

Feather Mountain Railroad Dispatching Presentation



Scott Sabo – Superintendent
25 May, 2020

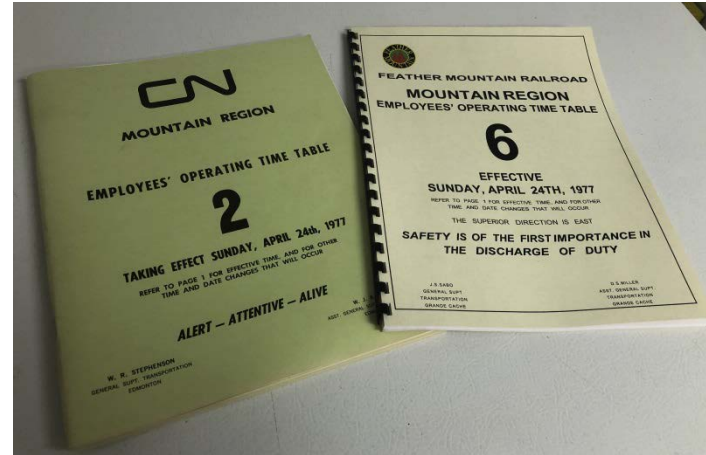
Overview

Manual Block System (MBS)

- **Brief Layout Description**
- **Prototypical MBS**
- **Model Version MBS**

FMRR Background

- **Class 2 railroad**
- **Free-lanced based on Canadian National Railways practices**
- **Year – Summer 1977**



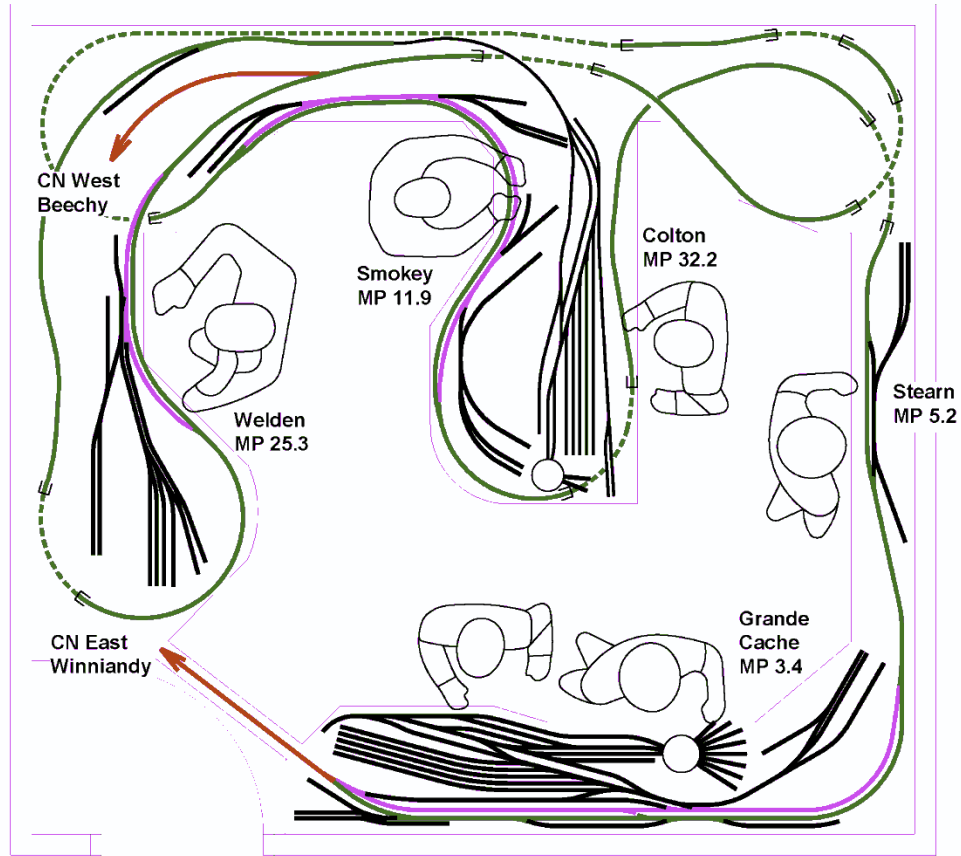
Layout Facts

- **N scale**
- **13ft x 14ft room**
- **100 ft. of single track mainline**
- **Point to point**
- **4 Towns, 2 Yards, 3 Track Staging**
- **DCC - Digitrax Simplex Radio**

The Layout Room



Layout Plan



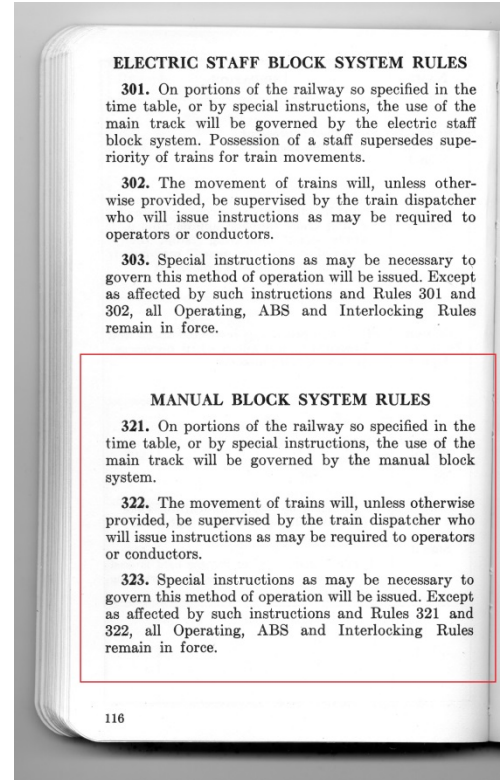
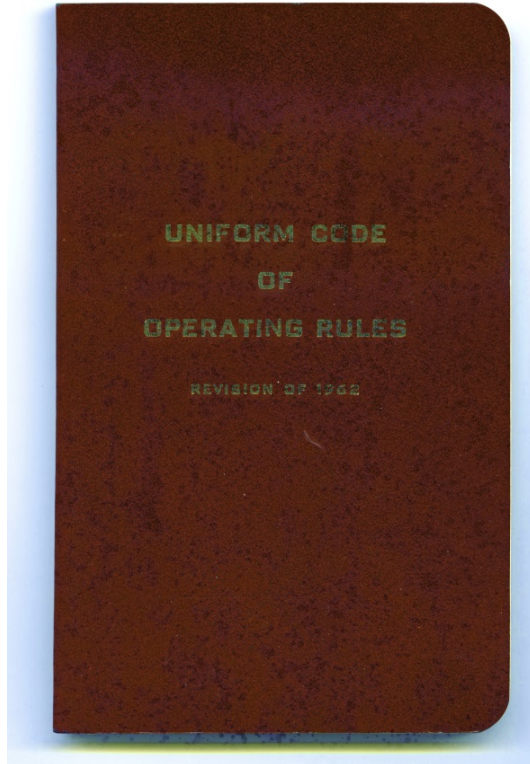
Operational Notes

- **Operating Crew Size:**
 - 3 Road Engineers**
 - 2 Yardmasters**
 - 1 Yard crew**
 - 1 Dispatcher**
- **All trains are run as Extras**
- **Dispatching using Manual Block System (MBS) clearance forms and JMRI Panel Pro**
- **Communication: Telephone System**
- **6:1 Fast Clock (4 hour session)**
- **Operational Absolute Block Signal (ABS) System**
- **Car Forwarding: JMRI Switch Lists and Manifests**
- **250 railcars and 18 locomotives on the layout**
- **About 22 Trains are run per session**

Prototype MBS

- **Similar to Direct Traffic Control (DTC) and Track Warrant Control (TWC).**
- **Used on lower volume sub-divisions. During 1970s and 1980s there were a mixture of TT&TO and MBS sub-divisions.**
- **CN and CP used MBS from the early 1970's to December 1990 at which time they converted to Occupancy Clearance System (OCS) which is governed under the Canadian Rail Operating Rules (CROR). OCS is currently used today.**
- **In the mid 1980s onwards utilized computers (CAMBS) to aid assigning clearances.**

UCOR



CNR Timetable #12 - 1981

CN RAIL MOUNTAIN REGION TIME TABLE PEACE RIVER DIVISION

12

EFFECTIVE
THURSDAY, JANUARY 1st, 1981

REFER TO PAGE 1 FOR EFFECTIVE TIME, AND FOR
OTHER TIME AND DATE CHANGES THAT WILL OCCUR

THE SUPERIOR DIRECTION IS EAST OR SOUTH

**SAFETY IS OF THE FIRST IMPORTANCE
IN THE DISCHARGE OF DUTY**

W. R. STEPHENSON
GENERAL SUPT. TRANSPORTATION
EDMONTON

E. D. KEARNEY
ASST. GENERAL SUPT. TRANSPORTATION
EDMONTON

NORTHWARD TRAINS		WESTLOCK SUBDIVISION		SOUTHWARD TRAINS	
Miles from Dunvegan Jct.	Yard Limits	STATIONS	Office Signals	Station County in Feet	
0.0		DUNVEGAN JCT. Jct. with Clear Sub.	Z		
0.7		DUNVEGAN YARDS CKWYZ	D		
2.0		CALLAGHAN	Z	6720	
4.3		CAMPBELL PARK	Z	2868	
10.5	6.0	MORRHUR.	Z		
14.3		BANKO JCT. Jct. with La. Buche Sub.	Y	1830	
14.5		CARBONDALE	Y	1830	
19.5		MORINVILLE	Y	5230	
20.2		MORIN JCT. Jct. with Interoceanic Sub.			
28.4		MEARNS	Z	2205	
30.4		ALCOMDALE	Z		
34.7	33.1	RUSBY	YZ	2160	
35.2		CARLEY JCT. Jct. with Barren Sub.	Z		
43.7	36.8	PICARDVILLE		2110	
52.5		WESTLOCK	Z	5000	
58.8		PIERCH	Z	2985	
65.9		DAPP	Z	1965	
74.4		JARVIE	Z	2350	
82.1		FAWCETT	Z	2015	
87.4		KILYTH	Z	6000	
93.5		FLATBUSH	Z	2180	
101.2		TIEND	Z	2205	
109.9	107.9	CHESHOLM	Z	2205	
122.6	111.6	HONDO	Z	2300	
130.9	129.0	SMITH	YZ SM	2540	

Rules 41 and 44 applicable
Rules 221 to 223 applicable
Main track commences at mileage 0.7
Rule 105 applies between mileages 0.9 and 0.7

WESTLOCK SUBDIVISION FOOTNOTES

1. RULE MODIFICATIONS

1.1 TRAIN REGISTER MODIFICATIONS
Dunvegan Yards—Standard Clock and Bulletins only.

1.2 OTHER MODIFICATIONS

Rule 9—At initial stations, unless otherwise specified, leaving time of all trains applies at the last main track switch where trains can leave the siding or yard tracks.

Rule 106A—Train Dispatcher must be advised when cars are left on sidings. Callaghan, Morinville, Mearns, Westlock, Kilyth and Chaholm.

1.3 SPECIAL INSTRUCTIONS

System 2.0—Applies between Dunvegan Yards and Smith.

2. GENERAL FOOTNOTES

2.1 Dunvegan Yards—Southward trains will head in at the north switch of the working lead unless otherwise instructed.


Gates on the Nelson Lumber Spur have been equipped with a switch lock. Crews using this trackage are to ensure that gates are closed and locked after use.

(Continued on Page 3)

SYSTEM SPECIAL INSTRUCTIONS	
2.0	MANUAL BLOCK SYSTEM (MBS) The following instructions are supplemental to Rule 323 and only apply on subdivisions or portions thereof specified in time table or special instructions. Wherever the words "Train Dispatcher" appear herein, they apply to the employee performing the duties.
2.1	In MBS territory there is no superiority of trains. An MBS clearance is the only authority for movement, except that the main track may be used within yard limits as prescribed by Rule 33. Trains will be designated as "extra" or "weak extra" and will only display white lights in the application of Rule 21.
2.2	Train Dispatcher will issue MBS clearances and MBS bulletins. When issuing an MBS clearance the Train Dispatcher must provide for protection against conflicting movements. All movements authorized by MBS clearance must be recorded on the train sheet. MBS clearance must show the number of each MBS bulletin, if any, affecting the train addressed, with other required information.
2.3	MBS clearances will be numbered consecutively each day beginning at midnight. When transmitting each MBS clearance, the Train Dispatcher must write the required information in the book provided for the purpose, reading aloud all applicable written and preprinted portions as he transmits it. Employees repeating MBS clearances must read aloud all applicable written and preprinted portions. Train Dispatcher must check and underscore each word and figure as it is repeated.
2.4	MBS clearances must be in the possession of the Conductor and Engineman before being acted on. MBS clearances will be issued as follows: (a) When issued to Operator, copies will be delivered to the Conductor and the Engineman of the train addressed or to the Foreman addressed. (b) When issued to the Conductor, he must make a copy for delivery to the Engineman. (c) When issued directly to a train, it will be copied simultaneously by the Engineman and the Conductor. The Conductor will repeat to the Engineman who will then repeat to the Train Dispatcher and will include confirmation that the Conductor has copied and repeated correctly. The Train Dispatcher may then issue repeated time. Conductors and Enginemen are responsible to ensure that all members of the crew have a definite and proper understanding of the requirements of all MBS clearances and MBS bulletins as soon as practicable after they have been received.
2.5	MBS clearances may be issued to the Foreman for the purpose of carrying out maintenance work and for the operation of Track Units, but do not provide protection against other Track Units. MBS clearances do not become effective until repeated time has been given by the Train Dispatcher and must not be acted upon until the Foreman has read aloud the contents of the MBS clearance to at least one accompanying employee, if any, to ensure a clear understanding. When in possession of an MBS clearance Rule 40, 41 or 42 protection is not required and Train Dispatcher must provide protection until Foreman has reported such protection is no longer required and it has been cancelled.
2.6	Yard limits provide protection for track units against extra trains and engines. The words in Rule 93 "known to be clear" are defined as known to be clear of trains, engines, cars and Track Units. Maintenance work must not be performed under the protection of Rule 93. MBS clearances may be issued for maintenance work within yard limits provided the Train Dispatcher can control all train and engine movements at that location.
2.7	MBS bulletins will be issued to give notice of track or other conditions using procedure outlined in Rule 203 paragraph 2. Crew members are responsible for obtaining MBS bulletins affecting their trains. When MBS bulletins are issued for the protection of slow track, flags and lights must be placed as required by Rule 43.

(Continued on Page 23)

CPR Manual Block System Forms

Manual Block System Clearance 

1. M.B.S. Clearance Number 2 To Enter 930 Out (Train or Engine No.) At Hardisty (Location) Date August 4 1982

2. M.B.S. Clearance N/A **is Cancelled**

3. M.B.S. Bulletins in Effect 265 - 270 (Numbers or Nil)

4. Do not leave Hardisty (Location or N/A) Before 0820 (Time)
 After N/A (Train or N/A) Arrives at _____ (Location)

5. This is Authority to: Proceed From Hardisty (Location) To mileage 10 (Location) (Take siding, hold main track or N/A)
This is Authority to: Work Between _____ (Location) _____ (Location) And _____ (Location) _____ (Location) _____ (Location) _____ (Location)
 Until M.B.S. Clearance is Cancelled

6. Restrictions N/A (as below or nil)

1. Protect Against _____ (Train or Engine) Between _____ (Location) And _____ (Location) _____ (Location)
 2. Protect Against _____ (Train or Engine) Between _____ (Location) And _____ (Location) _____ (Location)
 3. Protect Against _____ (Train or Engine) Between _____ (Location) And _____ (Location) _____ (Location)

7. Joint Authority granted with Foreman _____ (Name) _____ (Location) And _____ (Location) _____ (Train or Engine No.)


Must not proceed until instructions have been received from Foreman _____ (Name) _____ (Location)

8. Call Train Dispatcher _____ (Name) _____ (Before Time or at or N/A)

9. Completed at 0741 (Time) AJS (Train Dispatcher)
 Acknowledged by opa (Occupation and name) At 0741 (Time)

10. Cancellation This M.B.S. Clearance Number _____ Is cancelled at _____ (Time) _____ (Train Dispatcher) at _____ (Time) _____ (Occupation and Name) Acknowledged by _____ (Occupation and Name) at _____ (Time) Acknowledged by _____ (Occupation and Name) at _____ (Time)

FORM 3321

Manual Block System Bulletin 

Bulletin No. 265 Date JULY 28 1982

For HARDISTY SUB TRAINS

DO NOT EXCEED FORTY MILES PER HOUR BETWEEN MILEAGE THREE 3 AND MILEAGE ONE TWENTY SIX 126 HARDISTY SUB ACCOUNT TRACK CONDITIONS

_____ (Time) _____ (Occupation) 0027 _____ (Time) _____ (Occupation) 0027

_____ (Time) _____ (Occupation) _____ (Time) _____ (Occupation)

_____ (Time) _____ (Occupation's Initials) _____ (Time) _____ (Occupation's Initials)

Manual Block System Bulletin 

Bulletin No. 270 Date AUGUST 2 1982

For HARDISTY SUB TRAINS

WEST FERTILIZER TRACK AT PROVOST OUT OF SERVICE SB107H SPIKED ACCOUNT BASHOUT

_____ (Time) _____ (Occupation) 0048 _____ (Time) _____ (Occupation) 0048

_____ (Time) _____ (Occupation) _____ (Time) _____ (Occupation)

_____ (Time) _____ (Occupation's Initials) _____ (Time) _____ (Occupation's Initials)

CNR Manual Block System Form

CN RAIL **MANUAL BLOCK SYSTEM CLEARANCE** CN 726 (4-79)
48-05-075

MBS CLEARANCE NUMBER _____ TO _____ AT _____ (LOCATION) _____ (DATE) _____ 19 _____

MBS CLEARANCE _____ IS CANCELLED
(NUMBER OR NOT APPLICABLE N/A)

NOT APPLICABLE TO FOREMAN

DO NOT LEAVE _____ BEFORE _____ (TIME IN WORDS AND FIGURES)
(LOCATION OR NOT APPLICABLE N/A)

AFTER EXTRA _____ ARRIVES AT _____
(TRAIN OR NOT APPLICABLE N/A)

THIS IS AUTHORITY TO:

PROCEED FROM _____ TO _____ (TAKE SIDING HOLD MAIN TRACK OR NOT APPLICABLE N/A)	WORK BETWEEN _____ AND _____ UNTIL MBS CLEARANCE IS CANCELLED
--	--

RESTRICTIONS (AS BELOW OR NIL)

- PROTECT AGAINST _____
- PROTECT AGAINST _____
- PROTECT AGAINST _____
- _____
- _____

CALL TRAIN DISPATCHER BEFORE _____ (TIME OR NOT APPLICABLE N/A)

MBS BULLETINS IN EFFECT _____ (TRAIN DISPATCHER)
(NUMBERS OR NIL)

CANCELLATION

REPEATED AT _____ (TIME) _____ (TRAIN DISPATCHER)
MBS CLEARANCE NUMBER _____

CANCELLED AT _____ (TIME) _____ (TRAIN DISPATCHER)

ACKNOWLEDGED BY _____ (OCCUPATION AND NAME)
ACKNOWLEDGED BY _____ (ENGINEER OR FOREMAN)

CN RAIL **MANUAL BLOCK SYSTEM BULLETIN**

Number 1707 ED. CONT. IN AUG 14 19 85

TO TRAINS T.J. SANGUDO SUB AT _____
CALDER

ON AUG 15TH
BETWEEN THE HOURS OF
FOURTH SEVEN HUNDRED 0700
AND
SIXTEEN HUNDRED 1600
EASTWARD

AT MILEAGE ... TWENTY TWO ... TRAINS APPROACH RED SIGNAL
AND ... WESTWARD

AT MILEAGE ... THIRTEEN 13 ... TRAINS APPROACH RED SIGNAL
SANGUDO ... SUB

PREPARED TO STOP AND DO NOT PASS THIS SIGNAL UNTIL
INSTRUCTIONS HAVE BEEN RECEIVED FROM
FOREMAN ... DALUZ

EITHER BY RADIO COMMUNICATION OR PERSONAL CONTACT.


DISPATCHER DK REPEATED 2000
COPIED & REPEATED BY Luzys


Why MBS?

- 1. A lot of people in this area want a Throttle job. Few want to be a Dispatcher, and even fewer want to be an Operator copying orders.**
- 2. There is always a trade off on how the prototype does things and what works best in a model railroad environment.**
 - 1. Size of layout**
 - 2. Number of people**
 - 3. Cost**
 - 4. Fun - not work**
- 3. Needed a system new operators and dispatchers can understand easily.**

Model Version of MBS

CN RAIL		MANUAL BLOCK SYSTEM CLEARANCE		CN 726 (4-79) 48-05-075
MBS CLEARANCE NUMBER	TO _____ AT _____	(DATE)	19 _____	(LOCATION)
MBS CLEARANCE _____ IS CANCELLED <small>(NUMBER OR NOT APPLICABLE: N/A)</small>				
NOT APPLICABLE TO FOREMAN				
DO NOT LEAVE _____	BEFORE _____	(LOCATION OR NOT APPLICABLE: N/A)	(TIME IN WORDS AND FIGURES)	
AFTER EXTRA _____	ARRIVES AT _____	(TRAIN OR NOT APPLICABLE: N/A)		
THIS IS AUTHORITY TO:				
PROCEED FROM _____ TO _____	WORK BETWEEN _____ AND _____	(TAKE SIDING, HOLD MAIN TRACK OR NOT APPLICABLE: N/A)		
UNTIL MBS CLEARANCE IS CANCELLED				
RESTRICTIONS <small>(AS BELOW OR NIL)</small>				
(1) PROTECT AGAINST _____				
(2) PROTECT AGAINST _____				
(3) PROTECT AGAINST _____				
(4) _____				
(5) _____				
CALL TRAIN DISPATCHER BEFORE _____		(TIME OR NOT APPLICABLE: N/A)		
MBS BULLETINS IN EFFECT _____		(NUMBERS OR NIL)	(TRAIN DISPATCHER)	
REPEATED AT _____	DISPATCHER _____	(TIME)	(TRAIN DISPATCHER)	
ACKNOWLEDGED BY _____	ACKNOWLEDGED BY _____	(OCCUPATION AND NAME)	(ENGINEER OR FOREMAN)	

		MANUAL BLOCK SYSTEM CLEARANCE	
No: _____	To: _____ at _____	Date _____	(Train, Foreman, Track Unit) (Location)
MBS CLEARANCE _____ IS CANCELLED			
Do not leave _____ before _____	After Extra _____ arrives at _____		
PROCEED:			
From: WN GC ST SM LD PM BH WD CL	To: WN GC ST SM LD PM BH WD CL	Take / Clear	Main Track at GC ST SM WD
WORK (until MBS is cancelled)			
Between: MP 0	MP 4.2	MP 10.1	MP 23.0 MP 28.8
and: MP 5	MP 6.0	MP 13.8	MP 26.9 MP 31.3
RESTRICTIONS <small>As Noted / NIL</small>			
(1) Protect Against _____	Between _____ and _____		
(2) Protect Against _____	Between _____ and _____		
(3) Protect Against _____	Between _____ and _____		
(4) _____			
(5) _____			
Call Train Dispatcher Before _____			
MBS BULLETINS IN EFFECT _____	Train Dispatcher _____		
Repeated at _____ hrs	DISPATCHER _____	MBS Clearance Number _____	CANCELLED AT _____ hrs
Dispatcher _____	Cancelled at _____ hrs	ACKNOWLEDGED BY _____	ACKNOWLEDGED BY _____

		MANUAL BLOCK SYSTEM CLEARANCE	
No: _____	To: _____ at _____	Date _____	(Train, Foreman, Track Unit) (Location)
Loads _____	Empties _____	Length _____ ft	Weight _____ tons
MBS CLEARANCE _____ IS CANCELLED			
Do not leave _____ before _____	After Extra _____ arrives at _____		
PROCEED:			
From: WN GC ST SM LD PM BH WD CL	To: WN GC ST SM LD PM BH WD CL	Take / Clear	Main Track at GC ST SM WD
WORK (until MBS is cancelled)			
Between: MP 0	MP 4.2	MP 10.1	MP 23.0 MP 28.8
and: MP 5	MP 6.0	MP 13.8	MP 26.9 MP 31.3
RESTRICTIONS <small>As Noted / NIL</small>			
(1) Protect Against _____	Between _____ and _____		
(2) Protect Against _____	Between _____ and _____		
(3) Protect Against _____	Between _____ and _____		
(4) _____			
(5) _____			
Call Train Dispatcher Before _____			
MBS BULLETINS IN EFFECT _____	Train Dispatcher _____		
Repeated at _____ hrs	DISPATCHER _____	MBS Clearance Number _____	CANCELLED AT _____ hrs
Dispatcher _____	Cancelled at _____ hrs	ACKNOWLEDGED BY _____	ACKNOWLEDGED BY _____

FMRR Mini Timetable

Time Table No.6
April 24th, 1977

WESTWARD TRAINS	Miles from Winnandy	Yard Limits	SMOKEY RIVER SUBDIVISION Mountain Time		On/Off signals	Siding Capacity in feet	EASTWARD TRAINS	
			STATIONS					
↓	0.0		WINNANDY Jct with CNR Grande Cache Sub 3.4 KYZ	VM	↑	
	3.4	0.5 4.5	GRANDE CACHE 2.2	.... CKYZ	GC	1200	
	5.2		STEARNS 6.4	.... P		200	
	11.6		SMOKEY 8.9	.... P	SM	1040	
	20.5		LAIRD 12.5	.... P			
	23.0		PALMER Jct with Goat River Sub. 1.3	.... RP	PM		
	24.3		WELDEN 8.5	.... PB	WD	720	
	32.8	31.3	COLTON End of track	.... CKYZ	CL	....	
			<small> Rule 41 applicable Rules 321 to 323 applicable Rules 505 to 518 applicable Main track ends at mileage 31.3 Rule 105 applies between mileages 0.5 and 4.5, 31.3 and 32.8 </small>					

SMOKEY RIVER SUBDIVISION FOOTNOTES

1. RULE MODIFICATIONS

1.1 SPECIAL SIGNAL FEATURES

EB Signals at MP 1.2 are controlled by Dispatcher. If the signal displays a "Stop" indication, eastward trains must stop and contact the Dispatcher to request a "Proceed" indication.

WB Signals at MP 20.9 are the Advance Signals which govern train movement between the Smokey and Goat River Subdivisions. Top signal head is dark if junction switch is aligned for Smokey River Subdivision. Top signal head flashes red when junction switch is aligned for Goat River Subdivision. Train speed is governed by the heads illuminated.

Dwarf Signal at MP 23.0 is for westward trains and is located on left side of track. It displays green if junction switch is aligned for the Smokey River Subdivision. It displays flashing yellow when junction switch is aligned for Goat River Subdivision. Train speed is governed by the heads illuminated.

WB signal at MP 31.3 is the Colton Yard entrance and is controlled by the Yardmaster. Contact the Yardmaster for clearance into the yard.

1.2 TRAIN REGISTER MODIFICATIONS

All Eastward trains will register by calling Dispatcher after arriving at Winnandy Yard
All trains will register by calling Dispatcher when caboose clears Palmer Tower.

Time Table No.6
April 24th, 1977

1.3 OTHER MODIFICATIONS

Rule 111 – Trains handling ore must stop for inspection at Welden

2. GENERAL FOOTNOTES

2.1 All trains to look out for falling rocks between Mileages 8.0 and 9.7; between Mileages 18.2 and 20.6; and between Mileages 25.8 and 31.3.

2.2 Wayside telephones in "Utility Circuit" located at all signals.

3. SPEEDS

3.1 MainTrack	<u>Mileage</u>	<u>All Trains (mph)</u>
	0.0 to 6.0	15
	6.0 to 13.3	30
	13.3 to 18.2	35
	18.2 to 20.9	15
	20.9 to 23.0	20
	23.0 to 31.3	30

3.2 Sidings - 15 mph

3.3 Yards, Engine Terminals, and Spurs - 5 mph

4. HOT BOX SCANNERS AND DRAGGING EQUIPMENT DETECTORS

Located at Mileage 4.6

5. TUNNELS

Mileage	Length
6.2	140 ft
9.7	260 ft
13.8	500 ft
19.5	220 ft
20.6	225 ft
21.6	230 ft
27.4	315 ft

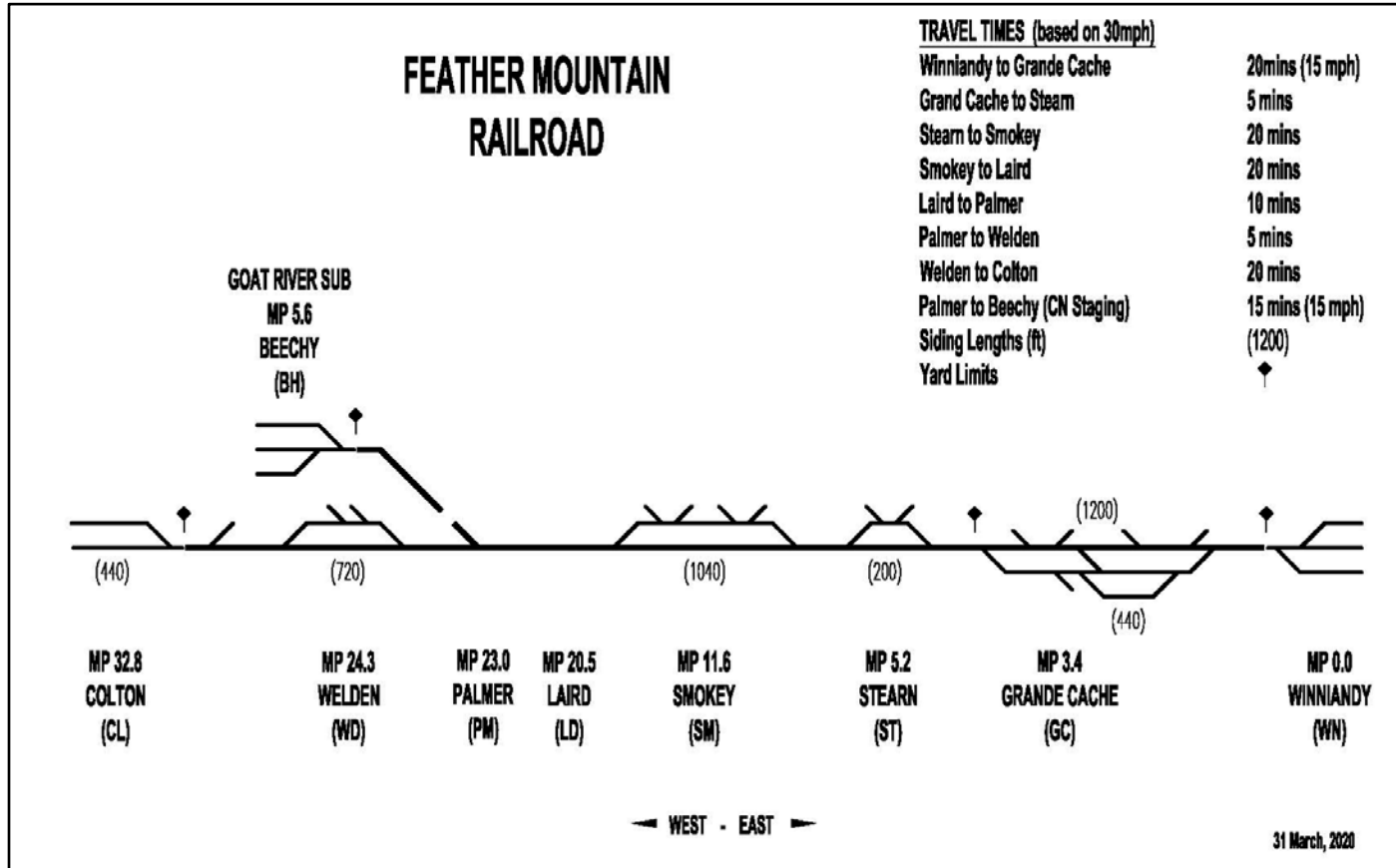
6. BRIDGES

Mileage	Length
1.0	240 ft
7.0	200 ft
8.6	75 ft
18.8	225 ft
19.6	50 ft
30.9	30 ft

7. SPURS OFF MAIN TRACK

	Mileage	Car Capacity	Points	Face
Swift Meats	1.4			W
Herbs Outfitters	2.0	4		E-W
Saabco/House Trk	3.3	4		E
Team Track	29.6	4		W

FMRR Mini Schematic



Dispatcher

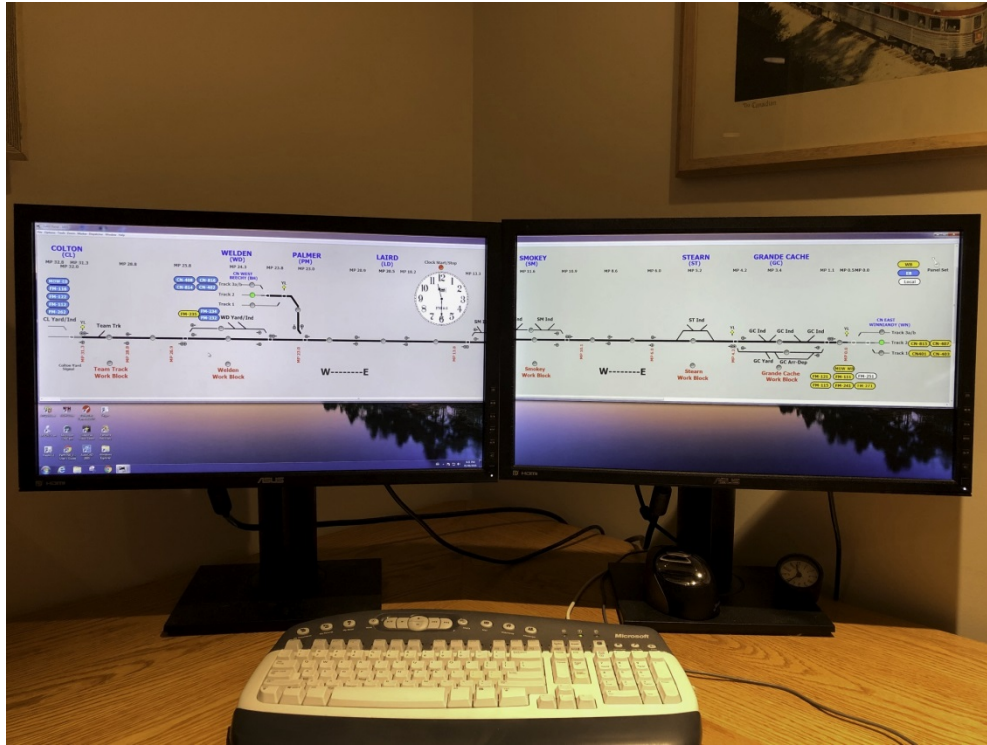


Feather Mountain Railroad Train Line Up Schedule A

12 February, 2019

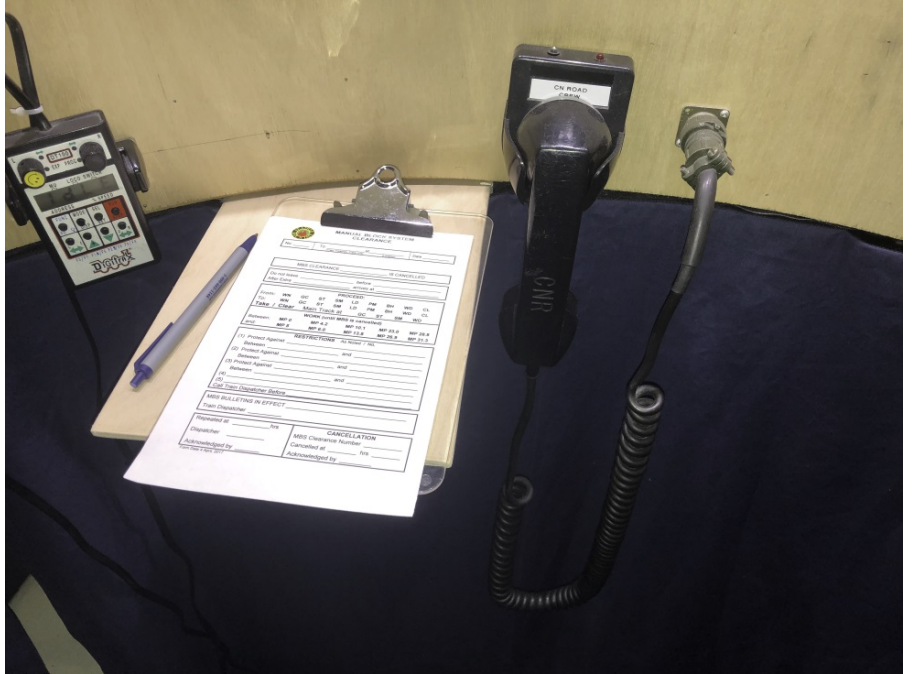
No.	Departure Time	Train Number	Train Name	Dir.	Originates	Switches	Terminates	Engineer
1	0:00	CN-401	CN Unit	W	Winniandy	None	Beechy	
2	0:00	MCW_WB	MCW	W	Grande Cache	None	Colton	
3	0:40	FM-232	Smokey Coal Turn	EW	Weiden	Smokey	Weiden	
4	1:50	FM-116	Thru Freight	E	Colton	Weiden	Grande Cache	
5	2:20	CN-815	CN Local	W	Winniandy	Grande Cache	Beechy	
6	4:00	FM-262	Weiden Yard Turn	EW	Colton	Weiden	Colton	Yard Crew
7	5:00	FM-241	Stearn Turn	WE	Grande Cache	Stearn	Grande Cache	
8	5:40	FM-111	Ore	W	Grande Cache	None	Colton	
9	5:45	CN-402	CN Thru Freight	E	Beechy	None	Winniandy	
10	8:30	FM-112	Ore	E	Colton	None	Grande Cache	
11	8:45	FM-121	Way Freight	W	Grande Cache	Smokey Weiden	Colton	
12	9:45	CN-814	CN Local	E	Beechy	C	Winniandy	
13	12:00	FM-234	Smokey Coal Turn	EW	Weiden	Smokey	Weiden	
14	14:10	FM-251	Grande Cache Local	EW	Grande Cache	GC City	Grande Cache	Yard Crew
15	14:40	CN-403	CN Unit	W	Winniandy	None	Beechy	
16	16:10	FM-115	Thru Freight	W	Grande Cache	None	Colton	
17	16:15	FM-122	Way Freight	E	Colton	Weiden Smokey	Grande Cache	
18	17:55	CN-816	CN Local	E	Beechy	Grande Cache	Winniandy	
19	21:05	CN-408	CN Thru Freight	E	Beechy	None	Winniandy	
20	21:30	FM-271	Smokey Turn	W	Grande Cache	Smokey	Grande Cache	
21	21:50	FM-235	Weiden Turn	EW	Colton	Weiden	Colton Yard	Yard Crew
22	22:00	CN-407	CN Thru Freight	W	Winniandy	None	Beechy	

Dispatcher's JMRI Panel




Crew Call in

- Road crew initiates call to Dispatcher using the phone system. The system is based on Seth Neumann's DO articles in 2011.
- Crew fills in MBS forms based on instructions from Dispatcher.
- There are typically 4 types of clearances given.....

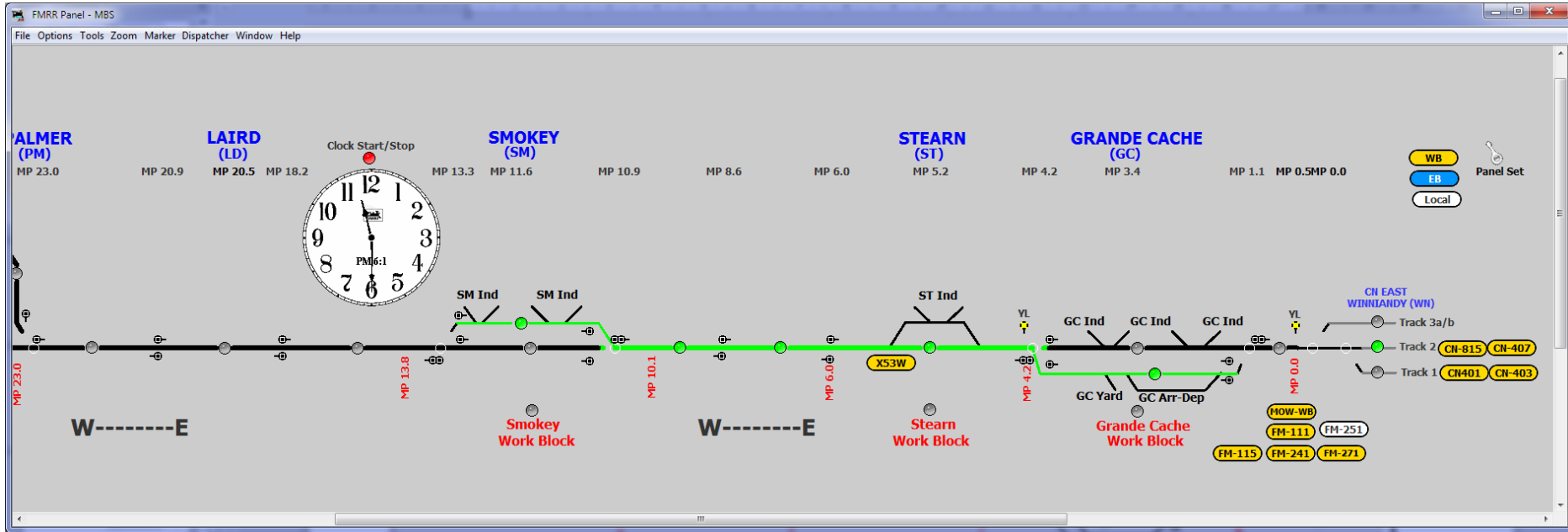


Proceed Clearance

X53W (FM-121) is going from Grande Cache to Smokey in order to do some switching work there. It can only travel forward in one direction with this clearance


		MANUAL BLOCK SYSTEM CLEARANCE	
No: <u>32</u>	To: <u>X53W</u> at <u>GC</u> <small>(Train, Foreman, Track Unit) (Location)</small>	Date <u>30 OCT 77</u>	
MBS CLEARANCE _____ IS CANCELLED			
Do not leave _____ before _____			
After Extra _____ arrives at _____			
PROCEED:			
From: WN	<u>GC</u>	ST	SM LD PM BH WD CL
To: WN	GC	ST	<u>SM</u> LD PM BH WD CL
Take <u>Clear</u>	Main Track at <u>GC ST</u>		<u>SM</u> WD
WORK (until MBS is cancelled)			
Between: MP 0	MP 4.2	MP 10.1	MP 23.0 MP 28.8
and: MP 5	MP 6.0	MP 13.8	MP 26.9 MP 31.3
RESTRICTIONS As Noted / <u>NIL</u>			
(1) Protect Against _____ Between _____ and _____			
(2) Protect Against _____ Between _____ and _____			
(3) Protect Against _____ Between _____ and _____			
(4) _____			
(5) _____			
Call Train Dispatcher Before _____			
MBS BULLETINS IN EFFECT <u>None</u>			
Train Dispatcher _____			
Repeated at <u>09:45</u> hrs		CANCELLATION	
Dispatcher <u>JSS</u>		MBS Clearance Number _____	
Acknowledged by <u>DMS</u>		Cancelled at _____ hrs	
Form Date 4 April, 2017		Acknowledged by _____	


Proceed Clearance (Dispatcher Panel)



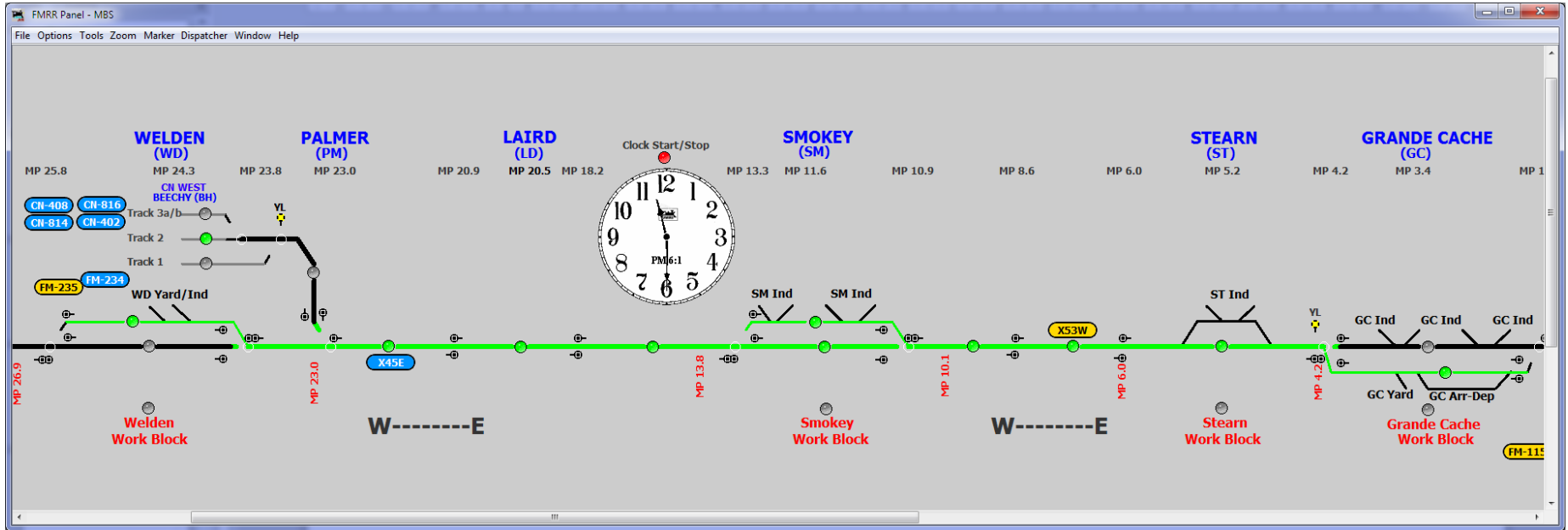
Meet Clearances

X53W is going from Grande Cache to Smokey. It has been instructed to Clear Main Track in Smokey. X45E (FM-232) is travelling from Welden to Grande Cache. It can only go as far as Smokey and has been instructed to Take Main Track at Smokey

 MANUAL BLOCK SYSTEM CLEARANCE	
No: <u>32</u>	To: <u>X53W</u> at <u>GC</u> Date <u>30CT77</u> <small>(Train, Foreman, Track Unit) (Loc/Dir)</small>
MBS CLEARANCE _____ IS CANCELLED	
Do not leave _____ before _____ After Extra _____ arrives at _____	
PROCEED:	
From: WN <u>GC</u> ST SM LD PM BH WD CL	To: WN GC ST <u>SM</u> LD PM BH WD CL
Take <u>Clear</u> Main Track at GC ST <u>SM</u> WD	
WORK (until MBS is cancelled)	
Between: MP 0 MP 4.2 MP 10.1 MP 23.0 MP 28.8	and: MP 5 MP 6.0 MP 13.8 MP 26.9 MP 31.3
RESTRICTIONS As Noted / <u>NIL</u>	
(1) Protect Against _____ Between _____ and _____	
(2) Protect Against _____ Between _____ and _____	
(3) Protect Against _____ Between _____ and _____	
(4) _____	
(5) _____	
Call Train Dispatcher Before _____	
MBS BULLETINS IN EFFECT <u>None</u>	
Train Dispatcher _____	
Repeated at <u>09:45</u> hrs	CANCELLATION
Dispatcher <u>JSS</u>	MBS Clearance Number _____
Acknowledged by <u>DMS</u>	Cancelled at _____ hrs
<small>Form Date 4 April, 2017</small>	


 MANUAL BLOCK SYSTEM CLEARANCE	
No: <u>33</u>	To: <u>X45E</u> at <u>WD</u> Date <u>30CT77</u> <small>(Train, Foreman, Track Unit) (Loc/Dir)</small>
MBS CLEARANCE _____ IS CANCELLED	
Do not leave _____ before _____ After Extra _____ arrives at _____	
PROCEED:	
From: WN GC ST SM LD PM BH <u>WD</u> CL	To: WN GC ST <u>SM</u> LD PM BH WD CL
<u>Take</u> Clear Main Track at GC ST <u>SM</u> WD	
WORK (until MBS is cancelled)	
Between: MP 0 MP 4.2 MP 10.1 MP 23.0 MP 28.8	and: MP 5 MP 6.0 MP 13.8 MP 26.9 MP 31.3
RESTRICTIONS As Noted / <u>NIL</u>	
(1) Protect Against _____ Between _____ and _____	
(2) Protect Against _____ Between _____ and _____	
(3) Protect Against _____ Between _____ and _____	
(4) _____	
(5) _____	
Call Train Dispatcher Before _____	
MBS BULLETINS IN EFFECT <u>None</u>	
Train Dispatcher _____	
Repeated at <u>09:50</u> hrs	CANCELLATION
Dispatcher <u>JSS</u>	MBS Clearance Number _____
Acknowledged by <u>MAJ</u>	Cancelled at _____ hrs
<small>Form Date 4 April, 2017</small>	

Meet Clearance (Dispatcher Panel)



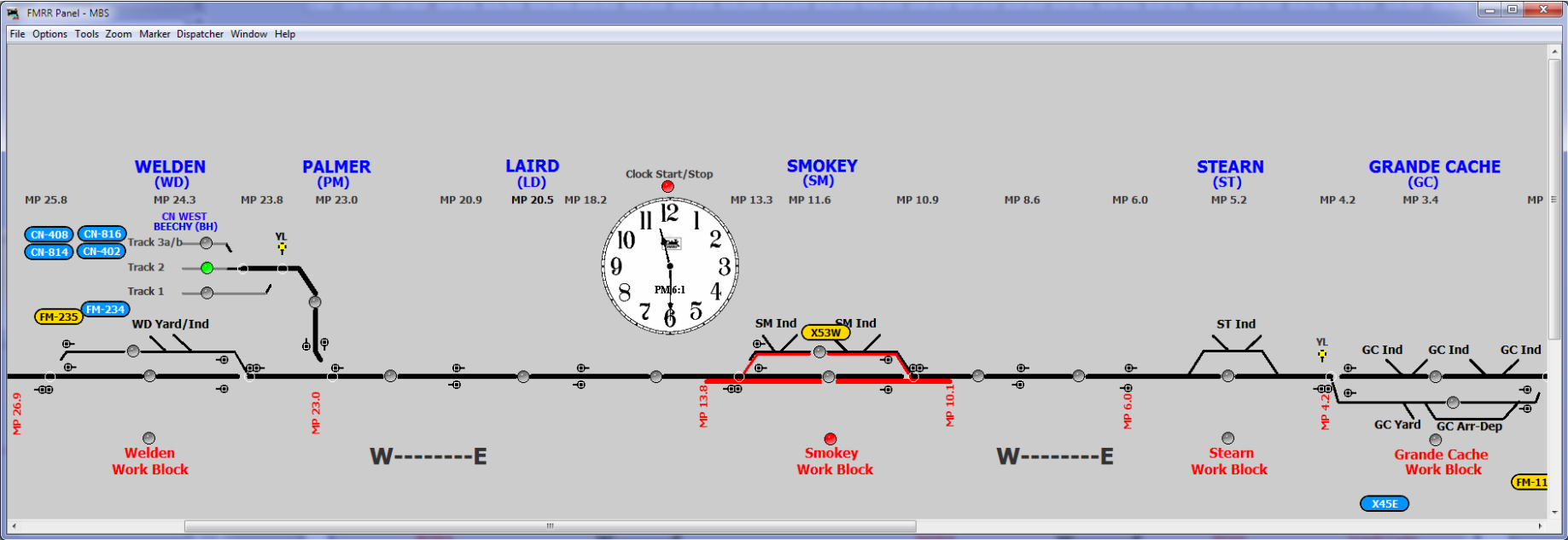
Work Clearance

X53W is switching both trailing point and facing point spurs in Smokey. It will require use of the Main Track for run around moves. X53W can move back and forth between MP 10.1 and MP 13.8 as many times it is required to complete the switching. When complete this MBS is cancelled and a new Proceed clearance will take it to the next town.

 MANUAL BLOCK SYSTEM CLEARANCE	
No: <u>35</u>	To: <u>X53W</u> at <u>SM</u> Date <u>30CT77</u> <small>(Train, Foreman, Track Unit) (Location)</small>
MBS CLEARANCE _____ IS CANCELLED	
Do not leave _____ before _____ After Extra _____ arrives at _____	
PROCEED:	
From: WN GC ST SM LD PM BH WD CL	To: WN GC ST SM LD PM BH WD CL
Take / Clear Main Track at GC ST SM WD	
WORK (until MBS is cancelled)	
Between: MP 0 MP 4.2 <u>MP 10.1</u> MP 23.0 MP 28.8	and: MP 5 MP 6.0 <u>MP 13.8</u> MP 26.9 MP 31.3
RESTRICTIONS As Noted <u>NIL</u>	
(1) Protect Against _____ Between _____ and _____	
(2) Protect Against _____ Between _____ and _____	
(3) Protect Against _____ Between _____ and _____	
(4) _____	
(5) _____	
Call Train Dispatcher Before _____	
MBS BULLETINS IN EFFECT <u>None</u>	
Train Dispatcher _____	
Repeated at <u>11:45</u> hrs	CANCELLATION
Dispatcher <u>JSS</u>	MBS Clearance Number _____
Acknowledged by <u>DMS</u>	Cancelled at _____ hrs
	Acknowledged by _____


Form Date 4 April, 2017

Work Clearance (Dispatcher Panel)



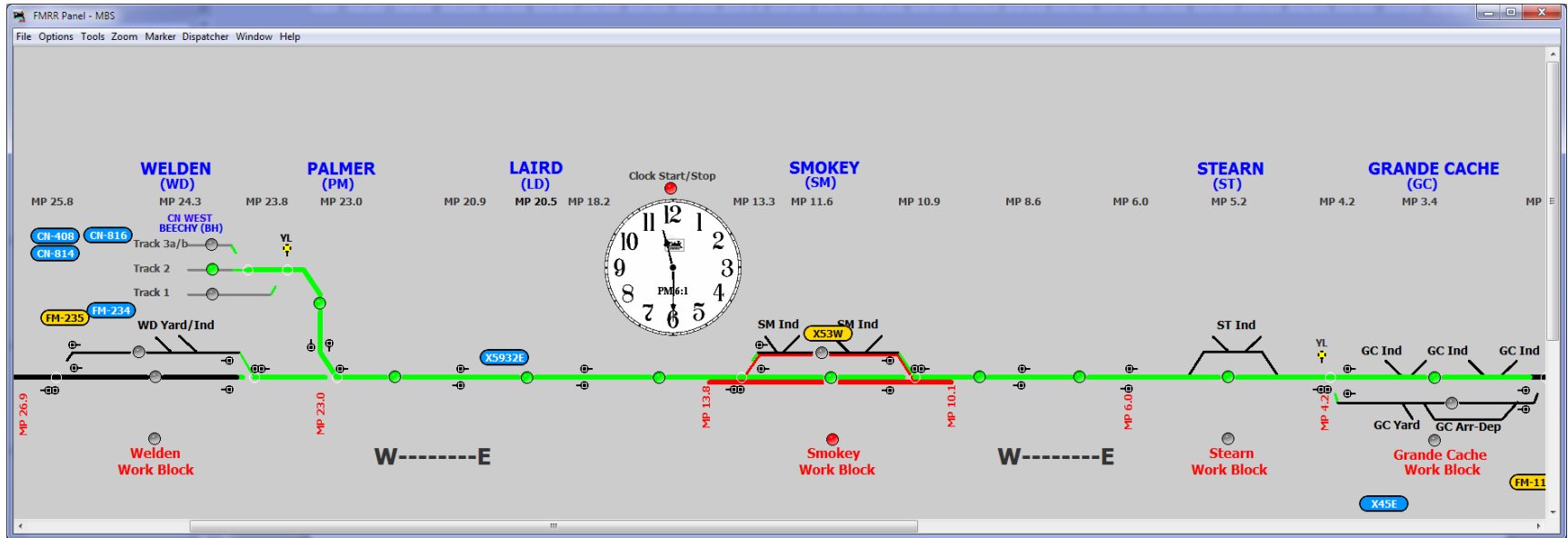
Proceed with Restrictions

X5932E (CN-402) is going from Beechy to Grande Cache. In order to get by X53W switching at Smokey it will need a “Protect Against” Restriction between the work limits that X53W is currently in possession of. It will be up to the 2 trains to coordinate passing movements.


 MANUAL BLOCK SYSTEM CLEARANCE	
No: <u>36</u>	To: <u>X5932E</u> at <u>BH</u> Date <u>30CT77</u> <small>(Train, Foreman Track Unit) (Location)</small>
MBS CLEARANCE _____ IS CANCELLED	
Do not leave _____ before _____ After Extra _____ arrives at _____	
PROCEED:	
From: WN GC ST SM LD PM <u>BH</u> WD CL	To: WN <u>GC</u> ST SM LD PM BH WD CL
<u>Take</u> / Clear Main Track at <u>GC</u> ST SM WD	
WORK (until MBS is cancelled)	
Between: MP 0 MP 4.2 MP 10.1 MP 23.0 MP 28.8	and: MP 5 MP 6.0 MP 13.8 MP 26.9 MP 31.3
RESTRICTIONS <small>As Noted</small> NIL	
(1) Protect Against <u>X53W</u> Between <u>MP 13.8</u> and <u>MP 10.1</u>	
(2) Protect Against _____ Between _____ and _____	
(3) Protect Against _____ Between _____ and _____	
(4) _____	
(5) _____	
Call Train Dispatcher Before _____	
MBS BULLETINS IN EFFECT <u>None</u>	
Train Dispatcher _____	
Repeated at <u>13:00</u> hrs	CANCELLATION
Dispatcher <u>JSS</u>	MBS Clearance Number _____
Acknowledged by <u>KLP</u>	Cancelled at _____ hrs _____
	Acknowledged by _____


Form Date 4 April, 2017


Proceed with Restriction Clearance (Dispatcher Panel)



MBS Bulletins

MANUAL BLOCK SYSTEM BULLETIN		FEATHER MOUNTAIN RAILROAD		
Bulletin No.	<u>100</u>	Date:	<u>23-May-77</u>	
To:	SMOKEY RIVER SUB TRAINS			
<p>MAXIMUM SPEED IS LIMITED TO TWENTY (20) MPH FROM MILEAGE TWENTY SIX POINT FIVE (26.5) TO TWENTY NINE POINT TWO (29.2) TRACK CONDITIONS</p>				
Made complete at:	<u>0135</u> <small>(Time)</small>	Train Dispatcher:	<u>MRJ</u> <small>(Initials)</small>	
Acknowledged by:	<u>Marlowe</u> <small>(Name)</small>	<u>OPR</u> <small>(Occupation)</small>	<u>0135</u> <small>(Time)</small>	
This M.B.S. Bulletin No.				
Cancelled at:		By:		
<small>Form Date: 16-Apr-17</small>				

MANUAL BLOCK SYSTEM BULLETIN		FEATHER MOUNTAIN RAILROAD		
Bulletin No.	<u>200</u>	Date:	<u>17-May-77</u>	
To:	SMOKEY RIVER SUB TRAINS			
<p>TRAINS WITH EMPTY LOG OR POLE CARS (FM 7000 SERIES) ARE LIMITED TO TWENTY (20) MPH</p>				
Made complete at:	<u>1200</u> <small>(Time)</small>	Train Dispatcher:	<u>AL</u> <small>(Initials)</small>	
Acknowledged by:	<u>Webster</u> <small>(Name)</small>	<u>OPR</u> <small>(Occupation)</small>	<u>1200</u> <small>(Time)</small>	
This M.B.S. Bulletin No.				
Cancelled at:		By:		
<small>Form Date: 16-Apr-17</small>				

MANUAL BLOCK SYSTEM BULLETIN		FEATHER MOUNTAIN RAILROAD		
Bulletin No.	<u>303</u>	Date:	<u>6-May-77</u>	
To:	SMOKEY RIVER SUB TRAINS			
<p>MAXIMUM SPEED APPROACHING GRADE CROSSING AT MILEAGE TWENTY SIX POINT NAUGHT (26.0) IS LIMITED TO TEN (10) MPH UNTIL CROSSING IS FULLY OCCUPIED</p>				
Made complete at:	<u>1859</u> <small>(Time)</small>	Train Dispatcher:	<u>AL</u> <small>(Initials)</small>	
Acknowledged by:	<u>Douglas</u> <small>(Name)</small>	<u>OPR</u> <small>(Occupation)</small>	<u>1859</u> <small>(Time)</small>	
This M.B.S. Bulletin No.				
Cancelled at:		By:		
<small>Form Date: 16-Apr-17</small>				

MANUAL BLOCK SYSTEM BULLETIN		FEATHER MOUNTAIN RAILROAD		
Bulletin No.	<u>401</u>	Date:	<u>1-Jul-77</u>	
To:	SMOKEY RIVER SUB TRAINS			
<p>SIGNAL MAINTENANCE AT MILEAGE FOUR POINT TWO (4.2) APPROACH SIGNALS AT RESTRICTED SPEED</p>				
Made complete at:	<u>0800</u> <small>(Time)</small>	Train Dispatcher:	<u>MRJ</u> <small>(Initials)</small>	
Acknowledged by:	<u>Stewart</u> <small>(Name)</small>	<u>OPR</u> <small>(Occupation)</small>	<u>0800</u> <small>(Time)</small>	
This M.B.S. Bulletin No.				
Cancelled at:		By:		
<small>Form Date: 16-Apr-17</small>				

Pros

1. **Simple instructions for train crews.**
2. **With JMRI Panel Pro the Dispatcher has a visual of the trains on the layout and the clearances in effect.**
3. **The JMRI computer does not need to be connected to the layout.**
4. **With Extra trains running sequentially there is minimal consequences if a session runs behind schedule.**
5. **Makes shorter runs seem longer. Add about 5 minutes.**
6. **The yards can keep up (sometimes are ahead) with the arriving and departing trains.**
7. **Dispatcher writes between 45 and 55 clearances in 4 hrs. (not too busy)**
8. **I can use my ABS signals (a signal system is not needed)**

Cons

1. **Era specific – 1962 to 1990 (in Canada)**
2. **A phone or radio system is required.**
3. **A computer is required**
4. **Less challenging than TT & TO.**

End

Time Table No. 6 – April 24th, 1977

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WATCH INSPECTORS

Location	Name	Location	Name
Grande Cache	Train Dispatcher	La Crique	Yardmaster or Operator
Colton	Yard Master or Operator	Tumbler Ridge	Yardmaster or Operator

MEDICAL OFFICER

G. C. GARFIELD Regional Medical Officer, Edmonton, Alta.

MEDICAL CLINICS

DR. A. B. WATERS, Grande Cache, Alta. Telephone: 440-1904
DR. S. Y. CHANG, Tumbler Ridge, B.C. Telephone: 468-8821

OFFICERS

REGIONAL TRANSPORTATION

Transp. Control Officers	J. W. Carmichael R. J. Richardson P. J. Stockton	Grande Cache Tumbler Ridge Goad River
Regional Master Mechanic	W. J. Dearborn	Grande Cache

DIVISIONAL OFFICERS

Operations Managers	R. A. Floyd H. O. Masi	Grande Cache Tumbler Ridge
Road Foreman, Instructor & Mechanical Supervisor	F. T. Dove	Grande Cache

DISPATCHING OFFICE AT GRANDE CACHE - OFFICE SIGNAL "GC"

Telephone Nos. 440-1904, 719-0330

Chief Train Dispatcher
N. T. Skretting

Train Dispatchers
C. Sevensmith
M. Johnson
A. Love
K. King



FEATHER MOUNTAIN RAILROAD MOUNTAIN REGION EMPLOYEES' OPERATING TIME TABLE

6

EFFECTIVE
SUNDAY, APRIL 24TH, 1977

REFER TO PAGE 1 FOR EFFECTIVE TIME, AND FOR OTHER
TIME AND DATE CHANGES THAT WILL OCCUR

THE SUPERIOR DIRECTION IS EAST

**SAFETY IS OF THE FIRST IMPORTANCE IN
THE DISCHARGE OF DUTY**

J. S. SABO
GENERAL SUPT.
TRANSPORTATION
GRANDE CACHE

D. S. MILLER
ASST. GENERAL SUPT.
TRANSPORTATION
GRANDE CACHE

Websites:

Northern Rails:

<http://www3.telus.net/public/ulvestad/NorthernRails>

Layout:

<https://www.operatingsessions.com/Layouts/Sabo>