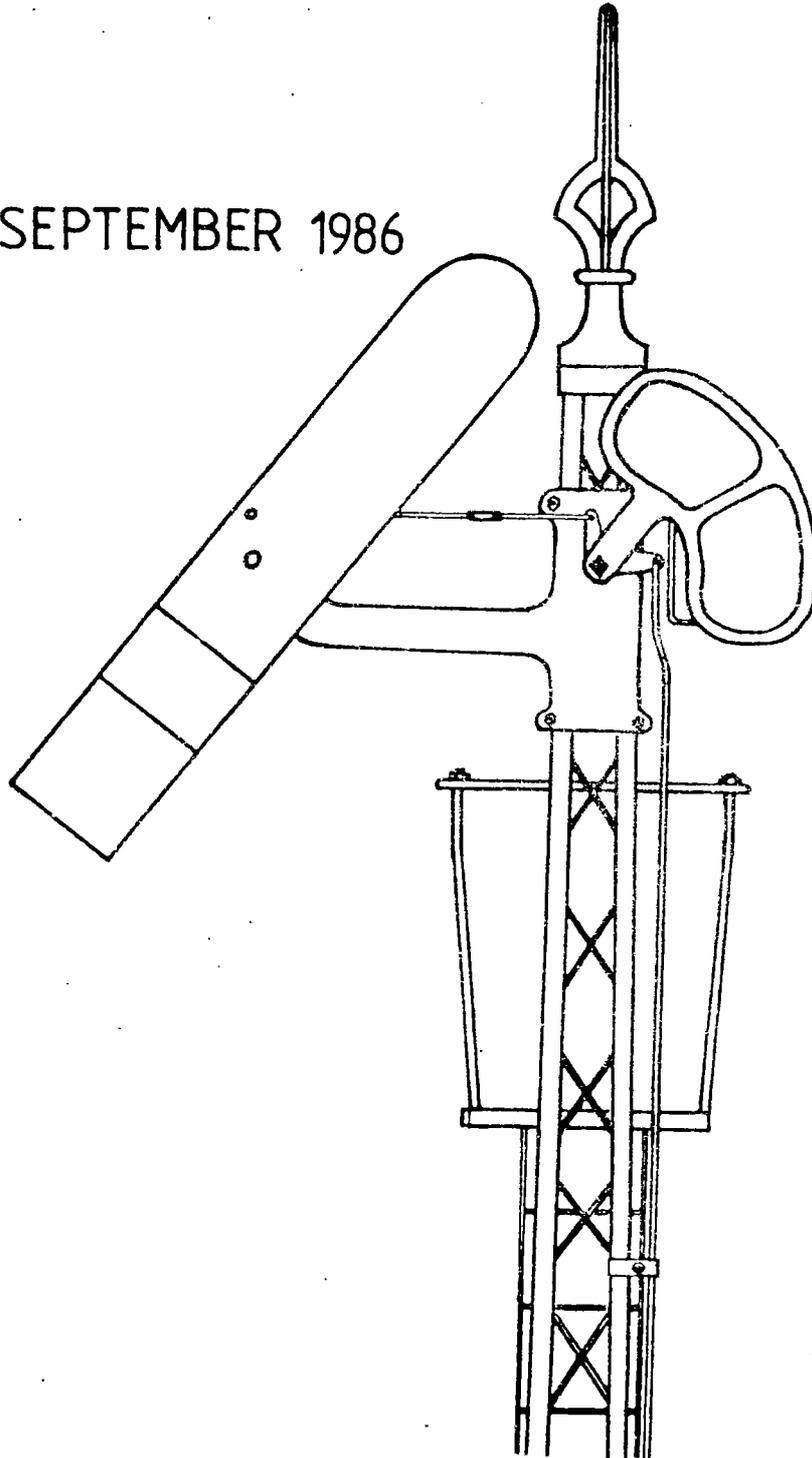


SOMERSAULT

SEPTEMBER 1986



SRSV

Editor: David Langley, Crichton Street, Avenel, 3664.
 Articles may be reprinted without prior permission but
 acknowledgement is required. Opinions expressed in
 articles appearing in Somersault or supplements are
 not necessarily those of the S.R.S.V.

Deadline for the

NEXT MEETING: Friday, 19 September 1986.

VENUE: A.R.H.S. Library Room, Windsor Railway Station.

VICTORIAN GROUP LEADER: Jack McLean, 60 Kenmare Street,
 Box Hill North, 3129. Phone: 03-8906764.

VICTORIAN GROUP TREASURER AND SUBSCRIPTION MANAGER:
 Rob Weiss, 40 Shady Grove, Nunawading, 3131.
 Phone: 03-8781305.

NEW SOUTH WALES GROUP LEADER: Neil Curryer, 20 Elton
 Close, Adamstown Heights, 2289. Phone: 049-437404.

NEW SOUTH WALES GROUP SECRETARY: Bob Taafe,
 11 Deribong Place, Thornleigh, 2120. Ph. 02-8489994.

MINUTES OF JULY 1986 MEETING

HELD AT: A.R.H.S. Library Room, Windsor Railway Station.

MEETING COMMENCED: at 2006 hours.

PRESENT: Jack McLean, Jim Brough, David Langley, Alan Jungwirth,
 Colin Rutledge, Ian Mathews, Glen Cumming, Bob Whitehead,
 Jon Churchward, Tony Kociuba, Wilfrid Brook and Bill Mercer.
 Visitor R. Bishop was welcomed to the meeting.
 There was also one indecipherable attender.

1986 ANNUAL MEETING: Again adjourned due to lack of a treasurer.

MINUTES OF PREVIOUS MEETING: As there was no May meeting, the minutes of the
 March meeting were adopted as read (Langley/Jungwirth)

BUSINESS ARISING: nil

CORRESPONDENCE: nil

GENERAL BUSINESS: 1. Tony Kociuba showed the model of a rocker interlocking
 machine that he had constructed after one member was heard
 to have said that he probably could not do it. Tony says
 that his next model will have working facing point locks
 with moveable fouling bars.

2. Further to previous reports the following has come to
 light - Fernbank will be closed but will be used during the
 special train traffic for the Great Victorian Bike
 Hike.

3. The July issue of Somersault had a list of forthcoming
 alterations in it and discussion ensued regarding some of
 these especially regarding the South-East line changes.

4. Jack McLean showed some newspaper cuttings from Canada
 concerning the head on collision at Hinton, Alberta, which
 had some surprising similarities with the Victorian head on
 collision at Violet Town.

SHOW DAY TOUR: Alan Jungwirth reported on the forthcoming tour to Gippsland
 Members to travel per the 0825 Bairnsdale (arrange your own
 ticket and seat) to Stratford arrive 1141. The connecting
 road motor service to Yarragon will depart from the station
 forecourt shortly after and will stop at a number of inter-
 esting safeworking places including Stratford Junction Box.
 The train from Yarragon will deposit members in Melbourne at
 around 1900 hours. The bus fare is payable on the day and is
 expected to be about \$10. Suggest train tickets to be single
 to Stratford and single from Yarragon to Melbourne.

MEETING CLOSED: at 2210 hours after a very enjoyable syllabus item of 32
 questions and 40 odd slides of a 'where is it' nature. Our
 thankyou's go to David Langley and Alan Jungwirth for these.

--oOo--

(Answers to the questions on p92.)

SIGNALLING ARRANGEMENTS

- * 17/3/1986 NEWPORT WORKSHOPS. Signal post No 49A was relocated 55 metres in the down direction and is now controlled by lever 14 in lieu of lever 9. A new co-acting disc signal provided on post No 49C. Hayes derails and wheel crowders were provided and worked by levers 8 & 9.
- * 22/3/1986 NARRE WARREN-TYNONG. New signalling diagram No 5/86 issued and diagram No 36/82 cancelled. Automatic boom barriers were provided at the following level crossings - Cranbourne Road (Narre Warren-Berwick), Clyde Road (upside of Berwick), Goff Street (down side of Beaconsfield) and Brunt's Road (Beaconsfield-Officer). Other alterations are as below:
 NARRE WARREN - The operation of the Webb Street booms converted to automatic and lever No 20 (boom lever) taken out of use. Lever No 13 (Closing lever) no longer has a centre notch. A 5P key operated switch has been provided on the platform which can be used to prevent the operation of the Webb Street booms as necessary by holding signal No 14 at the Stop position. Signals Nos 14 & 15 have been interlocked with the boom barrier cycle and provided with express/stopping push buttons. The annett locked gates and lever No 9 were abolished.
 NARRE WARREN-BERWICK - Signal D1295 (lever 17 at Narre Warren) was interlocked with the boom barrier operation at Cranbourne Road and the express/stopping push buttons at Narre Warren.
 BERWICK - Signals Nos 4, 8, 12 and 14 were interlocked with the boom barrier cycle and a 5P key operated switch was provided to hold signal No 14 at Stop to prevent unnecessary operation of the booms. Signal D1470 (lever 34) now requires No 27 points normal in lieu of either normal or reverse.
 BEACONSFIELD - Signal D1497 has been interlocked with the boom barrier cycle at Goff Street and a 5P key operated switch has been provided to enable the signal to be held at Stop if a train is to be held at the platform.
- * 4/4/1986 DENDY STREET. All points at Dendy Street have been abolished but the home signals with illuminated letter "A" lights will remain for the time being.
- * WN 14/86 STAWELL. No 2 road has been removed.
- * 9/4/1986 HAMILTON. Flashing lights were provided at South Boundary Road level crossing at 319.655 Km on the down side of Hamilton. The home arrival signal for Hamilton was relocated to the down side of the crossing and is interlocked with the flashing lights.
- * 16/4/1986 NEWPORT. No 181 points and No 190 Dwarf signal were abolished.
- * 16/4/1986 NEWPORT WORKSHOPS. A new co-acting disc signal, worked by lever 14, was provided on post 49C. (See entry for 17/3/86.)
- 21/4/1986 SEAFORD. In order to overcome interference to the view of automatic signal F1215, the signal lights were re-arranged in a reverse stagger.
- 21/4/1986 N.E. STANDARD GAUGE LINE. Emergency 5P key operated switches were commissioned and made available for use in the telephone cabins at all crossing loops on the North East Standard Gauge line. The switches enable the departure home signals to be operated by the train crew or local signalman in the event of a failure of the control system.
- WN 17/86 KENSINGTON-ESSENDON. New signalling diagram No 9/86 was issued and diagram No 1/83 was cancelled. This diagram shows the alterations at Essendon following the abolition of the ground frame and goods yard.
- 23/4/1986 GLENBERVIE-SOMERTON. New signalling diagram No 3/96 was issued and diagram No 18/65 was cancelled. Home signal No 8 at Glenroy was converted to automatic signal E530 and dwarf signals 4 & 6 abolished.
- * 28/4/1986 WODONGA. The down distant signal was relocated 1021 metres further in the up direction. The control for the down approach bell was also re-located 307 metres further out.
- WN 16/86 BOOK OF RULES & REGULATIONS. Regulation 59 relating to speed indications of signals has been amended and the amended instructions are published late in this issue of Somersault. Also published elsewhere are the alterations to the Code of Bell Signals for Double Line Block and Electric Staff systems. The basic alteration here has been the rationalisation of certain bell signals.

- 8/5/1986 MORDIALLOC. The down distant signal was abolished.
- WN 17/86 END TO END RADIO COMMUNICATION. Instructions have been issued regarding the operation of radios when shunting with two man crews and also regarding the procedure for issuing radios from locomotive depots.
- WN 18/86 GRAMPIANS LOOP. Curve speed boards indicating a maximum speed of 20 Km/h when entering the loop are erected at each end of the loop. At the exit of the loop there is a board erected lettered "20 UNTIL LOCOMOTIVE HAS PASSED POINTS" indicating that the train must not be taken up to line speed until the locomotive(s) have cleared the trailing points at that end of the loop. This speed restriction is a temporary one only.
- WN 19/86 SPENCER STREET PASSENGER YARD. When a shunting movement is to be performed and the locomotive is standing beyond signal No 183 Home Departure Signal from No 1 Platform, the Driver must, subject to the necessary hand signal from the Guard, Secondman or Shunter, obtain the Signalman's VERBAL authority to perform the movement. If any other movement is to be performed in the area whilst an engine is standing beyond signal No 183, the Signalman must first VERBALLY advise the Driver of that engine of what is about to be done and that he must not move his engine until again authorised. (Near miss eh! ED)
- * 18/5/1986 GLENHUNTLY. The diamond crossing and the turnout in the down line previously forming the exit from the goods yard were straight railed.
- * 20/5/1986 MIAKITE LOOP. Opened as an automatic electric staff station with sections being Hamilton-Miakite Loop-Myamyn Loop. The staff & ticket system in use on the sections Hamilton-Branxholme-Myamyn Loop was abolished and Branxholme was closed as a staff station. The points at Miakite Loop are fitted with trailable point machines and location boards are provided at a distance from the points. Speed restrictions similar to those in use at Grampians Loop (see WN 18/86) are also in force at Miakite Loop.
- * 29/5/1986 HEYWOOD. The down end plunger locked points were abolished and replaced by trailable points with normal left hand lie. The mechanical up home signal was abolished and a new up home light signal provided which electrically detects the trailable points locked for the normal lie. The signal is controlled by 5P key switches and an up location board is also provided.
- * 28/5/1986 SHEPPARTON. Boom barriers were added to the flashing lights at Wyndham Street level crossing (Goulburn Valley Highway). A new up home light signal has been provided and is controlled by push buttons on the new control panel or from a 5P key switch near the up end of the oil siding.
- * 4/6/1986 SHEPPARTON. Boom barriers were added to the flashing lights at Fryers Street.
- * 4/6/1986 WILLAURA LOOP. Opened as an automatic electric staff station with sections being Maroona-Willaura Loop-Glen Thompson. The existing electric staff sections Maroona-Willaura-Glen Thompson was abolished and Willaura was closed completely. The existing mechanical signals, plunger locks, signal quadrants and signal push buttons were abolished. The existing two position home light signals were converted to two position automatic light signals and are fitted with a reflectorised letter "A" signs. The signals control movements across both roadways. The down signal is controlled from the existing push button at the down end and new push buttons at the up end, and the up signal is controlled from push buttons at the up end annett locked points. Notice boards are provided at the annett locked points and are lettered "OPERATE REVERSE CONTROL FOR WORKING TRAINS REQUIRED TO PASS SIGNAL". Willaura Loop has normal left hand lie of points, fitted with trailable point machines and location boards.
- * 5/6/1986 MURTOA. A new dwarf signal - post 14 - has been provided on the down side of the level crossing and controls up movements across the roadway. It is interlocked with the flashing light cycle and is controlled by lever 14.
- * 6/6/1986 RAINBOW. Closed as a staff & ticket station with the new section becoming Jeparit-Yaapect. The signals and plunger locks were abolished and hand locking bars provided.

- WN 23/86 TWO MAN FREIGHT TRAINS. Following the programme to improve the braking of wagons, there are now no restrictions on the types of Victorian wagons that may be used as the last three vehicles in a two man train. The restriction still applies to Australian National wagons AOOX, AMNX, GOX or GB classes.
- * 17/6/1986 GLEN THOMPSON. The electric staff system between Glen Thompson and Dunkeld was converted to automatic operation. All signals, signal quadrants and plunger locks were abolished and replaced by location boards and trailable point machines. The up end points of No 3 road are staff locked and the down end are secured by hand locking bar.
- # 19/6/1986 DUNKEILD. All signals, signal quadrants and plunger locks were abolished and replaced by location boards and trailable point machines. The up end points of No 3 road are secured by staff locks and the down end are secured by hand locking bars.
- * 19/6/1986 DONNYBROOK. The down distant signal was relocated 150 metres further out and provided with an electric light.
- * 19/6/1986 MURCHISON EAST. The down end plunger locked points "J" were removed.
- * WN 24/86 PORTLAND. The middle main line points leading to Borthwicks Siding have been abolished.
- WN 25/86 DANDENONG-CRANBOURNE-KOO WEE RUP-LANG LANG. To enable the convenient running of express goods and passenger trains on the South-East main line, the following special instructions for the conversion of the Electric Staff sections into one Train Staff & Ticket section will take effect. (Published later in this issue-see p91).
- * 25/6/1986 PORTLAND. The final stage of the signalling alterations took place. The signal control panel was relocated from the Harbour Trust Junction to the Depot building. The right hand signal on post 3 was converted to a home signal and will be track controlled. A 4D key switch was provided on the control panel and 4D padlocks secure main line points Nos 22 and 23 at the down end of the depot sidings. Removal of the key from the panel will secure the signals worked by levers 11 and 14 at the Stop position. Five additional light signals were provided - posts 11 (down home signal for Depot sidings), post 13 (down departure home signal protecting Julia Street flashing light), post 14 (up home and shunting signals towards Depot sidings from Harbour Trust line) and post 18 (up home signal from Departure Road Harbour Trust line towards Depot sidings). The Harbour Trust junction points lie normally for the Harbour Trust line and are provided with trailable point equipment, as are also the points forming the junction between the arrival and departure roads at the Harbour Trust sidings.
- * WN 25/86 WILLAURA LOOP. The trailable points at the down end are provided with a fixed switch stand which displays two black discs for facing movements and two white discs with vertical black bars for trailing movements. The up two position (light) automatic signal at Edgarley Road controls movements across the roadway and is also electrically detected with the down end points. If this signal is at Stop, the Driver must bring his train to a stand and the Secondman must then proceed to the points. If they are correctly set and locked, the train may then proceed past the signal into the loop in accordance with Rule 74.
- * 26/6/1986 JACKSON'S LOOP. The crossing loop at 221.5Km was opened for use and the automatic electric staff sections are now Ararat-Jackson's Loop-Maroonna in lieu of the large pattern electric staff previously in use between Ararat and Maroonna. Trailable points are provided at both ends of the loop and the speed limit for engines when trailing through the points is 20 Km/h. When the engine has completely passed through the points the speed of the train may be increased to line speed.
- WN 26/86 TRAILABLE POINTS. A new improved type of switch stand is to be introduced on trailable points. The new switch stand will display the following: a) when the left hand road is the diverging road and the points are normal and locked, a reflectorised yellow fish-tailed arrow pointing in the direction in which the points are set, and b) when the points are not correctly set, two reflectorised red discs. If, when approaching the points in the trailing direction, the Driver observes two white discs with black bars, the points may be trailed through but the Train Controller must be advised.

RUNNING TRAINS BY TIME TABLE AND TRAIN ORDERS

CANADA 1944

by Jack McLean

THE ORDERS FOR No 4.

We come now to a practical application of the foregoing; the orders that were given to Conductor Waller on the night on 14 July 1944, for train No 4, the Continental Limited on which I left Edmonton for Halifax, Nova Scotia, and other places.

The Terminal Clearance (reproduced below) that was received this night, was issued at 2116, eleven minutes after we should have left, and attached to it were nine orders, listed by their numbers. Eight of these orders have survived the last forty years and an attempted explanation of the reasons for their issue follows.

CANADIAN NATIONAL RAILWAYS
TERMINAL CLEARANCE FORM B
 Station Edmonton 2116 July 14 1944
 TO 225-235-244-249-253-255
 FROM 892-894-895
 OTHER TRAINS Other trains
 AND LEFT EXCEPT held
 THE TRAIN AHEAD FROM THIS STATION Fish Extra 5150 left 21:00
 AND ARRIVED AT North Edmonton AT 21:12
 2116 H.B.J. J.M. Schenck

Above. Terminal Clearance Form B.

ORDER 255

The first order concerned, of all the unlikely trains, a Fish Extra. The order was a long one, actually on Form 31A, which was long enough to accommodate the names of all the stations on the Viking Sub-division, and the times of the Fish Extra against them. But why was a Fish Extra so important and why did it leave from Edmonton Passenger Station?

Maybe it was Conductor Waller who had told me about the Silk Extras, where the insurance on the valuable silk (from the Orient) was so high that the railway ran the consignments as fast and as continuously as possible to minimise the premiums, which may even have been charged by the minute. After forty years, I only recently read an article by Mr. J-G Cote, who had at one time worked in the Edmonton Train Despatchers Office which I later haunted. Mr. Cote described how one Silk Train had actually overtaken a division of the Limited (on the CPR) on which a British Prince was travelling.

A Fish Extra doesn't sound quite so romantic (aromatic perhaps) but its consignment was valuable and the value decreased with age. Hence the urgency of the consignments resulted in Fish Extras getting extraordinary priorities. Even on the Viking Sub-division, its times were five minutes faster than the two Continentals. As an extra train, the engines

CANADIAN NATIONAL RAILWAYS
 FORM 31A TRAIN ORDER No. 225 FORM 31A
 EDMONTON JULY 14 1944

TO YARDMASTER
 TO ENG 5150
 TO TRAINS TO VIKING SUB

AT EDMONTON

STATION	TIME
ENG 5150 RUN FISH EXTRA LEAVING EDMONTON ON FRIDAY	
JULY 14TH AS FOLLOWS WITH RIGHT OVER ALL TRAINS LEAVE	
NORTH EDMONTON	TWENTY FIFTY FIVE 21:55
CLOVER BAR	TWENTY ONE NAUGHT ONE 21:01
BREMNER	TWENTY ONE NAUGHT EIGHT 21:08
ARDROSSAN	TWENTY ONE FIFTEEN 21:15
URCAS	TWENTY ONE TWENTY FOUR 21:24
DEVILLE	TWENTY ONE THIRTY TWO 21:32
LINDBROOK	TWENTY ONE FORTY 21:40
TOPFIELD	TWENTY ONE FORTY SEVEN 21:47
SHONTS	TWENTY ONE FIFTY FOUR 21:54
RYLEY	TWENTY TWO NAUGHT ONE 22:01
POE	TWENTY TWO NAUGHT SIX 22:06
HOLDER	TWENTY TWO ELEVEN 22:11
BRUCE	TWENTY TWO TWENTY ONE 22:21
TORLEA	TWENTY TWO TWENTY SEVEN 22:27
VIKING	TWENTY TWO THIRTY FOUR 22:34
PHILIPS	TWENTY TWO FORTY TWO 22:42
KINSELLA	TWENTY TWO FORTY SEVEN 22:47
JARDON	TWENTY TWO FIFTY FIVE 22:55
IRMA	TWENTY THREE NAUGHT THREE 23:03
HAWKINS	TWENTY THREE ELEVEN 23:11
FABIAN	TWENTY THREE TWENTY TWO 23:22
ARR WAINWRIGHT	TWENTY THREE THIRTY FIVE 23:35

CONDUCTOR AND ENGINEMAN MUST EACH HAVE A COPY OF THIS ORDER

REPEATED AT 11:17

ENGINEMAN	TRAIN	DATE	OPERATOR
<u>Stewart</u>	<u>497</u>	<u>11/17/44</u>	<u>Waller</u>
<u>Waller</u>	<u>497</u>	<u>11/17/44</u>	<u>Waller</u>

would have carried white flags or additional white lights at the head end, as described by Rule 21, to show that it was not a regular train whose schedule was in the timetable.

Under certain conditions it would have been possible to run an Extra train over the Viking Sub-division with just one order, such as "Eng 5151 will run extra North Edmonton to Wainwright". Because the extra normally had no superiority, and as long as there were no extras in the opposite direction, Extra 5151 East would leave North Edmonton as soon as the Conductor and Engineer got their copies of the order and they "would keep out of the way of" superior trains, i.e. ALL OTHER TRAINS. If at about the same time, an Extra (West) was run from Wainwright to North Edmonton, then the dispatcher would have had to make some arrangements for the two to meet. Generally, the Extra in the inferior direction would take the siding at the meeting point.

The dispatcher could have arranged the meeting point in one of several ways. He could have issued a Train Order on Form A; "Extra 5151 East meet Extra 5152 West at To-field". As an alternative, he could have used a Time Order Form E, ordering the Extra in one direction to wait at (a list of stations) for a (list of times), for example:

"Extra 5151 East wait at Clover Bar until	ten ten	1010
Bremner	ten twenty five	1025
Ardressan	ten thirty	1030

for Extra 5152 West."

Extra 5152 West would then "keep out of the way" of Extra 5151 East knowing that the latter would not leave these stations before those times.

Just as it was possible to run a Sub-division, under certain conditions solely by timetable, it was also possible (and still is) to run a Sub-division entirely with Extra trains. In 1985, such Sub-divisions are quite common and are often those lines "on which trains run only in the grain season". Before CTC was installed, Hammersley Iron Railway in Western Australia ran trains the North American way - entirely with Extras.

Extra trains, as I have just shown, are normally inferior to all regular trains and so, how could the Fish Extra be given such a remarkable run, holding the main line at its meeting points with First Class trains, when it was at the bottom of the pecking order?

RIGHT

Rule 71 shows that trains had their superiority based on class and direction, to both of which I have already referred, and these are both granted ("conferred is the word the Canadians used") by timetable. A third form of superiority, called "right" was conferred by train order. By means of "right", a train despatcher could reverse the superiority given one train over another by class or direction. (Train Order Form C) or he could make the lowly Extra the most important train on the line.

The order relating to the Fish Extra was a 31 Order because it restricted the authority and had to be signed for by every other train on the Sub-division. At the foot of my copy, you will see the signature of Conductor Waller carboned through from where he signed the operator's copy. The times of the Fish Extra had to be shown at all the sidings on the Sub-division so that inferior trains (all other trains) would know by what time they had to be clear of the main line for it, that is five minutes earlier than the times shown in the order,

21. Extra trains will display two white flags and, in addition, two white lights by night, in the places provided for that purpose on the front of the engine.

NOTE: Where flags are prescribed, suitable lights may be substituted when authorized.

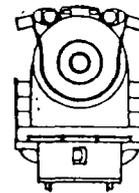


Fig. 14.
Engine running forward by day as an extra train.

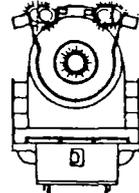


Fig. 15.
Engine running forward by night as an extra train.

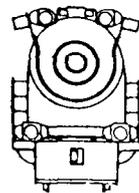


Fig. 16.
Engine running backward by day as an extra train without cars or at the rear of a train pushing cars.

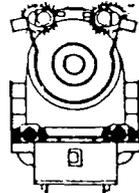


Fig. 17.
Engine running backward by night as an extra train without cars or at the rear of a train pushing cars. Headlight extinguished.

The order was issued at 1127, nine hours before the Extra was to run, so that, for instance, a copy of the order could have been given to No 403 freight at Wainwright, in case that train was running two hours late approaching North Edmonton.

AN ALTERNATIVE

An alternative method of "creating" a train which was not in the timetable was the running of a Regular Train in "sections".

For example, had the Fish Extra been following the two Continentals, instead of preceding them, it could have been run as a "second section" of say No 2. It would have been arranged in accordance with Train Order Form F, already mentioned, and something like this. The Dispatcher would issue an order "Engs 6046 and 5150 run as First and Second 2 North Edmonton to Wainwright". Rule 20 would then apply and when the first section, the passenger train was due to leave North Edmonton, "all sections except the last will display two green flags and two green lights at night in the places for that purpose on the leading end of the engine".

20. All sections except the last will display two green flags and, in addition, two green lights by night, in the places provided for that purpose on the front of the engine.

NOTE: Where flags are prescribed, suitable lights may be substituted when authorized.

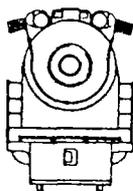


Fig. 10.

Engine running forward by day displaying signals for a following section.

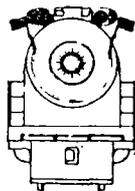


Fig. 11.

Engine running forward by night displaying signals for a following section.

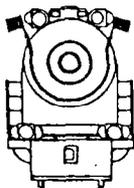


Fig. 12.

Engine running backward by day without cars or at the rear of a train pushing cars and displaying signals for a following section.

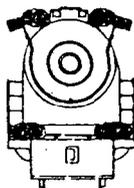


Fig. 13.

Engine running backward by night without cars or at the rear of a train pushing cars and displaying signals for a following section. Headlight extinguished.

Now if nothing else were done in the way of orders, all inferior trains either by class or by direction, on seeing the signals and answering the whistle signals of the first section - see Rules 14k, 14ka and 31 - would after meeting that section, have to wait for the second section. First 2 might have left Edmonton on time, but Second 2 might not be ready until some time later, at least 20 minutes later anyway - see Rule 91.

Waiting for a Second Section under these conditions could cause considerable delays and so a Second Section could be given a Time Order (Train Order Form E) such as "Second 2 Eng 5150 will run 30 minutes late North Edmonton to Wainwright" or "Second 2 Eng 5150 will wait at North Edmonton (followed by a list of stations) until (a list of times).

When I was travelling on the Southern Pacific troop train mentioned earlier, it was sometimes an Extra and sometimes a section of a regular train. For instance, between Davis and Gerber in California it ran as Third 16. Sixteen was a passenger train due out of Davis at 1045 and this train must have

31. Unless otherwise provided, signal 14 (k) must be sounded by a train displaying signals for a following section to call attention of engine and train crews of extra trains, trains of the same class, inferior trains, and of trains affected at train order meeting, waiting or passing points on single track; of trains of the same class and inferior trains moving in the same direction on double track, to signals displayed, and must hear the answer 14 (k-a) or stop and notify trains of signals displayed.

Unless otherwise provided, signal 14(k) must be sounded by a train displaying signals for a following section to call attention of engine and train crews of trains moving in the opposite direction on double, three or more tracks, and moving in the same direction on three or more tracks, to signals displayed.

Signal 14 (k) must be sounded by a train displaying signals for a following section to call attention of maintenance forces and crews of yard engines to signals displayed.

(k) — o o

To call attention to signals displayed for a following section as prescribed by rule 31.

(k-a) o o —

Answer to 14k. See rule

91. Unless some form of block signal system is in operation to the next open train order office, except in closing up at stations, and unless clearance indicates the arrival of the preceding train at a station ahead, the following intervals must be maintained between trains in the same direction:

Between a train carrying passengers or operating a snow plow, and a following train— at least twenty minutes;

previously been given an order to display signals "for engines unknown". Order 234 given to the conductor of the troop train read "Engs 4354 and 4344 run as Second and Third 16 Davis to Gerber". Order 214 added to this "Second and Third 16 wait at Davis until twelve fifteen pm" and this was followed by a list of all sidings to Gerber exclusive and times against each one.

Order 238 added to Order 214 the following - "Third 16 run two hours and twenty minutes late on Order 214" and the Conductor's copy, which I still have, shows how the troop train conductor had written in pencil the added two hours and twenty minutes to all the times on the order. Further north, we received an order "Third 16 meet Second 15 at Odell Lake and No 17 at Cascade Summit". As you can gather, the line was very busy indeed with war time traffic. Along here my troop train went into a siding to meet a superior train. I was standing on the step of the Pullman Car behind the conductor who was standing on the ballast. He said, "Excuse me, I must identify this train", and then very deliberately he said aloud "Second 15 Eng 4432" - or whatever it was. Rule 89A covers this point now but I believe it was then a comparatively new rule.

"Rule 89A (Single Track) - A train must not leave any point without knowing positively that the train or trains which it was required to meet or clear at that point, have arrived".

ORDER 235

If you look at the times of No 11 in the page of the Public Timetable, you will see that it was due to leave Biggar, Saskatchewan, at 1145. At Biggar the train entered the Edmonton Division and must then have been known to be rather late. Order 235 was issued at 1347, when No 11 was approaching Wainwright where it was due at 1605. No 11 was a westward first class train and so it would

FORM 19	CANADIAN NATIONAL RAILWAY	FORM 19
TRAIN ORDER No. <u>235</u>		
EDMONTON JULY 14/44		
TO <u>YARDMASTER</u>		
TO <u>EASTWARD TRAINS</u>	AT <u>EDMONTON</u>	
TO _____		
<input checked="" type="checkbox"/> X	OPR. _____	TIME _____
NO. 11 ENG. 5129 RUN FORTY 40 MINS LATE		
WAINWRIGHT TO EDMONTON		
T.G.H.		
CONDUCTOR AND ENGINEMAN MUST EACH HAVE A COPY OF THIS ORDER		
REPEATED AT <u>13.47</u>		
MADE <u>13.17</u>	TIME <u>13.17</u>	OPR. <u>[Signature]</u>
PRINTED IN CANADA		

require all other trains, except eastward first class trains, and of course, on this occasion, the Fish Extra, to "keep out of the way". When it was known that No 11 was late, with apparently little chance of making up much time, it was ordered to run 40 minutes late (Train Order Form E) so that when its inferiors, including No 4, received a copy of this order, they might be able to move along a siding or two. No 406 Freight, for instance, would have received its copy of the order before leaving Calder Freight Yard, and if it had been running close to time, might have been able to move along from Ryley to Poe.

ORDER 244

By 1652, that is 25 minutes after No 11 should have left Wainwright, its punctuality had obviously worsened, and so Order 235 was annulled and replaced by Order 244 which ordered No 11 to run fifty minutes late. No 11 probably received its copy of Order 244 at Wainwright. If the crew of No 406 had this order delivered to them at Tofield, and if No 406 was punctual, the order would have given No 406 enough time to get to the siding at Holden. No 11 was not running so late (yet) that it would fail to reach the end of double track at North Edmonton before No 4 was due to leave there, but a copy of the order was given to No 4 in case that should happen.

FORM 19	CANADIAN NATIONAL RAILWAY	FORM 19
TRAIN ORDER No. <u>244</u>		Y
EDMONTON JULY 14/44		
TO YARDMASTER.		
TO EASTWARD TRAINS.	AT EDMONTON	
TO		
X	OPR.	TIME
ORDER NO TWO THIRTY FIVE 235 IS ANNULLED.		
NO. 11 ENG. 5129 RUN FIFTY 50 MINS LATE		
WAINWRIGHT. TO EDMONTON.		
H.E.F.		
CONDUCTOR AND ENGINEMAN MUST EACH HAVE A COPY OF THIS ORDER		
REPEATED AT <u>16.52</u>		
MADE	TIME	OPR.
PRINTED IN CANADA		
G.N.R. 714 2-48		

ORDER 249

This order would not have come into force until after No 4 had left Edmonton but the ordering of No 2 to run twenty minutes late would certainly have helped those on No 4, by informing them of the minimum time that No 2 was following them. You will notice that it was signed for by Conductor Livingston on the Fish Extra, and also by Conductor Waller on No 4. The signature of Engineer McPhail on No 4 has also come through on the carbon. I was sufficiently observant to wonder why it had to be signed for by the Fish Extra and also by No 4 when it did not restrict restrict the authority of either. I think the answer is

CANADIAN NATIONAL RAILWAYS

FORM
31

TRAIN ORDER No: 249

FORM
31

EDMONTON JULY 14/44 19__

TO <u>OPR... YARDMASTER,</u>	
TO <u>NO. 2</u>	AT <u>EDMONTON</u>
TO <u>EASTWARD TRAINS.</u>	

X _____ OPR. _____ TIME _____

**NO. 2 ENG. 6046 RUN TWENTY 20 MINS LATE
EDMONTON TO WAINWRIGHT.**

H.E.F.

CONDUCTOR AND ENGINEMAN MUST EACH HAVE A COPY OF THIS ORDER

REPEATED AT 19.12

CONDUCTOR	ENGINEMAN	TRAIN	MADE	TIME	OPERATOR
<i>D. Barlow</i>			<i>Conv</i>	<i>19.12</i>	<i>Mackay</i>
<i>Livingston</i>		<i>48515</i>	<i>Conv</i>	<i>20.43</i>	<i>Mackay</i>
<i>Waller</i>		<i>7104</i>	<i>Conv</i>	<i>20.59</i>	<i>Mackay</i>

that Mr. McKay, the Operator at Edmonton Passenger Station, had to make out the order on Form 31 because it restricted the authority of No 2 and he would have been unlikely to make out two lots of the same order, one lot on Form 31, and another on Form 19, and in consequence, the Fish Extra and No 4 signed for their copies unnecessarily.

ORDER 253

Probably, when No 11 was reported by Tofield at say 1950, it must have been clear to Mr. H. E. Fowlie, the dispatcher, (whose initials appear on a number of these orders), that No 11, running at least 50 minutes late, might reach North Edmonton about 2054, if there was no other delay. The Fish Extra's 31 order times showed that train there at 2055, and No 4 was going to follow the Fish Extra at something like 2115.

FORM 31

CANADIAN NATIONAL RAILWAYS

FORM 31

TRAIN ORDER No. 253

EDMONTON JULY 14/44

TO NO. 4	AT EDMONTON
TO	
TO	
X	OPR. TIME

NO. 11 ENG 5129 HAS RIGHT OVER NO 4 ENG. 6052

ADDRESS TO NORTH EDMONTON

H.E.F.

CONDUCTOR AND ENGINEMAN MUST EACH HAVE A COPY OF THIS ORDER

REPEATED AT 20.48

CONDUCTOR	ENGINEMAN	TRAIN	MADE	TIME	OPERATOR
Waller	H.E.F.	Pass	Clear	20.59	Maerdy

PRINTED IN CANADA

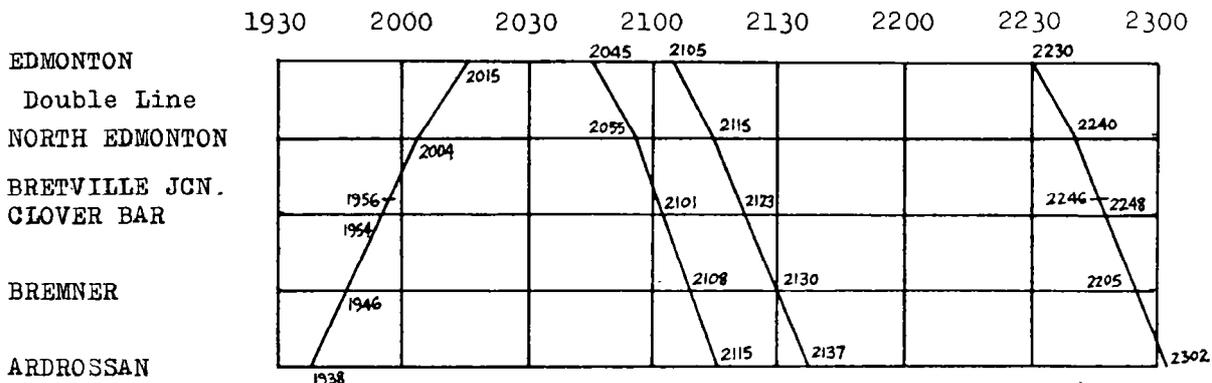
C.N.R. 717 9-61

No 11 could not leave Clover Bar before 2044, that is its schedule time plus fifty minutes, and therefore would not be able to reach North Edmonton by 2050, that is five minutes before the Fish Extra's time at North Edmonton. No 11 would therefore have to wait at Clover Bar until at least 2101, the earliest the Fish Extra could pass there. The Fish Extra ran later than the times shown on the 31 order, and the dispatcher must have had a good idea that it would do so, because it is written in on the Terminal Clearance for No 4 that the Fish Extra

arrived at North Edmonton at 2112, that is seventeen minutes later than its 31 order time.

There was no chance, therefore, of No 11 being able to reach North Edmonton by 2115, the leaving time of No 4 there, because it would not have been able to leave Clover Bar until say 2119. And if No 11 waited for No 4 at Clover Bar as well as the Fish Extra, No 11 would likely have finished its journey one hundred and fifty minutes late instead of the fifty minutes shown on order 244. The following graphs illustrate the problems confronting the dispatcher and the likely outcome of the situation.

GRAPH SHOWING SCHEDULES OF No 11, No 4 & No 2 AND FISH EXTRA'S TIMES.



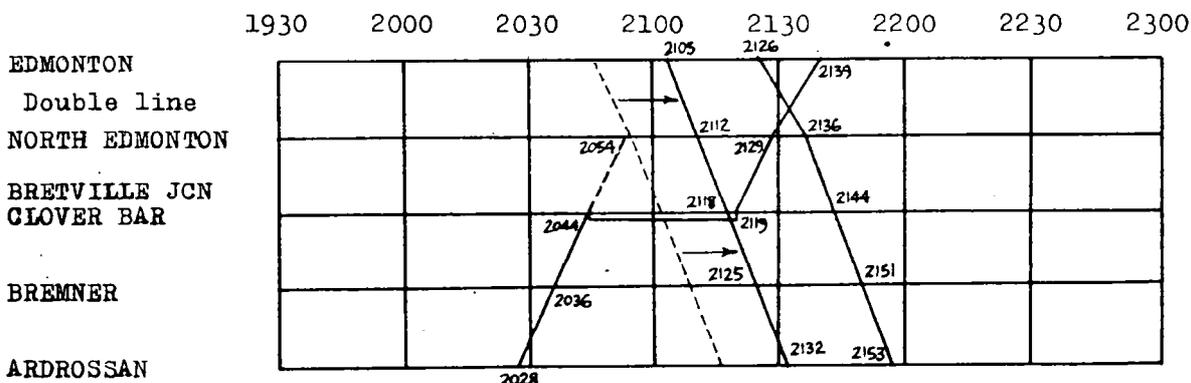
As No 11 was running at least 50 minutes late (Order 244) it could not leave Clover Bar until at least 2044 (schedule time plus 50 minutes). Therefore it could not reach North Edmonton until at least 2054, which was NOT five minutes before the Fish Extra (Superior by Direction AND Right) was due to leave there. No 11 would therefore have to have waited at Clover Bar for the Fish Extra, itself running 17 minutes later than the times on its Order 225. No 11 would then have been unable to leave Clover Bar until about 2119.

By this time, No 4, if on time (and it must have been assumed by No 11 that it was) should already have left North Edmonton at 2115. No 4 was also running late (21 minutes) and if No 11 had waited at Clover Bar for both the Fish Extra and No 4, it would have been eventually about an hour and fifty minutes late.

If the Dispatcher wished to avoid this lengthy delay to No 11, he needed to give No 11 an additional order by which it could move along from Clover Bar to North Edmonton. He did this by giving No 11 "right over" No 4 Ardrossan to North Edmonton (Order 253). Before the dispatcher could advance No 11 in this way (giving it the order at Ardrossan at about 2028) he would have had to restrict the authority of No 4 at Edmonton, where at 2028, No 4 had not yet arrived. So Order 253 was taken by the Edmonton Operator to be delivered to the Conductor of No 4 when he came on duty at 2059.

As No 4 now had "to keep out of the way of" No 11, No 11 could leave Clover Bar after the passage of the Fish Extra at 2118, and No 11 and No 4 passed on the double line between North Edmonton and Edmonton.

GRAPH SHOWING PROBABLE TIMES OF TRAINS



Bretville Junction, we note from the ETT, had no siding on the main line, and even the North Edmonton Service Track would have been of no help to No 11 which was "a westward train unable to proceed west of mileage 122.4 against an opposing superior train", No 4. If the dispatcher was going to do anything to prevent No 11 from having to wait at Clover Bar for about forty minutes for two superior trains, then he would have to do so before No 11 passed

the last open train order station at Ardrossan, some time about 2028. And furthermore, if he was going to advance the inferior train at Ardrossan, he would first have to restrict the rights of the superior train, No 4, at Edmonton. He did this by issuing Order 253.

In the ETT we see that North Edmonton was the end of double track and it would not be reasonable for the two trains to MEET there. Why should No 11 have to wait there for No 4?

Instead Order 253, issued at 2018; about ten minutes before No 11 would have passed Ardrossan, gave "No 11 right over No 4 Ardrossan to North Edmonton". This order reversed the superiority as far as No 11 and No 4 were concerned, so that instead of No 11 having "to keep out of the way of" No 4, No 4 had "to keep out of the way of" No 11, knowing that No 11 was running at least fifty minutes late.

When Conductor Waller had signed for this order at 2059, it was forty minutes after it had been issued, and perhaps thirty minutes after it had been given to the Conductor and Engineer of No 11 at Ardrossan, but it had already been included in the sheaf of orders issued at Edmonton for the new Conductor and Engineer of No 4 to sign for when they came on duty.

The Conductor and Engineer of No 4 would know that No 11 had not yet reached Edmonton because its arrival had not been entered in the Register there. They would leave Edmonton as soon as possible after 2115 (2005 schedule time plus the ten minutes in Order 255), because there was no restriction on an eastbound train using the eastbound track to North Edmonton, as the previous train, the Fish Extra, had been reported as passing the latter place.

The Clearance for No 4 shows that the Fish Extra was seventeen minutes late on its 31 order and it may have passed Clover Bar seventeen minutes late at 2118, and so I "figure" that No 11 would have left Clover Bar at say 2119 and gone onto the double track at North Edmonton at 2127. No 4 left Edmonton at 2126, according to a letter I wrote to my mother, and so the two trains must have passed somewhere near the Borden Park Showgrounds/Manning Depot, I can not remember exactly. I was probably wondering what my aerial future held in store.

ORDER 255

Probably as a result of the Fish Extra being seventeen minutes late, Order 255 ORDERED No 4 to run ten minutes late and this would have prevented No 4 from running too closely behind the Fish Extra, bearing in mind that the only block system for most of the way at that time was Rule 91, and a fleet-footed rear brakeman with some torpedoes and a lantern carrying out Rule 99.

Order 255 restricted the rights of No 4 and so had to be signed for on Form 31. At the foot you can see not only Conductor Waller's signature but bearing in mind that this WAS the Conductor's copy, there is also the signature of Engineer McPhail. It was issued at 2115, ten minutes AFTER the schedule departure time of No 4, and was obviously put out in a hurry because Operator Schmalz, who must have come on duty at 2100, did not have time to put it in his typewriter.

It would have been of no assistance to No 11, as by 2115, No 11 must have passed Ardrossan, the last open Train Order station before reaching the double track at North Edmonton, and therefore could not have had a copy of it.

THE REMAINING ORDERS

The other three orders had numbers in a different series - in the 800s - and therefore contained speed limits and other restrictions not concerned with the direct running of trains.

Order 892 was a slow order and showed that, among other things, there were three sections of track over which speed had to be reduced, and that the speeds of passenger trains had to be reduced to forty miles per hour all the way from Tofield to North Edmonton. These would have added to the difficulty of moving No 11 along and it is to be hoped that No 11 was not late enough to have to use the siding at Bremner to meet the Fish Extra as Order 894 showed that the 72-car siding was holding four cars, which would have necessitated No 11 heading in and backing out but also that the cars were "spotted" and would have to be returned to their original position if they were moved. Order 895 seems

Order 895 seems to have been lost over the last forty years but would have contained similar information to the two foregoing orders.

PROCEDURE FOR ISSUING ORDERS

When the dispatcher issued Order 253 for No 11 to have right over No 4, the procedure would have been something along these lines.

FORM 31

CANADIAN NATIONAL RAILWAYS

FORM 31

TRAIN ORDER No. 255

Edmonton July 14 1944

TO No 4 AT Edmonton

X OPR. TIME

No 4 eng 6052 run ten 10 mins late Edmonton to Wainwright

H 8 J

CONDUCTOR AND ENGINEMAN MUST EACH HAVE A COPY OF THIS ORDER

REPEATED AT 2115

CONDUCTOR	ENGINEMAN	TRAIN	TIME	OPERATOR
Waller	H 8 J	No 4	2115	Mitchell

PRINTED IN CANADA

C.N.R. 717 B-41

No 11, the inferior westward train was approaching Ardrossan and No 4, the superior eastward train, was on the outskirts of Edmonton, where it would stop for at least half an hour to change engines and crews. The dispatcher could therefore, be sure that the Order to No 4 would be given to that train, and signed for and acted upon, because the conductor and engineer would have to get a Terminal Clearance before they left, and such an Order would have been listed on it and attached. Otherwise the signature of the conductor of No 4 would have been required by the Edmonton operator BEFORE the Order could have been sent to the operator at Ardrossan for delivery to the conductor and engineer of No 11.

FORM 19 CANADIAN NATIONAL RAILWAYS **FORM 19**

TRAIN ORDER No. 892 R

EDMONTON JULY 12/44 19

TO TRAINS TO VIKING AT EDMONTON

TO SIB DIVISION AT

TO

X OPR. TIME

DO NOT EXCEED TEN 10 MILES PER HOUR OVER BRIDGE FILL

MILEAGE NINETY THREE POINT SIX 93.6

BETWEEN SIX 6 POLES WEST AND FOURTEEN 14 POLES EAST OF

MILEAGE ONE TWENTY TWO 22

AT TWO HUNDRED AND FIFTY 250 FEET EAST OF MILEAGE ONE

TWELVE 12

PASSENGER TRAINS MUST NOT EXCEED FORTY 40 MILES PER

HOUR AND FREIGHT TRAINS THIRTY 30 MILES PER HOUR BETWEEN

TOFIELD AND NORTH EDMONTON.

DERAIL EAST END COMMERCIAL TRACK IRMA HAS BEEN REMOVED.

A.F.B.

CONDUCTOR AND ENGINEMAN MUST EACH HAVE A COPY OF THIS ORDER

REPEATED AT 1.14

MADE Law TIME 1.14 OPR. Murray

PRINTED IN CANADA C.N.R. 714 8-44

FORM 19 CANADIAN NATIONAL RAILWAYS **FORM 19**

TRAIN ORDER No. 894 R

EDMONTON JULY 13/44 19

TO TRAINS TO VIKING AT EDMONTON

TO SIB DIVISION AT

TO

X OPR. TIME

FOUR 4 CARS ON SIDING AT BRUMER. SPOTTED.

A.F.B.

CONDUCTOR AND ENGINEMAN MUST EACH HAVE A COPY OF THIS ORDER

REPEATED AT 22.58

MADE TIME OPR.

PRINTED IN CANADA C.N.R. 714 8-44

WHY SIGNALLING?

The following piece was written as an essay for a H.S.C. option by Glenn Cumming, one of our younger members. He explains that parts of it may seem over simplified but not written that way, the examiner would not have a clue what he was talking about.

When you live in a boarding house at a boarding school, it is quite difficult to go about your own business without the other people boarding with you finding out about it. This was the case when I started at Scotch College in 1983.

At this time I was only interested in trains generally and during 1983 my interest really took off and often Saturday breakfast was missed so that I could ride the suburban spark into Spencer Street to see the morning's traffic at the country passenger terminal. To the other 64 boys in my house, I was a weirdo. How could anyone like trains, I was asked. I blamed it on my model railway.

Now my interest in trains has matured and I am a self confessed signalling fanatic. To the others I am a lunatic. To them you are only allowed to be interested in cars, trucks, motor bikes and tractors, nothing more. I am often disturbed in my room by the others as I pore over diagrams, books, and magazines with special relevance to signalling and safeworking. This leads them to ask - "Why signalling?". Most times I would just shrug my shoulders and reply "I dunno".

This sort of answer didn't do much for my reputation of insanity and so I had to find out why I was interested in signalling. I have made two conclusions - the first, that signalling is so complicated to the uninitiated, for example, I was once asked "What type of signalling is used on my (Cobram) line?" to which I replied that they use two and three position signalling, and the line is worked under automatic signalling in the suburbs, double line block to Mangalore and electric staff for the rest of the way. That person never asked me about signalling again. This complexity was a tempting attraction.

The second conclusion relates to the way I became involved in signalling. Here lies a major culprit. I helped to found the Warrnambool Model Railway Club in 1982 and our first president was Greg O'Flynn. From then on I was in trouble. He often mentioned signalling terms that meant nothing to me but aroused my curiosity and one day the mention of a plunger lock put the icing on the cake. I was soon searching everywhere for anything about a plunger lock. All I could find out was that there were two of them in the yard at Warrnambool. One Sunday morning I rose early and cycled down to the yard to find out all I could. My curiosity was switched again when I found that a signal wire ran through a round "thing" that was hooked up to the points where the plunger lock was located. I was annoyed when I couldn't find out why the points wouldn't move.

Later on I was able to pick up a 1953 General Appendix and this provided more information about the wretched plunger lock but it also mentioned a lock bar with plunger, a drawer lock, a switch lock, a staff lock, a cross lock, a tablet lock and an annett lock. Sigh!! Locks have been left alone ever since.

My appetite for signalling knowledge was growing and so in January 1983, when my family was visiting friends in Castlemaine, I took the opportunity to have a look at the local yard. I was amazed to find that Castlemaine had two signal boxes and a large goods yard. I spent an hour walking from one end of the yard to the other, counting up the arms and discs as I went. A passenger train passed through and as I took a photo, the signalman in "A" box caught sight of me. After the train had passed, he invited me up into the signal box. This was the first signal box I had ever been in.

While inside the box, the signalman explained everything in great detail including the block and electric staff instruments which I had never seen before. He even set up a couple of moves to demonstrate the interlocking and gave me the pleasure of resetting these moves. He explained why there were only 57 levers when there were spaces for 88. At the time I found this rather hard to comprehend. Needless to say, I left Castlemaine "A" Box feeling rather pleased with myself.

Some time later I was reading a "Newsrail" when I came across a mention of the Signalling Record Society of Victoria. Curiosity Box was switched in once more and I quizzed Greg O'Flynn. From what he told me I decided that the S.R.S.V. was for me. Especially when I would receive a newsletter and have the chance to visit more signal boxes. This was in January 1985 and at the same time my model railway was under going overhaul. To complete the overhaul I needed an extra length of track that would cost in the vicinity of \$5.00. The same \$5.00 would buy me a yearly subscription to the S.R.S.V. Newsletter. I opted for the latter and my model railway has never forgiven me.

Signalling has become a sort of an obsession for me as I hunt around for any information that could expand my knowledge. Train travel is a whole new concept as I try to pick out signal boxes and the like. Mum hates vacuuming under my bed as she has to move my collection of signal diagrams and Dad says it is a waste of time. But I enjoy it; despite the critics.

I regret to add that I have not run a train at home since Dec. 1984.

--oOo--

(Editor's comment - Now that you have read Glenn's contribution perhaps all those members who feel that they do not know enough to contribute to Somersault via a technical article etc. could put on paper their own experiences and reasons for pursuing this thoroughly enjoyable aspect of railways. It is very pleasing to see young people like Glenn becoming enthralled by this side of the hobby.)

--oOo--

POPE'S VISIT

On a Friday in November, there is to be a thing at the Racecourse (Flemington) and there will be 10 electric trains running between Flinders St. and the Racecourse ALL DAY. It looks as if there will be down trains and up empties until early afternoon and then reverse. As trains come out of service, they will stand on the up line near Ascot Vale Road and then when the change over takes place, they will each run forward and back across the crossover onto the down line head to tail for the return traffic. The first TWO trains out of the Racecourse will be PRIESTS ONLY. This is the day before the Bike Hike to Bairnsdale when there will perhaps be four train necessitating a cross at Fernbank. (Jack McLean)

--oOo--

- 2/7/1986 SUNBURY. The lever controls for the up and down distant signals removed and both signals will clear automatically when all home signals in advance are clear. The down distant signal was provided with a signal motor, the up distant signal has been motor operated since 8 October 1963. A new down home (light) signal - post 3B - worked by lever 2 was provided at the down end of No 2 platform road. Lever 2 formerly worked the down home arrival signal, now lever 1. Lever 1 is fitted with an "A" pattern annett lock and lever 2 has a "B" pattern annett lock. The crossover leading from the down platform to the centre road is secured by an "A" pattern annett lock and the crossover from the centre road to the down line in advance of post 3B is secured by a "B" pattern annett lock. The up home signal, post 5, has been fitted with a signal reverser. Lever 7 is the closing lever. The signals on posts 2, 3B, 4B and 5 track cancel under switched-in conditions. The points leading to the goods shed and associated signalling equipment were abolished.
- 9/7/1986 CORIO. Pedestrian booms were provided at the down end of the platform and are interlocked with signal No 6. If a train enters the platform with signal No 6 at Stop, the booms will lower but will lift again once the train has been proved at Stop. When signal No 6 is then cleared, the booms will again lower and the signal will clear after 20 seconds delay.
- 9/7/1986 LARA. Pedestrian booms were provided at the down end of the platform and operate in a similar manner to those at Corio except the time delay is only 13 seconds. Red flashing lights were provided on both pedestrian crossings at Lara Lakes Road.
- * 11/7/1986 LANG LANG-NYORA-KORUMBURRA. Nyora was closed as an electric staff station and the new long section Lang Lang-Korumburra will be worked by staff and ticket for the time being. Lang Lang ceased to be a switching electric staff station. The signals and plunger locking at Nyora will remain in use until further notice.
- WN 26/86 CHELTENHAM. When Cheltenham is switched out, the post telephones at signals 6, 12 and 18 will be connected to Caulfield signal box and instructions were issued regarding the procedure to adopt if a train stops at one of these signals at the Stop position and the illuminated letter "A" is not displayed.
- WN 26/86 WESTALL. Instructions issued similar to above except that the telephones are connected to the Springvale signal panel.
- WN 27/86 BANK BOX LOOP. Instructions issued regarding the working of Bank Box Loop, the operation of the emergency key switches and the procedure to adopt if the up home signal - A 2386 - is at the Stop position. (Home signal A 2386 is about five kilometres on the down side of the loop and was formerly an automatic signal.)
- WN 27/86 TWO POSITION AUTOMATIC SIGNALS. Should a train be stopped by a two position automatic signal protecting a set of flashing lights or boom barriers in a Staff or Block section, the train may proceed carefully after waiting ten seconds for the signal to clear, making frequent use of the whistle. After clearing the level crossing, the train may resume normal line speed unless otherwise prevented from doing so by other regulations.
- * 14/7/1986 DERRINALUM. The hand locking bar and padlock on the down end points leading to No 3 road were replaced by a staff lock.
- * 14/7/1986 LISMORE. The hand locking bar and padlock on the up end points to No 3 road were replaced by a staff lock.
- * 20/7/1986 KEON PARK. The down starting signal post No 29 was moved 10 metres in the down direction.
- * 22/7/1986 CAULFIELD. Points No 68 were renewed and No 69 catch points were replaced by a derail and wheel crowder. Levers Nos 64, 67, 69 and 74 will be sleeved normal.
- * 25/7/1986 BRUTHEN & NOWA NOWA. Both stations disestablished as staff stations and the new section is Bairnsdale-Orbost. The signals and plunger locking at both places will remain in use.

S.R.S.V. CROSSWORD No 15

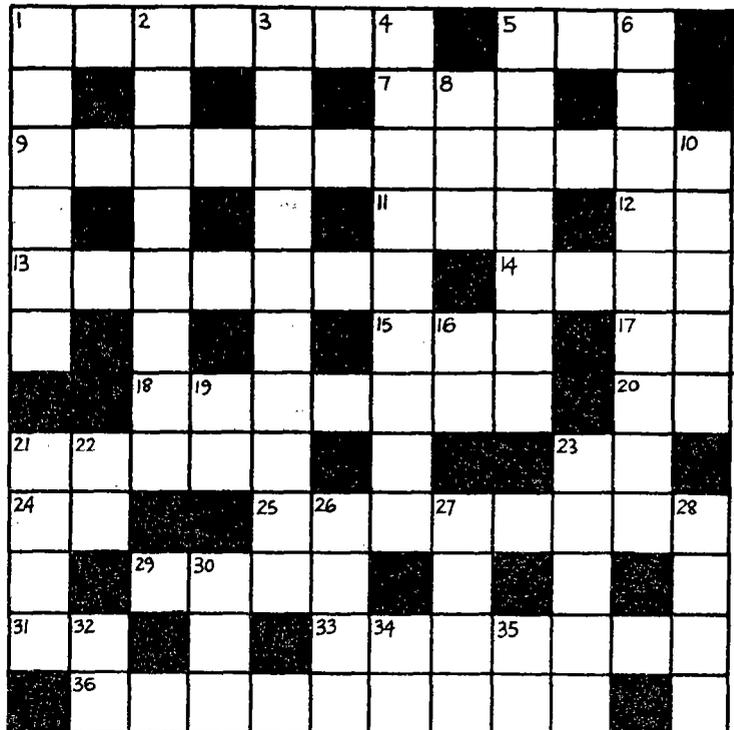
ACROSS

compiled by S. McLean

1. If track be complicated, this sort of signal may be found (7)
5. Start of experimental non-stop service (3)
7. A King on the Relief Express (3)
9. Confused as us at spiral, with unlimited travel possibilities (12)
11. For 12 months the home of a DL loco (3)
12. Not on Saturdays beyond Cranbourne (2)
13. Upset one calm Safeworking Inspector (7)
14. Still, Creech made it a junction station (4)
15. Lighting system described in General Appendices (3)
17. A two-way track in Denver (2)
18. Ruth changes, followed by Lesley, at this station beyond Portarlinton (7) (2)
20. Loco manufacturer in Germany
21. In general, nothing right at the last crossing station (5)
23. Two engines, or only one engine (2)
24. Airconditioned car found in the past (2)
25. Roy's bear misdirected to this station (8)

DOWN

1. Not a trunk route (6)
2. Is Les about to change a non-automatic signal? (8)
3. Rub our mark out in 12 across (10)
4. Instruments found these days at North Geelong, and in the past at Serviceton (9)
5. Say, this train isn't going to stop! (7)
6. Gasp! Sneer! Horror! There's someone on the train! (9)
8. Junction station in the Champs Elysees (3)
10. Help to stop at a station (5)
16. Victorian car seen first and last in Adelaide (2)
19. End of NSW brakevan - 16.5 mm? (2)



29. All this labour produces an expensive type of track (4)
31. Through carriages found on half of the Turkish Railways (2)
33. SAR News possibly found on this page (7)
36. Warning device which does more than rend a toot: (9)
21. Not first, but not economy either (4)
22. Safeworking system with two points (2)
23. It is almost intelligent to be seen in a signal box (5) (4)
26. A destination beyond Hellensburgh (4)
27. Found after Kingsgrove before the hills (4)
28. "A station with a town attached" (4)
30. Nighttime description of the signals in Lithgow (3)
32. Extremely crowded van (2)
34. An overturned tank loco (2)
35. Where in Germany a service runs only on Wednesday (2)

--oOo--

Solution to No 14. Across-1. Mambray Creek, 7. Hamm, 8. Siam, 9. AM, 10. (See compiler's note), 11. Me, 12. Chesham, 13. NAM, 14. DAM, 16. XAM, 18. Pram, 20. Gama, 22. ME, 23. Tram, 25. EAM, 26. Ramp, 27. Cams, 28. Eltham.

Down-2. Alamein, 3. BAM, 4. Amsterdam, 5. Chatham, 6. Kyabram, 7. Ham, 10. Amex, 11. Gampaspe, 15. Amen, 17. Adams, 19. Steam, 21. AMAY, 24. Ram, 27. CA.

(Note: This was an attempt to make up a crossword in which almost all words featured the letters "AM". This restriction meant that there were more black squares than usual, and in order to reduce the biggest block of black I opted to include 10 across, which had to be "AMB". In the pressure to get this crossword in the magazine on time, I couldn't think of a suitable clue, but I hoped that the editor could supply one. The answer to his clue, however, is "AAB".)

(Editor's Comment: I didn't get enough of it out to detect the "AM" theme.)

--oOo--