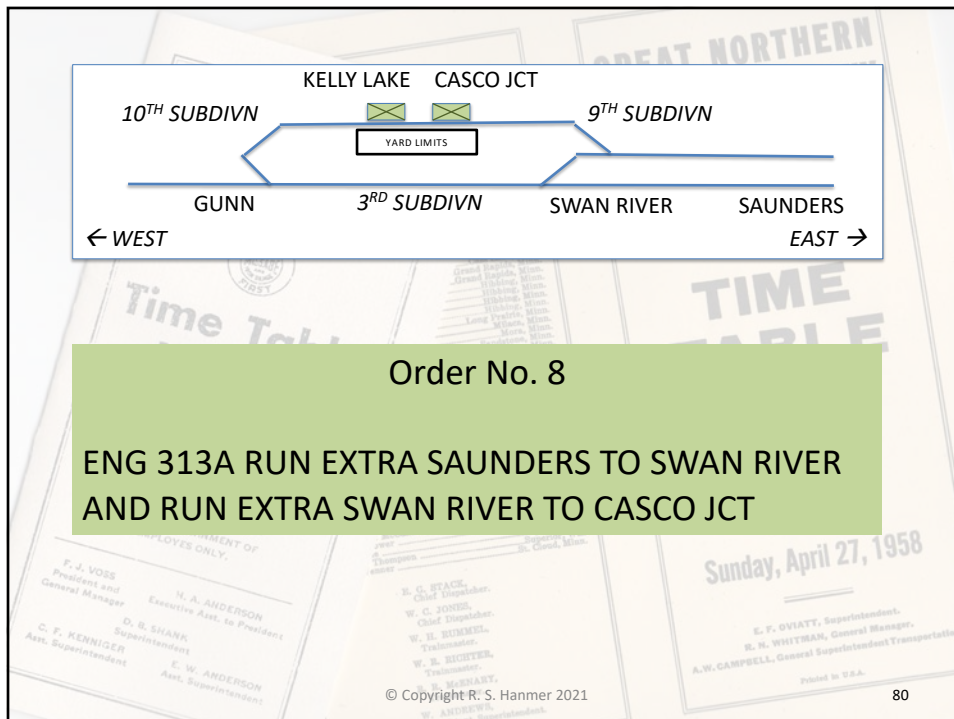
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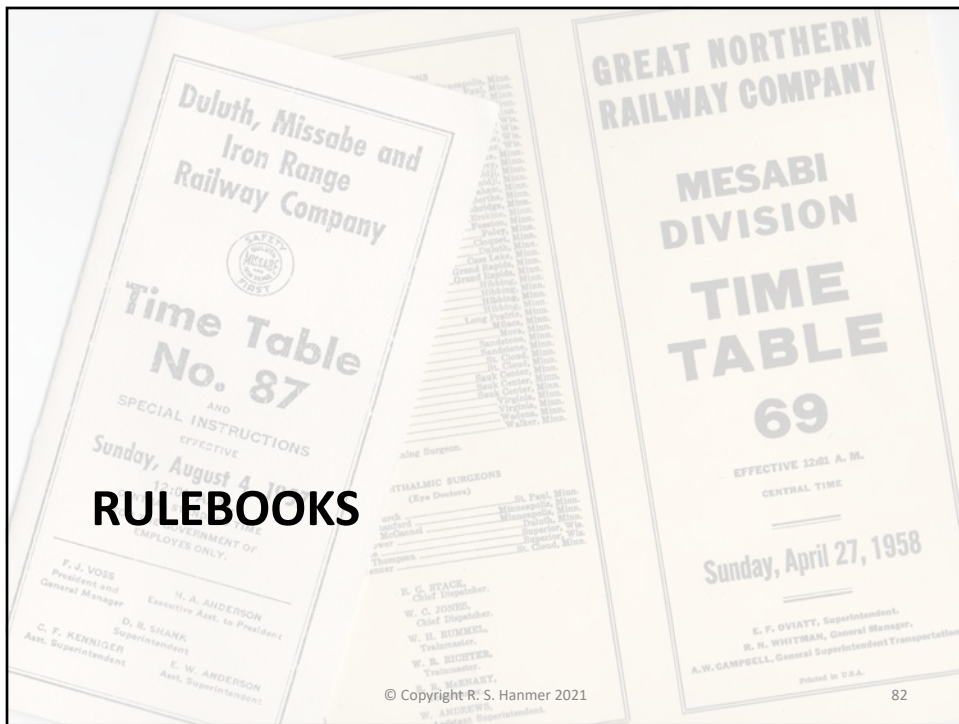
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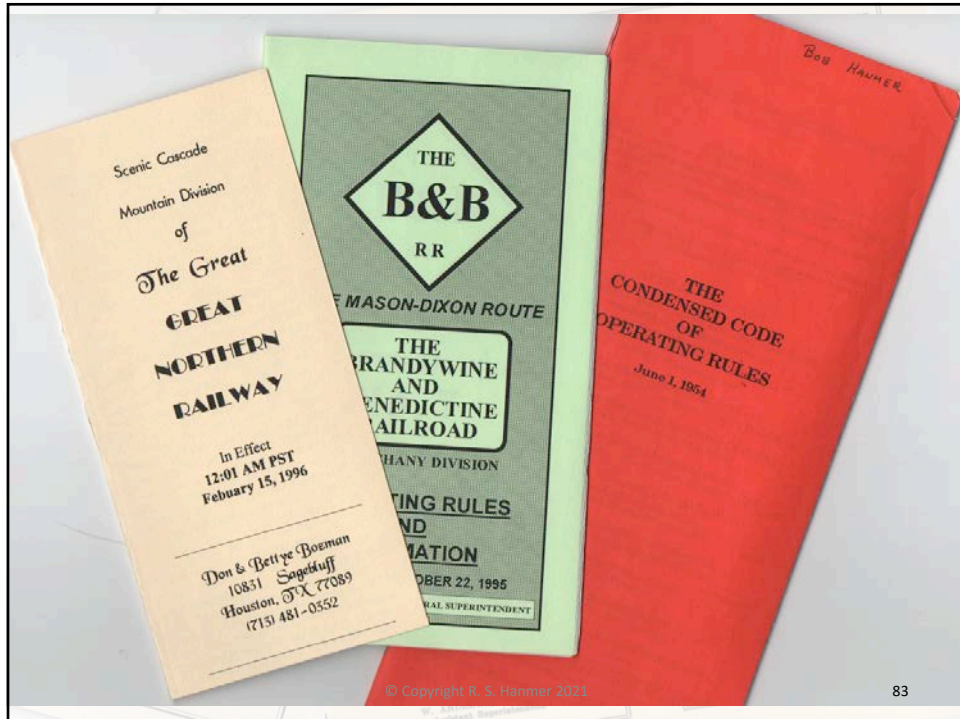
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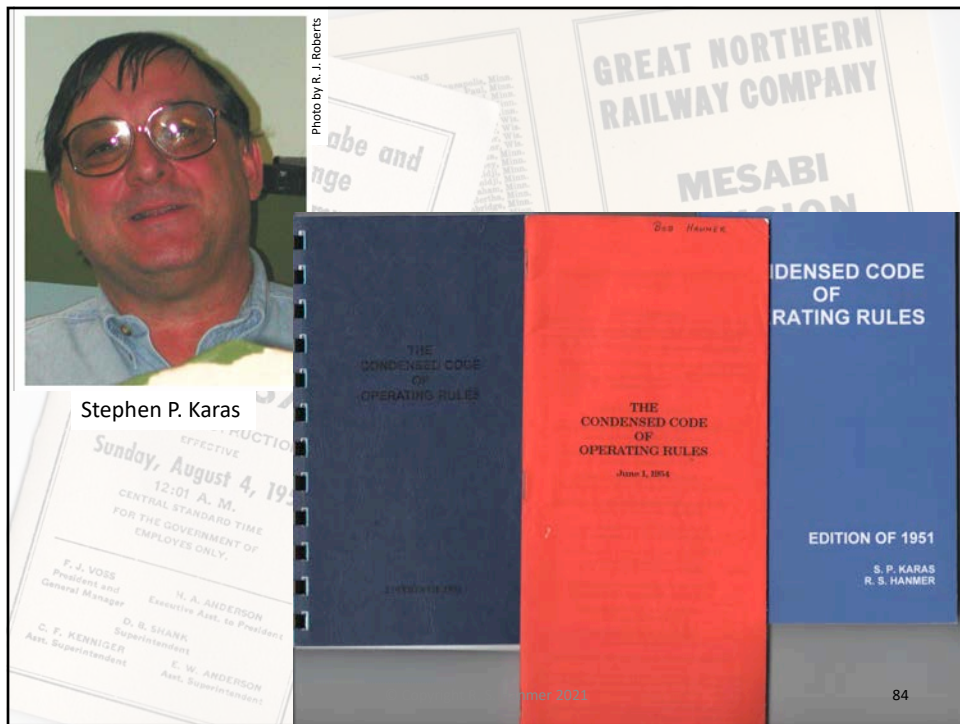
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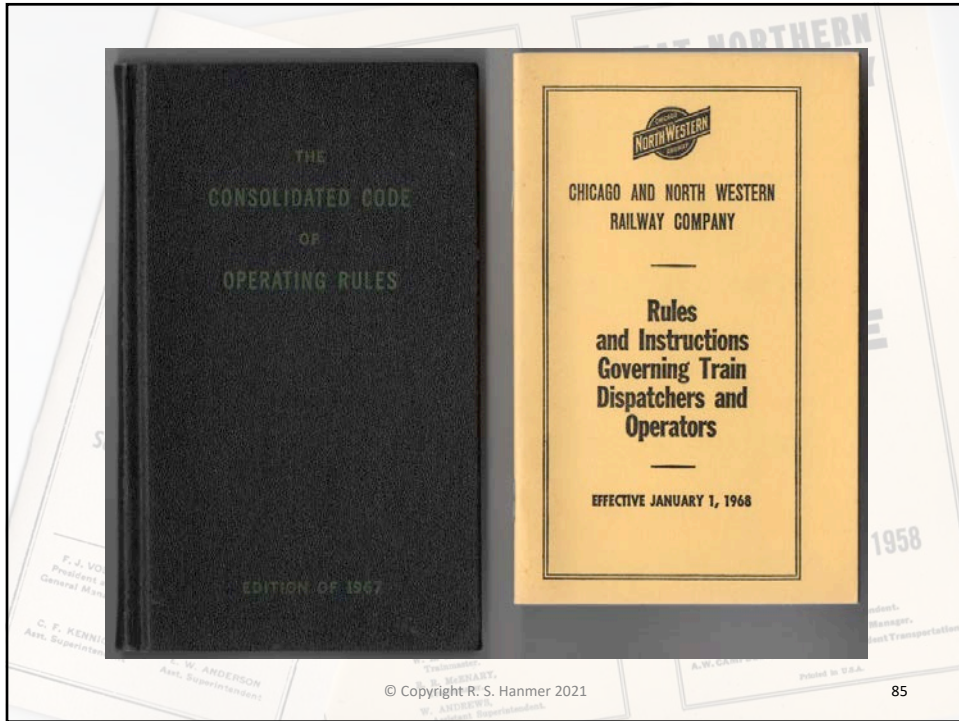
82



83



84



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Recreation

Train No.	4 WESTWARD				THIRD SUBDIVISION				EASTWARD															
	Class	Time	Class	Time	Class	Time	Class	Time	Class	Time	Class	Time												
421	2nd	9:30 Pm	163	1st	8:05 Am	65	1st	9:55 Am	35	1st	9:55 Am	36	1st	4:33 Am	64	2nd	3:35 Am	414	1st	2:45 Am	424	2nd	2:45 Am	
Y251	20	2																						
Y249	30	10																						
Y248	30	10																						
Y247	25	81																						
Y300	12																							
Y295	12																							
Y278			9:42		8:15			10:04																
Y26	4		9:55					10:30																
Y256	25	9			9:25			10:30																
Y143	22	14						12:20																
Y134	10	7						130:01																
Y125	9	8						140:03																
Y118	15				9:30			11:00																
Y306	Yard				10:30			9:50		12:55			10:35											
Y301	10							140:71																
Y36	9	5						112:21																
Y30	10	30			A 10:59			1:29		12:02			17:01											
Y34	10	3						12:39																
Y28	10							12:18																
Y20	10	3						12:26																
Y16	12	12						12:35																
Y38	15	5						12:44																
Y12	10	23						12:52																
Y16	10	15						1:02																
Y17	10	9						1:12																
Y11	11	5						1:22																
Y38	10	5						1:31																
Y17	10	5						1:41																
Y12	10	4						1:48																
Y26	Yard				A 2:05			2:01																

STATIONS: BOYLSTON, DEWEY, STATE LINE TOWER, BRIDGE 29, CARLTON, CLOUQUET, BROOKSTON, WIRGAT, FLOODWOOD, SWAN RIVER, PHILBIN, CORNSSET, DEER RIVER, BALL CLUB, BENA, SCHLEY, CASS LAKE, FARRIS, RGSBY, BEMIDJII, WILTON, SOLWAY, SHEVLIN, BAGLEY, EBRO, LENGBY, FOUSTON, MONTOSH, BIRD, MERTON, TLEDGET, SENG, CROOKTON YARD.

TRAINS BETWEEN CROOKTON YARD AND CROOKTON WILL BE GOVERNED BY GARGA DIVISION TIME TABLE


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Rule 6(A)

<p style="text-align: center;">DM&IR Operating Rules Edition of 1955</p> <p>D – Day telegraph or telephone station. N – Night telegraph or telephone station. DN – Day & night telegraph or telephone station. W – Water station. O – Track scales. C – Fuel station. Y – Wye. R – Register station. X – Yard limits.</p>	<p style="text-align: center;">Consolidated Code of Operating Rules Edition of 1945</p> <p>B – Bulletins. C – Coal. D – Day operator. N – Night Operator. DN – Day and Night operator. H – Hog drenching. I – Interlocking. J – Junction. K – Standard clock. M – Railroad crossing protected by signals or gates; O – Oil. P – Telephone. R – Train Register. T – Turntable. V – Track connection with foreign railroad. W – Water. X – Yard limits. Y – Wye. Z – Track scales.</p>
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1967 Consolidated Code
added
Q – Radio Installation.



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