SOMERSAULT

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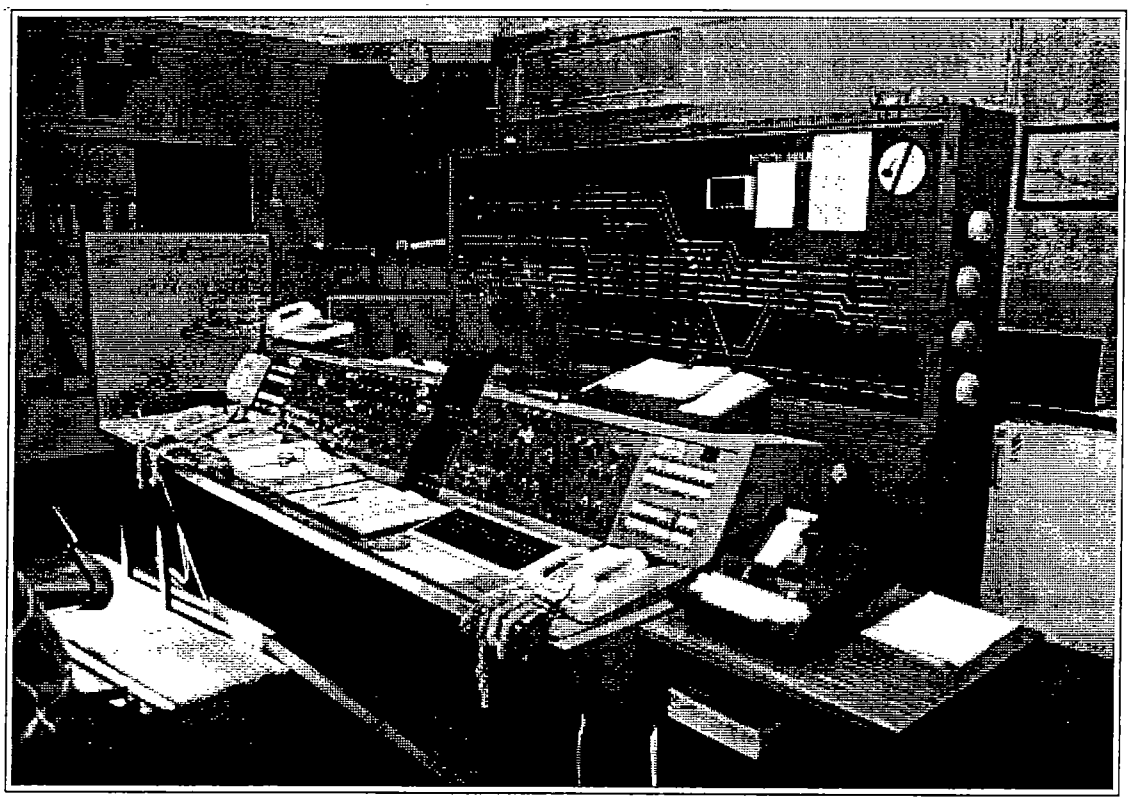
SIGNALLING RECORD SOCIETY OF VICTORIA INC



As noted in the signalling alterations section of this issue, Metrol took control of North Melbourne Junction on 30 July. This photograph shows the Westinghouse panel in North Melbourne Junction signalbox on the occasion of the SRS tour on 30 April 1994. The first signalbox at 'Essendon Junction' was erected in July 1876 and was the first for the Victorian Railways. This box was probably located on the other side of the Moonee Ponds creek. A smaller (20 lever) box was erected at North Melbourne later in 1876. This was replaced by a new 54 lever box 'Coburg Junction' in 1884 for the opening of the Coburg line. Both Coburg and Essendon junctions were combined into one box in 1887 when the North Melbourne 'New Cabin' box was opened. This box contained a 79 lever No 6 pattern frame, but was replaced in 1903 by a new 90 lever box. The brick power box was brought into use in 1928 and contained a 56 lever GRS frame. A small auxiliary panel was provided in 1972 to work the power signalling on through Macaulay and the connections to the Macaulay stabling siding. Both the power frame and the panel were replaced by the panel shown here in 1983. As usual in Victoria, this was not a route setting panel. Routes were set up by the point keys and single key was provided for each signal. The two screens in the middle of the console are the train describer from Metrol, while the teletype at the right is the train describer to Jewell signalbox.

Photo: Andrew Waugh

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Deadline for September 1994 issue is 24 July

MINUTES OF MEETING HELD FRIDAY JULY 15, 1994

Present:- A.Jungwirth, J.Churchward, G.Cumming, A.Gostling, W.Johnston, K.Lambert, D.Langley, B.McCurry, J.McLean, R.Murray, T.Penn, L.Savage, P.Silva, A.Waugh & R.Whitehead.

Apologies:- W.Brook, G.O'Flynn & R.Smith.

The President, Mr. Alan Jungwirth, took the chair and opened the meeting @ 2019 hrs.

Minutes of the May Meeting:- Accepted as published. Penn/Langley.

Matters Arising:- Nil.

Correspondence:- A letter was received from member David Donald in New South Wales commenting on late notification of meeting dates for country and interstate members. It was noted that the meetings of the S.R.S.V.Inc. are held on the third Friday of February, March, May, July, September, and November.

Bill Johnston tabled a newspaper cutting from a recent issue of the 'Age' commenting on the 100th anniversary of the Weekly Notice.

R.Whitehead/T.Penn.

General Business:- Jack McLean noted that the 1894 Weekly Notice extracts in WN 24/94 were specially typeset in a font that differed from the original issue.

Bob Whitehead advised the meeting that he had yet to receive documentation on oral history. He noted that the Dandenong Heritage Hill centre run courses on the subject and he has obtained a copy of this documentation. Members interested in a copy of the document should contact the Secretary.

The Secretary sought guidance from the meeting on the arrangements for future Showday Signal Box Tours. Considerable discussion took place before Peter Silva moved a motion that the Showday Signal Box Tour be held on the 1st Tuesday in November. Seconded Trevor Penn. Carried.

Bob Whitehead reported that an application for funding from Arts Victoria had not been lodged because the conditions were not applicable to the S.R.S.V.Inc. at the present time.

Bill Johnston reported on the new signals at the up end of the island platform at Sunshine where mechanical arms and discs had been replaced by lights. Bill asked why discs were provided for moves to the Newport Line. The answer given was that it was due to the original arrangements on the Braybrook Loop Line. This led to a discussion on arrangements at Sunshine and Newport for connections to the Braybrook Loop Line.

Andrew Waugh reported on a proposal to re - signal Sunshine using a solid state interlocking with the control panel in the existing signal box. A new brick building is currently under construction in the goods yard at Sunshine.

Andrew Waugh reported on a power failure in the City Loop last night.

Jack McLean reported on progress on arrangements for the electrification of the line from Dandenong to Cranbourne. A long loop signalled for left hand running is being constructed in the section.

Ross Murray noted that a decision has finally been made to motorise the gates at Lydiard Street in Ballarat.

Alan Jungwirth advised of local opposition to the removal of the gates at Yarraville.

Laurie Savage spoke about a report on a radio news bulletin suggesting that the Upfield Line should be preserved as an operating museum.

Keith Lambert spoke about the alterations on the reversing loop and bogie exchange sidings in the Melbourne Yard area. Ground frames and dwarf signals have been removed.

Andrew Waugh reported on the removal of the connections to Siding 'K' and the Oil Lines at Spotswood. The down end of Spotswood has been straight railed.

Andrew Gostling spoke about progress on the new control panel to be installed at Dandenong.

Bob Whitehead asked if anyone was interested in compiling a list of colloquial or slang names for railway sidings and locations eg. Spion Kop.

Syllabus Item:- The President introduced member Jon Churchward who presented a selection of 14 slides from his collection in the form of a 'guess where it is' competition.

Those present racked their brains as they tried to work out the location of each slide but at the end Trevor Penn and David Langley came out on top with 13 correct answers but they didn't get the same one wrong!!

At the conclusion of the Syllabus Item, the Chairman thanked Jon for the entertainment and this was followed by acclamation from those present.

Meeting closed @ 2140 hrs.

The next meeting will be on Friday September 16, 1994 at the Uniting Church Hall, Hotham Street, Mont Albert, commencing at 2000 hrs.

SIGNALLING ALTERATIONS

The following alterations were published in WN 23/94 to WN 29/94. The alterations have been edited to conserve space. Dates in parenthesis are the dates of the Weekly Notice.

18.06.1994 **Spotswood**

On Saturday 18.6.94 the following track and signal alterations were made:

1. Points 16, 17, 18, and 30 were abolished.
2. Dwarfs U7, 19, U19, 32 and U32 were abolished.
3. Home 31 was abolished.
4. Levers 16, 17, 18, 19, 30, 31, and 32 were sleeved Normal.
5. The level crossing protection equipment at the following level crossings on the Oil Sidings was decommissioned and will be removed at a later date: Hall St (9.777 km); Burleigh St (10.518 km); Burleigh St (10.662 km); and Douglas Pde (10.762 km)

Delete the level crossings from page 111, MTP. Delete the instructions "Spotswood Oil Sidings" on page 238, GA. Amend diagrams 9/87 and 5/51. (SW 116/94, WN 23/94)

23.06.1994 **Jewell**

Commencing 0001 hours Thursday 23.6.94, Signallers at Jewell Signalbox are to record the departure time of all Up train in Column 11 of the Train Register Book. This is in addition to the transmission of the Train Describer Number via the VT100 system. (SW 128/94, WN 24/94)

23.06.1994 **Cranbourne**

On Thursday 23.6.94, the following track alterations were made:

1. The plunger locked Points at the Up end of the yard were removed.
2. The plunger locked Points at the Down end of the yard were secured to lie for the Main Line.
3. The plunger locking and point detection was removed.

The TAILS Unit and signalling will remain for the moment. Follow on train movements are permitted in the Down direction, provided the previous train has received a "Train Complete" message.

(SW 118/94, WN 23/94)

Points B (at the Up end of the yard) were removed from service in addition to the other alterations described in SW 118/94. (SW 130/94, WN 24/94)

26.06.1994 **Kensington**

Commencing Sunday 26.6.94, the Signalbox hours will be from 0800 hours Sunday to 0020 hours the following Sunday. Amend page A10a, MTP Appendix. (O.596/94, WN 23/94)

(28.06.1994) **Garfield - Longwarry**

Diagram 4/94 replaced 18/88. (SW 115/94, WN 23/94)

30.06.1994 **Echuca**

On Thursday 30.6.94, the following track and signal alterations were carried out:

1. The Down Home signals "A" and "B" on Post 4 were abolished.
2. The plunger lock and two signal quadrants at Points C were abolished.
3. Points H, at the Down end of the Station yard, were abolished.
4. A new Down Home Arrival signal, Post 1, was installed on the Up side of the Murray Valley Highway level crossing. The Home signal is Signal A. A Dwarf Light Signal with "Siding" sign is also provided on Post 1. The Home signal is controlled from the control panel in the Signalbox. The Dwarf signal is controlled by the V5P Key Switches at Points B, C, and F and is Track Approach operated.
5. The two push buttons controlling the operation of the flashing lights at the Murray Valley Highway level crossing were removed. Four Notice Boards lettered "Trains must not enter the crossing until flashing lights are operating" are situated at the crossing. The track circuits in the siding operating the flashing lights were extended by 14 metres on each side of the crossing. The flashing lights will operate normally for through trains when Signal A is at Proceed, and will not activate while a train is occupying the Down Approach Track when Signal A is at Stop. The flashing lights will also operate when a train enters the approach track section.
6. A Notice Board lettered "Trains must not exceed 40 km/hr to Crossing" was placed at the Down end of Points B.
7. A Notice Board lettered "Trains must not pass this point until authorised by Signalman" was placed on the Toolamba line 100 metres on the Up side of Aerodrome Road level crossing.

Amend diagram 4/89 and pages 125-6 of the Book of Signals (SW 131/94, WN 24/94)

01.07.1994 **South Kensington**

On Friday, 1.7.94, the following Controlled Automatic signals were converted to Home signals: SKN.759, SKN 760, SKN.763, SKN.764, SKN.769. Amend diagram 13/93. (SW 146/94, WN 25/94)

01.07.1994 **Irymple**

Commencing Friday, 1.7.94, Master Key No 48, which is normally kept at Irymple for local movements, will be kept at Mildura when not in use. The Stationmaster, Mildura, will be responsible for the security of the Master Key when not in use.

Delete the instructions for Irymple from pages 41-2 of the "Rules for Train Order Working" and insert:

Irymple

Irymple must only be used as a Train Order Crossing station for switching movements between Redcliffs and Mildura.

When it is necessary for the Tractor to enter on the main line at Irymple, the following steps must be taken:

1. Before permitting the Tractor to foul the main line, the Signaller must:
   i) Obtain Master Key No 48 from the Stationmaster, Mildura, and sign for it in the Train Register Book.
   ii) Confer with the Train Controller on arrival at Irymple and obtain verbal permission for track occupancy to foul the main line with the Tractor.
   iii) Place the fixed signals to Stop.
   iv) Enter in the Train Register Book that permission has been granted and the time.
2. The Train Controller must:
   i) Endorse the Train Graph to the effect that permission for the Tractor to shunt has been granted and that the Signaller is in possession of Master Key No 48.
   ii) Not issue a Train Order for a train to proceed through Irymple until the Signaller at Irymple has advised that the movement has been completed, the Tractor is clear of the main line and Master Key No 48 is in the Signaller's possession.
3. When the Tractor has completed the shunting and is clear of the main line, the Signaller at Irymple must:
   i) Advise the Train Controller that the Tractor is clear of the main line, and the Master Key No 48 is in the Signaller's possession and all Fixed Signals have been placed to Proceed.
   ii) Enter in the Train Register Book the time that the Tractor is in clear, and that the Train Controller has been advised that the Fixed Signals have been placed to the "Proceed" position.

iii) On arrival at Mildura, hand Master Key No 48 to the Stationmaster and sign the entry in the Train Register Book indicating that the Master Key has been returned together with the time of return.

Note: Whilst track occupancy has been granted at Irymple, the Train Controller may issue a Train Order as far as the Home Signal at Irymple (SW 140/94. WN 25/94)

(05.07.1994) **Attendance of Signalling Staff**

When necessary for the Signaller to leave the vicinity of the Signalbox or signalling instruments, the following conditions will apply.

The Signaller must avoid delays to any train, whether scheduled or run without notice, and must be in attendance to:

i) Giver permission for a train to approach from the Signalbox in the rear.
ii) Receive and acknowledge the "Train Departure" signal
iii) Send and receive an acknowledgement of the "Train Arrival" signal.

If the Signaller is required to leave the vicinity of the Signalbox or signalling instruments after the "Train Departure" signal has been received, the Signaller must:

i) Comply with the provisions of Regulation 88 (Section 26.2, clauses 3c and 3d, 1994 Rules)
ii) Be in attendance 20 minutes prior to the arrival of the train (SW 12494. WN 24/94)

(05.07.1994) **Sunbury**

The Signalbox hours on Sunday will be from 0645 hours until the clearance of No 8021. Amend page 56, MTP Addenda (O.666/94, WN 24/94)

(05.07.1994) **Weekly Notice**

July 9th, 1994, is the 100th Anniversary of the Victorian Railways Weekly Notice. (WN 24/94)

05.07.1994 **Flinders Street**

On Tuesday, 5.7.94, a co-acting signal was provided for Home 142. Amend diagram 29/90/ (SW 144/94, WN 25/94)

06.07.1994 **Bendigo**

On Wednesday, 6.7.94, the existing Oak Street level crossing (159.040 km) was replaced by a new crossing located 18 m in the Up direction at 159.022 km. Boom barriers supplemented the existing flashing light protection. A Level Crossing Predictor was installed and will activate on the approach of a Down train. A Level Crossing Predictor Indicator Board was installed adjacent to the Down main line. Amend diagram 28/90 and page 57, MTP. (SW 145/94, WN 25/94)

07.07.1994 **West Tower**

On Thursday 7.7.94, the following alterations took place:

1. Points 189 and Dwarf 164 were relocated 45 metres further out (in the Down direction).
2. Points 191 and Dwarfs 160 and 162 were relocated 15 metres further out (in the Down direction).

Amend 14/89. (SW 153/94, WN 26/94)

08.07.1994 **West Tower**

On Friday 8.7.94, the following alterations took place:

1. Dwarfs 268 and 270 were abolished.
2. Dwarf 138 and Hump Signal Indicator HG3 were abolished.
3. Hump Signal Indicator HG2 on Dwarf 136 was abolished, but Dwarf 136 was retained.

Amend 14/89. (SW 154/94, WN 26/94)

Commencing Friday, 8.7.94 until Sunday 10.7.94, the following Track and Signal alterations took place:

1. Reversing Loop (Canal Area)

a) Crossover 2A (worked from Auxiliary Frame A) between the Reversing Loop and the Shunting Neck was spiked in the normal position.
b) Auxiliary Frame A and Discs 1A and 3A were abolished. Crosslock 205 on the West Tower Control Panel was sleeved Normal.
c) Auxiliary Frame B was abolished. Disc signals 1B and 4B were abolished. Crosslock 207, West Tower, was sleeved normal.
d) The points leading from the Reversing Loop to the Storage Sidings were fitted with a WSa lever and the catchpoints in the connection from the Reversing Loop to the Storage Sidings were spiked closed.
e) The points leading off the Reversing Loop to the Canal Area were fitted with a WSa lever. Two Notice Boards were provided, one on each side of the line, lettered "STOP CHECK POINTS - OBTAIN PERMISSION FROM SIGNALMAN WEST TOWER TO ENTER REVERSING LOOP".

2. Hollands Loop and Lead Neck Area

a) Dwarfs 1, 2, 3, 4 and 5 were abolished together with their association push button controls at the Yard Foreman's Office and 5P Key Switches at Points A.
b) The following points were fitted with WSa levers: the Points leading from the North Lead to the FCL Sidings and to the Engine Track; the Points at the neck of the South and West Lead; double

compound points A at the Canal end of the Bogie Exchange Sidings; and the Points at the Up end of Nos 3 and 4 Roads in the Bogie Exchange Sidings

c) The Points leading from the North Lead to Shaws Sidings were spiked in the normal position.

d) Dwarf 76, controlling Down moves along No 4 Bogie Exchange Sidings, was abolished.

e) A Notice Board lettered "STOP OBTAIN PERMISSION FROM SIGNALMAN WEST TOWER BEFORE PROCEEDING" was provided at the neck leading to the East and West Leads on the Down side of Footscray Road.

3. Mayne Nickless/Fruit and Vegetable Market Sidings Area

a) The Auxiliary Frame and Dwarfs B, C, and D were abolished. Crosslock 79 on the Dynon Area Control Panel was sleeved normal.

b) The crossover between Nos 3 and 4 Roads, Bogie Exchange Sidings, was spiked normal.

c) The points leading from No 4 Road to Mayne Nickless Sidings were spiked normal.

e) The catch point at the Down end of the Fruit and Vegetable Market Sidings was spiked closed.

3. Bogie Exchange Sidings, Footscray End

a) WSa levers were fitted to the points leading to Nos 1, 2, 3, and 4 Road at the Down end of the Bogie Exchange Sidings. The detection was removed from these points and Home 104 and Dwarf 136 are no longer detected through these points.

b) The Track Circuit approaches for the Boom Barriers at Dock Links Road were modified for trains approaching the crossing from the Bogie Exchange Sidings to ensure minimum warning time is maintained.

c) Dwarfs 80 and 124 were abolished.

d) Fouling point indicator Boards were provided at the Down end of Nos 1, 2, 3, and 4 Roads in the Bogie Exchange Sidings.

e) A Notice Board lettered "STOP OBTAIN PERMISSION FROM SIGNALMAN WEST TOWER BEFORE PROCEEDING" was provided at the Footscray end of Shaw's Siding.

f) The existing Notice Board at the Footscray end of Nos 1, 2, 3, and 4 Bogie Exchange Sidings was replaced by a new Board reading "STOP OBTAIN PERMISSION FROM SIGNALMAN WEST TOWER BEFORE PROCEEDING OUT OF 1, 2, 3, AND 4 TRACKS TOWARDS DWARF 132".

Amend diagrams 28/83, 13/93, and 14/93.

Operating and Radio Procedures

i) All main line train movements will operate on Channel 1 - End to End.

ii) National Rail will operate on their own *shunting channel* within the confines of their Melbourne Terminal (South Dynon), the Bogie Exchange Yard, and Canal Yard.

iii) No PTC train. locomotive, or pilot movement is to occur within or through the National Rail yards without the express permission of the Signaller, West Tower.

iv) When a PTC train requires to enter the National Rail yards, the Driver will contact the Signaller West Tower on Channel 1. The Signaller must contact the National Rail Shunt Crew by telephone and seek permission for the move.

v) The National Rail crew must, after ceasing operations, inform the Signaller at West Tower what track is clear for the PTC movement.

vi) The Signaller, West Tower, must inform the PTC Driver of the track which the train must take and authorise the Driver to proceed.

vii) Before proceeding, the Driver of the PTC train must ensure the points are set for the track indicated by the Signaller, West Tower.

viii) National Rail ground staff are not provided with PTC radio channels. Therefore, when within the confines of the National Rail yards, PTC Drivers are to tune to Channel 1.

ix) The Signaller, West Tower, will monitor Channel 1 and also the Melbourne Sidings/Dynon Administration Channel.

x) The present Melbourne Sidings/Dynon Administrative Channel is Channel 85 on "Syntrx Pro" locomotive radios.

xi) Where appropriate, alternative radio arrangements will be made by shunters for locomotives not yet fitted with "Syntrx Pro" radios.

1. Freightgate Area

1.1. Light Engines and trains arriving in the Freightgate area will do so on Channel 1.

1.2. The Melbourne Sidings/Dynon Administrative Channel area will commence at Dwarf 108 upon arrival at Freightgate area.

1.3 Trains departing the Freightgate area will change to Channel 1 at Departure Signal 240.

2. Strangs Siding

2.1 Prior to entering the National Rail yard the Driver will seek permission to enter from the Signaller, West Tower, on Channel 1. Clauses v), vi) and vii) must be complied with.

2.2. Light engines and trains will travel through the National Rail yard on Channel 1.

2.3. The Melbourne Sidings/Dynon Administration Channel area will commence when across Footscray Road.

2.4. Trains departing the Strangs Sidings area will change to Channel 1 when at Footscray Road.

2.5. Prior to crossing Footscray Road the Driver will seek permission to enter the National Rail yard. Clauses v), vi) and vii) must be complied with.

3. South Dynon RVM - Shaw's Siding

3.1. Prior to entering the National Rail yard, the Driver will seek permission to enter from the Signaller, West Tower, on Channel 1. Clauses v), vi) and vii) must be complied with.

3.2. Light engines and trains will travel through the National Rail yard on Channel 1.

3.3 Upon arrival at South Dynon RVM the Driver will make radio arrangements with the RVM Supervisor.

3.4. Trains departing South Dynon RVM will do so on Channel 1.

3.5. Prior to departing South Dynon RVM the Driver will seek permission to enter the National Rail yard. Clauses v), vi) and vii) must be complied with.

4. Arden Street

4.1 Trains working at Arden Street will do so on the Melbourne Sidings/Dynon Administrative Channel.

5. Arrival Yard, D Balloon, Storage Yard, West Yard

5.1 Trains working on D Balloon, the Arrival Yard, the Storage Yard, and West Yard areas will do so on the Melbourne Sidings/Dynon Administrative Channel.

6. Fruit Shed

6.1. Prior to entering the National Rail yard, the Driver will seek permission to enter from the Signaller, West Tower, on Channel 1. Clauses v), vi) and vii) must be complied with.

6.2. Light engines and trains will travel through the National Rail yard on Channel 1.

6.3. The Melbourne Sidings/Dynon Administration Channel area will commence when clear of No 4 Road, Bogie Exchange.

6.4. Trains and light engines departing the Fruit Shed area will change to Channel 1 when leaving the Fruit Shed Siding.

6.5. Prior to leaving the Fruit Shed Siding the Driver will seek permission to enter the National Rail yard. Clauses v), vi) and vii) must be complied with.

NOTE: If unable to place a PTC train in any Siding for any reason, the train may be securely stabled in either Nos 3 or 4 Bogie Exchange Sidings. The NRC may resume their operations once the train is stabled. (SW 163/94, WN 26/94)

(12.07.1994) **Failure of Level Crossing Equipment**

Train Controllers (Metrol) on becoming aware of level crossing equipment failures will notify Drivers of trains in the vicinity of the level crossings affected via radio, cautioning Drivers that there may not be anyone in attendance at the level crossing.

Drivers on approaching level crossings with equipment failures are required to reduce the speed of their train and proceed over the crossing with caution due to the possibility of road vehicles or persons being foul of the running lines. (TCO 17/94, WN 25/94)

(12.07.1994) **Holding Trains to Time**

Circular O.2189/91, dated 4.3.91, referring to Fixed Signals not being used to hold trains to time is hereby rescinded.

Commencing forthwith, if a Fixed Signal is at the "Stop" position on arrival of a train which is ahead of schedule, the Signaller may maintain the Signal at Stop to hold the train to schedule. Should the Fixed Signals have been placed to Proceed, the Signals *must not* be placed to Stop in face of an approaching train until the train has passed, or in case of accident or emergency. (SW 142/94, WN 25/94)

16.07.1994 **Brooklyn**

On Saturday 16.7.94 the hand operated crossover between the East and West lines near the Geelong Road Overpass (Points P and Q) was removed. On Sunday 17.7.94, the hand operated points at both ends of No 1 Track (Points K and M) were removed. Amend 38/90. (SW 173/94, WN 27/94)

(17.07.1994) **Somerton**

Commencing Sunday 17.7.94 the Signalbox hours for Somerton will be:

Mondays & Wednesdays.....0420 hours until 1945 hours
Tuesdays, Thursdays & Fridays.....0345 hours until 1945 hours
Saturdays & Sundays.....Closed

Amend page 68, MTP, and page A10a of Metropolitan WTT Appendix (O.726/94, WN 26/94)

19.07.1994 **Box Hill**

On Tuesday, 19.7.94, Pedestrian Gates were commissioned at the William Street foot crossing (16.694 km). Add to Metro WTT (Appendix A) and MTP General Insts (SW 174/94, WN 27/94)

20.07.1994 **Croydon**

On Wednesday, 20.7.94, Pedestrian Gates were commissioned at the Kent Avenue foot crossing (31.217 km). Amend Diagram 9/92, page A13 Metro WTT and page 127, MTP. (SW 175/94, WN 28/94)

22.07.1994 **Kimberly-Clark Siding (SE Line)**

On Friday 22.7.94, the Master Key locked points leading to Kimberly-Clark Siding were abolished. Amend diagram 29/90. (SW 174/94, WN 28/94)

23.07.1994 **Tottenham "B"**

On Saturday 23.7.94 and Sunday 24.7.94, Points 8 were relocated 5 metres in the Up direction. A Standard Gauge Diamond Crossing were installed in the Up and Down Independent Goods Lines. Amend Diagram 7/92. (SW 177/94, WN 28/94)

26.07.1994 **Kimberly-Clark Siding (SE Line)**

On Tuesday, 26.7.94, the Kimberly-Clark siding was extended 200 metres and connected to the Down end of ABB Siding. The points leading to Kimberly-Clark were provided with a WSa lever. Amend diagram 29/90. (SW 174/94, WN 28/94)

26.07.1994 **Portland Depot Sidings - Wagon Repair Road**

On Tuesday, 26.7.94, Hand Locking Bars were provided on the points leading to the Wagon Repair Road for protection of employees engaged in vehicle maintenance.

Each Hand Locking Bar is locked by a 4D padlock, the key to which is held by the Leading Hand on duty at Portland. Prior to any shunting movement into or out of the Wagon Repair Road, the Leading Shunter must advise the Leading Hand that the Hand Locking Bar is required to be placed to the Off position, to enable access to the Repair Road. The Leading Hand must warn all persons concerned that shunting movements are about to take place, and ensure that the area is clear. The Leading Hand must then manually activate the audible and visual warning devices. After this has been carried out, the Leading Hand must then unlock and remove the 4D padlocks and place the Hand Locking Bars to the Off position. After the shunting movements have been completed, the Leading Hand must then deactivate the audible and visual warning devices. The Hand Locking Bars must then be returned to the On position and secured with the 4D padlocks.

Prior to the Repair Centre being closed at the end of the day, the Leading Hand must (providing work has ceased), place the Hand Locking Bars to the Off position and inform the Signaller, Portland, that this has been done. Prior to the Repair Centre being opened, the Leading Hand must inform the Signaller Portland, that the Hand Locking Bars are about to be placed to the On position and secured with the 4D padlocks.

Scotch Blocks are provided at both ends of the Repair Track. It is the responsibility of the Leading Shunter to ensure that they are placed to the Off position prior to any shunting movements into or out of the Repair Track. The Scotch Blocks must again be placed to the On position after the shunting movement has been completed. (SW.200/94, WN 29/94)

27.07.1994 **West Tower**

On Wednesday, 27.7.94, Points 155 were removed from service. Amend diagram 14/89.

(SW 187/94, WN 29/94)

29.07.1994 **Seaford**

On Friday 29.7.94, road traffic light co-ordination was commissioned at Station Street level crossing.

(SW 188/94, WN 29/94)

30.07.1994 **North Melbourne & South Kensington**

On Saturday, 30.7.94, the control of all signalling and points at North Melbourne Junction and South Kensington Signalboxes was switched through to the Western Control Panel at Metrol.

North Melbourne - Loss of Remote Control

In the event of remote control of North Melbourne is lost, routes already set from Metrol will remain set until completed by the passage of the train for which the route is set. After all routes have been completed and when no train movements are taking place, the following will occur:

1. The Senior Train Controller, Metrol, will arrange for a Signal Maintenance Technician and a Field Operations Co-Ordinator or suitably qualified employee to attend North Melbourne.
2. When the Signaller Metrol and the Field Operations Co-Ordinator (or suitably qualified employee) at North Melbourne are satisfied that all train movements have been completed and that no trains are fouling points they must:
   a) Communicate with the Senior Train Controller, Metrol, and obtain permission to set up for preferred routing as set out below.
   b) Arrange for the Signal Maintenance Technician to operate points for preferred routing; and
   c) Arrange for the required fixed signals to be placed at Proceed and then placed into automatic (fleeting) mode.
3. Trains to/from Sunshine will be routed via the Main Suburban and East Suburban Lines.
4. Trains to/from Newport will be routed via the Through Suburban and Main Suburban Lines.
5. Trains to/from Kensington will be routed via the Broadmeadows Suburban and Through Suburban lines. North Eastern line trains will be routed via Sunshine from Broadmeadows.
6. Trains to/from Upfield will terminate at Macaulay.

NOTE: the indications at Metrol will not update during a remote control failure.

During the time that trains are being run under the above conditions, precedence and terminating at out stations, if required, will be determined by the Senior Train Controller, Metrol, and the Senior Train Controller, Centrol.

Trains to/from the North Melbourne, Macaulay, and Arden Street Sidings will be cancelled.

When remote control is restored to Metrol, the Signaller, Metrol, must ensure that all point clips or hand locking bars which may have been applied have been removed before normal routing is resumed.

If qualified staff are unable to attend at North Melbourne, or for any reason the equipment is unable to be set up for the preferred routing, the Senior Train Controller must make the necessary arrangements for train running.

South Kensington - Loss of Remote Control

In the event that remote control of South Kensington is lost, all routes set from Metrol will remain set until completed by the passage of the train for which the route was set - provided that the train is on the approach section. If the train is not on the approach section, the signal will be restored to Stop and the route cancelled.

After all routes have been completed, and no train movements are taking place over the points, there will be approximately a four and a half minute time out, then:

1. All applicable points will operate to set up for straight running.
2. When the points are set and locked the applicable fixed signals will go into an automatic (fleeting) mode.
3. Train to/from Sunshine will be routed via the Main Suburban lines.
4. Trains to/from Newport will be routed via the Through Suburban lines.
5. Trains to/from West Tower will be routed via the Main and Through Goods Lines. Note: Signal SKN.793 will not go into the automatic (fleeting) mode.
6. Trains will be signalled through the area automatically. The indications at Metrol will not update during a remote control failure.

When remote control is restored to Metrol, the automatic (fleeting) mode will cancel and, subject to no trains on the approach track sections, all signals will return to Stop. If a train is on an approach track section, the applicable fixed signal will remain at Proceed for the passage of that train. The Signaller, Metrol, can then operate South Kensington normally.

South Kensington - Track Block/Point Sleeve Commands

To ensure that track block and/or point sleeve commands are retained in the event of a loss of remote control between Metrol and South Kensington, the Signaller, Metrol, must:

1. Apply the commands in the normal manner at South Kensington and list the commands in the Log Book.
2. Advise the Metrol Technician on the first floor of the commands issued and of the Track Circuit numbers and/or point numbers to which the commands have been applied. If track block commands have been issued, the relevant Entry/Exit points must be given to the Metrol Technician.
3. The Metrol Technician will then apply the commands, as listed by the Signaller, to the interlocking at South Kensington and obtain a computer printout showing that the commands have been applied and hand a copy of the printout to the Signaller, Metrol
4. The computer printout must be signed by the Metrol Technician and the Signaller, Metrol, and be attached to the Signallers Logbook.
5. When the track block and/or point sleeve commands are to be removed, the procedure listed above must be carried out.

Insert the above as a new instruction in Section 35 of the 1994 Book of Rules and Operating Procedures after page 35-8. (SW 192/94, WN 29/94)

01.08.1994 **1994 Rules and Operating Procedures**

As from 0001 hours, Monday 1.8.94, the 1994 Rules and Operating Procedures will become effective and the 1979 General Appendix and 1987 Rules and Regulations will be withdrawn. A number of reprint pages will be distributed to correct print errors. (SW 165/94, WN 26/94)

The obsolete forms are listed in WN 27/94 and specimen replacement forms shown.

(SW.161/94, WN 27/94)

(02.08.1994) **Absolute Occupation of a Running Line**

i) Driver of Special Train to read Absolute Occupation Order.
Where a special train is employed in connection with the Absolute Occupation, the person in charge or the delegated representative accompanying the train must allow the Driver the opportunity of reading the Absolute Occupation Order. After reading the Order, the Driver must endorse it with the time, date, and signature.

ii) Protection of an area under Absolute Occupation.
The Flagman appointed at the entrance to the Absolute Occupation area must not allow a train or track machine to pass into the Occupation Area unless the person in charge (or a delegated representative) has informed the Flagman of the movement. Nor must they allow a train or track machine to depart from the Occupation area until the Driver has advised the Flagman that the movement may be performed. Once the Flagman has been instructed, the Flagman must withdraw the Red Hand Signal.

iii) Train or Track Machine leaving the Occupation Area in the Wrong Direction on a Double line.

Where a Train or Track Machine is required to leave the Occupation Area on the wrong line (i.e. wrong direction), the following procedure must be adopted:

a) The Driver must bring the Train or Track Machine to a stand at the Red Hand Signal displayed by the Flagman protecting the Occupation Area.
b) The Driver must then communicate with the Signaller and request permission to depart from the occupation area.
c) If permission is granted, the Driver may then inform the Flagman accordingly.

iv) Series of Absolute Occupations issued.
Where a Train or Track Machine is required to travel through a number of consecutive occupation areas on the wrong line and Intermediate Signalbox(es) exist, the instructions outlined in clause iii) must be observed at each entrance/exit point.

Insert as a new clause 1) on Page 15-18 of the Book of Rules and Operating Procedures.

(SW 18[?]/94, WN 28/94)

(02.08.1994) **Flinders Street**

Diagram 13/94 replaced 29/89. (SW 162/94, WN 28/94)

(02.08.1994) **Longwood and Bowser**

Longwood (134.000 km) and Bowser (243.825 km) are Block Point locations as described in clause viii, page 1, Train Order Rules, and may be used as follow on locations. (SW 181/94, WN 28/94)

03.08.1994 **Gheringhap**

On Wednesday, 3.8.94, the following alterations took effect:

1. Points 10, leading from the Main Line to Siding "C" were disconnected from the signal frame and secured for the Main Line.
2. Crossover 13, leading from the Main Line to Siding "A" was disconnected from the signal frame and is now worked by a small point lever at the points. The points are locked and detected for main line moves by a one way plunger lock.
3. Crossover 9, leading from the Main Line to the Maroona line, was disconnected from the signal frame and is now worked by a small point lever at the points. The Up end of the points are locked and detected by a two way Plunger lock, while the Down end is locked and detected for Main Line moves by a one way Plunger lock.
4. The disc signals on Posts 5 (Disc 6), 4 (Disc 14) were abolished.
5. Post 3 (Disc 19) was abolished.
6. Lockbar levers 7, 8, and 12 became pilot levers.

Amend diagram 52/90. (SW 190/94, WN 29/94)

(09.08.1994) **Longwarry**

When the 'Clear Medium Speed' indication is displayed for a train diverging onto the Down line at Longwarry, the speed restriction specified will only apply until the train has cleared the points protected by the Signal. Rule 13, Clause F (page 2-16) of the Book of Rules and Operating Procedures is modified accordingly. Insert this instruction below Clause B (pages 34-57) under the "Bunyip - Longwarry" section. (SW.203/94, WN 29/94)

(05.08.1994) **North Melbourne - South Kensington**

In conjunction with the transfer of control of North Melbourne and South Kensington to Metrol, the special instructions applicable to these two locations have been updated.

1. North Melbourne - Arden Street Sidings

a. Boom Barriers are provided at Arden Street level crossing, and are controlled by push buttons, operated by train crews or competent employees for movements in the Arden Street Sidings.
b. The push buttons are located on both sides of the Arden Street level crossing, in a box at the Dwarf Signals. The door of the box is secured by a 5P padlock. There are three push buttons in each control box, lettered UP SIGNAL; CANCEL; DOWN SIGNAL. The DOWN SIGNAL button is to be used for Down movements, and the UP SIGNAL button for Up movements. When the boom barriers are in the lowered position the dwarf signal will display a proceed indication.
c. The CANCEL button is to be used if the movement is not to go ahead. This will cause the Dwarf signal to revert to Stop and the Boom Barriers to return to the vertical position.
d. Before a train is allowed to proceed past Dwarfs NMA.502 or NMA.504 towards Dwarf NMA 506 at North Melbourne, permission must be obtained from the Signaller, Metrol.

2. Maribyrnong River Line and Junction

The Maribyrnong River line is worked as a siding. Before a train proceeds into Siding C over Youell Street level crossing, the level crossing must be protected by a competent employee.

a. When the train arrives complete at C siding, the Driver must advise the Signaller at Metrol using the telephone provided in the yard office that the train has arrived complete; that the line outside "C" siding will not be fouled; and the anticipated time of departure.
The Signaller and Driver must exchange names. The line outside "C" siding must not be fouled without obtaining permission from the Signaller, Metrol. The Driver must obtain permission from the Signaller, Metrol, before departing from "C" Siding.

b. Failure of Signal SKN 770 at Maribyrnong River Junction. If a train is detained at SKN.770 due to a point failure, the train must not depart until the signal maintenance technician has effected repairs.

3. North Melbourne Stabling Sidings Security Gates

a. Security gates are provided on the North Melbourne Stabling Sidings, operated by the Signaller Metrol. The gates are motor operated and interlocked with the fixed signals leading from and to the Stabling Sidings. When the gates are in the normal position the gates are open to trains. The position of the gates is indicated at Metrol. Should the gates fail to operate by remote control, they can be manually operated from the control box located in the telephone cabinet attached to the gate control box inside the security compound.

4. Footscray & Elsternwick Emergency Crossover

a. Emergency crossovers are located on the Through Suburban lines at the down end of Footscray station and at the Down end of Elsternwick station. The points are secured by an Annett lock. The Annett key is kept in a duplicate lock opposite the points.
In order to use the crossover, the competent employee must confer with the Signaller, Metrol, and obtain permission before removing the Annett Key from the duplicate lock. Withdrawal of the key at Footscray will secure Signals W.235 and W.238 at Stop. At Elsternwick, withdrawal of the key will secure Signals B.313 and B.330 at Stop.

b. Failure of the Letter "A" on Home signals W.235, W.238, B.313, or B.350
If a train has been stopped at the above Signals and the illuminated letter "A" is not displayed, the Driver must contact the Signaller, Metrol, on the radio, or by the signal post telephone if the train radio is not working. The Driver must advise the Signaller, Metrol, of the train number, the originating station and destination of the train, and the post number of the signal at which the train is standing.
If the Signaller, Metrol, ascertains that the Signal has failed at Stop, and that permission has not been granted for the key to be removed, the Signaller will then instruct the Driver to pass the Signal at Stop and to proceed in accordance with Rule 1 (Section 3) of the Book of Rules and Operating Procedures.
Before passing over the Annett locked points the Driver must ensure that the points are correctly set.

Macaulay Emergency Crossover

a. The crossover at the Down end of Macaulay is secured by an Annett Lock. The Annett Key is kept in a duplicate lock in the Up side office.
In order to use the crossover, the competent employee must confer with the Signaller, Western Control Panel, Metrol, will will place the signals on posts NMA.520 and NMA.523 at Stop. The Annett Key may then be withdrawn from the duplicate lock and the signals NMA.520 and NMA.523 will be secured at Stop.
For trains terminating at Macaulay, the Annett Key is to be replaced into the duplicate lock to allow the Signaller, Metrol, to operate the fixed signal.

Insert the above instructions following page 35-8 of the Book of Rules and Operating Procedures.

(SW 199/94, WN 29/94)

MAKING THE MOST OF THE MET.

Glenn Cumming

I am sure everybody has heard the story of the slow boat to China, but who has heard the story of the slow bus from Seymour? If you haven't heard this story, then read on.

For the 1991 Show Day Signal Box Tour, the Signalling Record Society arranged to visit the signal boxes between Seymour and Broadmeadows. As is the usual custom on these tours, the society needed to arrange a bus to convey the participants to the various locations to be visited. With the aid of the Met, the society arranged to charter a Mark 1 M.A.N. Met bus (body by Ansair) for the day. The bus to be used would be from the Doncaster Depot, thus allowing tour participants to travel to Seymour on the same bus that would convey them back to Melbourne.

On Thursday September 26, 1991, Met bus number 107 departed Doncaster depot at 0735 as set down in circular B.2609/91. First stop was just around the corner to pick up Jon Churchward and then direct to Box Hill Railway Station for another pick up. From Box Hill Railway Station, the bus ran to Seymour Railway Station with pick ups on the way at Kenmare St. Box Hill North, Wingrove Railway Station and Heidelberg Railway Station. After picking up the President from Wingrove Railway Station, he issued a presidential decree that the bus would **not** carry the Route Number 412. So the driver put up Route Number 413 instead. On the journey to Seymour on the Hume Highway, the destination read "Kew Cemetery".

On arrival at Seymour, we were met by more people waiting for the tour to officially commence and after the arrival of the regional Safeworking Inspector accompanied by the regional Signal and Communications Supervisor, the tour officially commenced. First call of the day was a brief inspection of Seymour Signal Box. Following the re-signalling of Seymour and Mangalore in 1989, the control of broad gauge signalling in the area was consolidated into a relay interlocking control panel located in the station office. Also contained in the signal box is the Double Line Block Instrument for the Broadford section, the miniature electric staff instrument for the Avenel section and two closed circuit television monitors used to observe the end of train markers on up and down trains arriving at Seymour.

Once we had completed our short inspection of Seymour, an announcement over the station public address system advised us to board the bus for Box Hill. We boarded the bus and set sail along the Hume Highway for our next stop at Broadford. On the way, tour notes compiled by Andrew Waugh were handed out.

Broadford is a double line block post that switches out when traffic requirements permit. The signal box is actually a bay at the Seymour end of the station building on the down platform. Inside the signal box is a 40 lever cam and tappet interlocking frame. A pair of Winter's Block instruments are provided the block shelf. Lever 17 is the closing lever and this lever is also used to switch the double line block circuits in and out as required instead of the more common key switch on the block shelf.

The up refuge siding and a trailing crossover in the mainline at the up end of the platforms are the only facilities remaining at Broadford, the down refuge siding and the goods siding having been removed in 1988/9. The Annett Locked connection to MacDougall's Siding was removed in 1987. Consequently, the frame now has many gaps where operating levers have been removed. The up refuge siding is a loop; the normal practice on this line is to provide dead end refuge sidings. A facing point lock is provided at the down end of the refuge siding and the up end points of the siding are motor worked. A small illuminated track diagram is provided for the up end of the up refuge siding on account of the track locked motor points.

The signals on the up line in the vicinity of the motor points are light signals instead of the usual mechanical arms and discs. The down distant signal is provided with a repeating signal, this being unusual on double line block sections. At the up end of the yard is Broadford standard gauge crossing loop. This loop, like all loops on the Standard Gauge, is worked from the C.T.C. control panel in Melbourne.

The next block post in the up direction is Kilmore East. Here the interlocking frame and block instruments are housed in a bay provided in the station building on the down platform. The signal box houses a 25 lever cam and tappet frame. Lever 10 is the closing lever in the frame. There are no spaces in the frame but with the recent removal of some of the sidings, five levers are now spare and are painted white. An illuminated track diagram supplied by the Westinghouse Brake & Signal Company is located on the block shelf along with the Winter's block instruments and a key switch for switching the block circuits. The illuminated track indication diagram also incorporates indicators for some of the signals and motor points worked from the signal box.

At the up end of the platforms is a trailing crossover in the mainline and a dead end refuge siding for the down line. On the down side of the station is the connection to the Apex Quarry siding. This connection consists of two motor operated crossovers, the first being a facing crossover in the mainlines and the other a trailing crossover from the up line across the standard gauge line via a diamond crossing in the standard gauge line to the quarry siding. The up refuge siding and the goods siding have been removed.

Up and down home signals on the standard gauge line protect the broad gauge diamond crossing in the standard gauge line (referred to as a grade crossing). To work the connection to the quarry siding, it is necessary for the signalman to contact the standard gauge train controller in Melbourne. If the standard gauge line is clear, the standard gauge train controller releases pilot lever 23 in the frame at Kilmore East which then allows the signalman to operate points 22 for the crossover across the standard gauge line. In the event of a failure, a 5P key switch is provided on the illuminated track indication diagram to give a release for the grade crossing after a time delay.

The majority of signals are mechanical arms and discs but at the junction of the quarry siding, searchlight

signals are provided. The up and down distant signals are worked by motors.

From Kilmore East our bus took us to the quarry siding. The siding consists of a loop under the loading bins. A set of points is provided in the lead from the loop to the main line connection to divert any runaway vehicles. This set of points is worked by a one lever ground frame that is electrically crosslocked by lever 6 in the frame at Kilmore East. The points are normally set for the run off but trains arriving into the siding can pass over the points without stopping as a trailable point machine is provided on the points.

When we inspected the junction of the mainline and the quarry siding, the signalman at Kilmore East set up the moves in and out of the siding allowing us to view the signal indications that would normally be seen by the drivers of trains using the siding. From the quarry siding the bus proceeded to Wandong for lunch but not before we inspected the co-acting down distant signals. Post 1 is a tall lattice mast located on the top of the bank of the cutting while Post 1B is a short tubular mast located adjacent to the down line in the cutting. Both signals are operated by electric motors.

First stop after our lunch break was the signal box at Wallan. This box has a hip roof and is situated on the up platform opposite the station building on the down platform. Wallan is now a shadow of its former self. There are no sidings and the only points remaining in service are a trailing crossover at the down end of the station. This crossover is secured by an Annett Lock, the key normally secured in a lock on lever 31. The box contains a 40 lever cam and tappet machine. Only ten levers remain in service, five down signals, four up signals and a pilot lever for the Annett Key. Following the rationalisation of Wallan, the frame now has many white levers.

The usual Winter's block instruments are provided the block shelf and a large but nearly blank diagram hangs over the frame. A key switch is provided for switching the block circuits. Between the block instruments is a small illuminated track indication diagram for the up end of the station where there is a level crossing protected by boom barriers. Prior to the removal of the sidings and crossovers, the boom barriers were manually controlled by lever 23 for shunting moves, but this facility is now out of use. The only signals remaining are for the main line, all disc signals for shunting have been removed. The signals protecting the level crossing are searchlight signals.

Behind the former yard is Wallan standard gauge crossing loop. The standard gauge line runs parallel to the broad gauge lines through the boom barriers at the level crossing before curving away to the crossing loop on the eastern side of the yard.

From Wallan our bus conveyed us to Donnybrook. Our arrival coincided with that of the signalman for the afternoon shift and we were able to watch him switch in and then test the block instruments and bells to comply with Rule 29. The signal box at Donnybrook is a bay in the small station building on the down platform. Inside the signal box is a 15 lever cam and tappet interlocking machine provided in 1960. The Winter's block instruments, key switch for the block circuits and a block telephone are on the block shelf above the levers.

Donnybrook retains its up and down platforms and at the down end of the station is a trailing crossover in the main line. This crossover is the only remaining pointwork in service at Donnybrook, the down refuge siding and the goods siding having been removed from service. The only signals remaining at Donnybrook are four signals for the up main line and three signals for the down main line. Adjacent to the up distant signal is Donnybrook standard gauge crossing loop

The next location to be inspected was Somerton which is a block post on the broad gauge lines between Broadmeadows and Donnybrook and is the junction for the line to Upfield. It also controls the connections to the sidings in the area and the broad gauge grade crossing across the standard gauge line. The signal box has a hipped roof and houses a 25 lever cam and tappet interlocking machine provided in conjunction with the standard gauge line project in 1959. The building is located on the Melbourne side of the busy Somerton Road level crossing. At this crossing, the roadway crosses over 5 railway tracks and is protected by automatic boom barriers.

The standard gauge Somerton Loop consists of four roads with extensions at each end of No. 4 road and is situated between the broad gauge main lines and the broad gauge sidings. A grade crossing over the standard gauge line is provided for the lead from the broad gauge main line to the broad gauge sidings. The branch line to Upfield is dual gauge as far as the Ford Motor Company's. siding with the broad gauge track continuing on through Upfield and on towards North Melbourne.

The line from Somerton to Upfield is worked under the rules for Electric Staff. Grey pattern large type instruments are provided for the section. Because the track from Somerton to Ford Siding is dual gauge, standard gauge trains as well as broad gauge trains are required to carry a staff when running in this section. The instrument at Somerton is number 1507 and the magneto generator is numbered 313.

An intermediate electric staff instrument is provided at Ford Siding at Upfield so that trains may lock away while shunting at the siding and other trains may use the section. At Somerton, the home signal from the Upfield line is a somersault signal, the only semaphore at Somerton. The home signal is fixed at the stop position but a calling - on signal is provided underneath, lever No. 19 working this signal. At the down end of the yard, a dual gauge siding serves a large bulk cement depot. Other sidings serving factories are dotted around the yard, including a siding serving the Clyde Engineering factory.

A large illuminated track diagram is located on the block shelf over the frame together with approach bells, Winter's block instruments, a block circuit key switch, push buttons for low speed signals, block phone, various indicators, time releases and switches for the air assisted points. Three pilot levers are provided in the frame. Lever 14 is the closing lever, lever 13 is the release for the broad gauge/standard gauge grade crossing and lever 9 is a pilot lever for moves along No.3 & 4 roads of the standard gauge sidings.

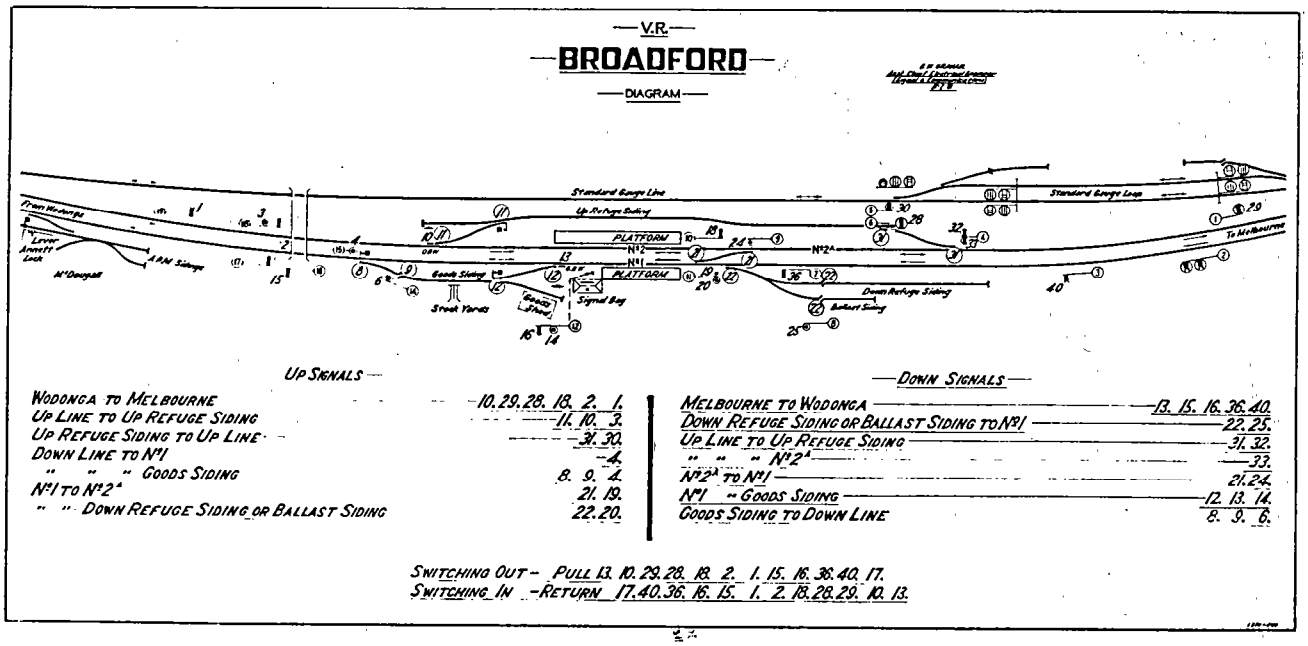
The last signal box for inspection on the day was Broadmeadows. Broadmeadows is the terminus for the suburban electric services and stabling sidings are provided here for electric trains. Broadmeadows also controls the junction at the up end between the goods lines to Albion and the passenger lines that run directly to North Melbourne and the city. The army sidings to

Broadstore have long been removed along with the associated grade crossing over the standard gauge line.

The signal box is on the down platform and is now semi - detached from the remainder of the station building following building works that converted the railway station into a shopping centre with station attached. The signalling arrangements at Broadmeadows are controlled from a 45 lever cam and tappet lever frame. The frame started life as 30 lever machine and has had 2 extensions, the last in October 1963. As a result, the levers in the frame are numbered from left to right 31 - 40, A - E and 1 - 30.

All points are mechanically worked from the frame, along with associated facing point locks. Broadmeadows is the start of the double line block working on the North East mainline, while the electrified passenger lines are worked by 3 Position automatic signalling. The up and down goods lines are also worked by 3 position automatic signalling as far as Jacana Junction where C.T.C. controlled from Melbourne control takes over for the run to Albion. Because of the change in safeworking systems that takes place at Broadmeadows, there is a mixture of signals. At the up end of the yard there are 2 and 3 position searchlight signals while the signals at the platforms and at the down end of the yard are 2 position semaphore arms and discs.

After we had completed our inspection, we boarded the bus for the last time in order to be returned to the original pick up points. Our thanks go to the V/Line Safeworking Office for permission to conduct the tour, Safeworking Inspector Don Butterworth our guide for the day and Alan Jungwirth and Chris Sweetnam for arranging and driving the bus.



SUPERVISION OF SAFE WORKING, ETC., AND LOCATIONS AND DUTIES OF BLOCK AND SIGNAL INSPECTORS (A. 1281/30)

Circular C. 7/09 "Supervision of Block and Signal Working" is cancelled and the following instructions will apply in lieu thereof :-

1. All matters in connection with Safe Working and Signalling Systems are dealt with by the Safe Working Officer who is under the supervision of the Superintendent of Goods Train Service.

2. Block and Signal Inspectors who shall reside at the Headquarters of their districts are members of the staff of the Superintendent of the District in which they are located, but may be utilised elsewhere at any time on the direction of the General Superintendent of Transportation or the Superintendent of Goods Train Service.

Block and Signal Inspectors are located as shown [in the table at the foot of this page]

Each Block and Signal Inspector must furnish his District Superintendent with his private address and telephone number (if any), and must immediately advise of any change therein.

Duties of Block and Signal Inspectors

3. The duties of the Block and Signal Inspectors will be :-

i) To examine and certify as to the competency of every employe in the Transportation Branch (or other Branches as may be necessary) before such employe is allowed to undertake safeworking under the Regulations, Rules and Instructions governing Section Orders, Train Staff and Ticket, Block, Lock and Block, Electric Train Staff, Electric Train Tablet, or any other system or instrument used for the purpose of train signalling and to re-examine any employe already qualified in the working of the systems specified above, who has not had practical experience during the preceding six (6) months before such employe is allowed to again operate such signalling system.

ii) To examine and satisfy himself as to the competency (including his knowledge of the special safe working instructions, if any, in force) of every Signalman or Employe acting in that capacity before such Employe is allowed to take charge of a Signal-box, Interlocking Frame (except as provided in Instruction 16 of Weekly Notice 7/30).

The Block and Signal Inspector must also examine employes working Level Crossing Gates which are protected by Fixed Signals; also certain employes who are required to work Plunger Locks, as laid down in clause 5, pages 143-144, General Appendix.

To also instruct and examine, as required, Transportation employes in the Overhead Electrical Equipment over the Permanent Way, Sectioning, and the working of Overhead Switches.

iii) To examine, as may be instructed, any employe for the position of Guard, Rail Motor Guard or Rail Motor Driver. Also Motormen and Conductors of Electric Street Railways, in the Safe Working portion of their duties.

iv) To re-examine, at the stipulated intervals, in accordance with instructions, any Employe holding a Guard's or other Safe Working certificate.

v) To see that every Employe engaged in

Name	District	Headquarters	Under Supervision of -
A. E. Colson, Senior Inspector	Metropolitan	Flinders-street	Metropolitan Superintendent
A. W. Murfitt, Assistant	do	do	do
D. Beddoe, Assistant	do	do	do
J. Evans (Mr. Evans to assist in Metropolitan District as required)	Eastern and South-Eastern	Flinders-street	do
C. A. McIntyre	Northern	Bendigo	District Supt., Bendigo
C. H. Saunders	Midland	Maryborough	District Supt., Maryborough
W. J. Pearson	Western	Ballarat	District Supt., Ballarat
J. Z. Mullins	South-Western	Geelong	District Supt., Geelong
J. T. Nolan	North-Eastern	Seymour	District Supt., Seymour
E. Anderson	Relieving	Flinders-street	Metropolitan Supt, or District Supt. in whose district he is relieving
J. A. Watkins	Examining	Spencer-street	Staff Officer

working any Block, Lock and Block, Electric Train Staff, or Electric Train Tablet Instrument, or any other instrument, apparatus or system which is used for the purpose of train signalling, maintains his knowledge of all necessary Rules, Regulations and Instructions.

vi) To visit each Signal-box as frequently as possible, by night as well as by day, and inspect thereat all Fixed Signals, Points, Scotch Blocks, Locking Bars, Plunger Locks, and all other appliances and instruments used in connection with the signalling and working of trains, and to enter in the Train Register Book the date and time of each visit, and initial such entry.

vii) To arrange and be responsible for the efficiency of a fortnightly check of all Train Register Books, Section Orders, Train Staff Tickets and any other printed or written matter used in connection with the signalling of trains; to personally inspect and check or re-check as many of the Train Register Books as is reasonably practicable; and in the event of his detecting any irregularity which has not been indicated by the person or persons responsible for the proper checking of the Books to report such neglect at once to the Metropolitan or District Superintendent, and the Superintendent of Goods Train Service.

viii) To report to the Metropolitan or District Superintendent, and the Superintendent of Goods Train Service, as prescribed in clause 8 hereof, every irregularity, and every breach of any Rule, Regulation or Instruction which may come under notice in connection with the working or signalling of trains, and every irregularity on the part of any employe engaged in connection therewith.

ix) To note the condition, order, cleanliness and efficiency of Points, Signals, Signal-boxes, Engine Head Signals, and Tail Signals.

x) To report, when required, upon :-

a) Train delays and the causes thereof, and

b) Station yard working.

c) Any other matter as arranged by the Metropolitan or District Superintendent, as the case may be.

xi) To see that every Station, Siding, Signal-box, etc., is suitably equipped with safe working appliances in accordance with the volume of traffic, and the importance of the train movements.

xii) To see, wherever interlocking is provided, that the Points are provided with the necessary locking bars, detectors, or other necessary appliances, and that the Points and Signals properly interlock; and, at places where Power Installations or Electric Apparatus are installed, that the Electric Locking, or apparatus properly perform their functions, and, where Track Circuits are provided, that it is not possible for the Fixed Signals to exhibit improper indications.

xiii) To see that an intermediate cross-over road, from one Main Line to the other, is not allowed in a double line Block Section unless it is securely interlocked, controlled, or spiked and padlocked, and to see that the Signalman understands that when not in use the keys of the padlock, securing any control on such Points, must be kept in his possession.

xiv) To bring under notice any instance in which an existing Signal can be improved either by removal to another site or otherwise, and before any new Fixed Signal is brought into use, to assure himself that a sufficient view of such Signal can be obtained by train crews and the Signalman operating it.

xv) To see, as far as possible, that Tablet, Staff, Annett, Plunger, and other Locks, are kept in good order, and in conjunction with the representative of the Chief Engineer of Signals and Telegraphs to see that they are properly tested when installed, and, if in good order, to sign a joint certificate to that effect.

xvi) To test all new Interlocking installations prior to their being brought into use, and in conjunction with the representative of the Chief Engineer of Signals and Telegraphs, and the Chief Mechanical Engineer, to see that the Fixed Signals are properly placed and interlocked.

xvii) To also act as laid down in clause xvi) with regard to alterations or additions to existing interlocking frames, and in each instance sign, in conjunction with the representative of the Chief Engineer of Signals and Telegraphs, and the Chief Mechanical Engineer, the usual certificate that the locking is correct, and that it and the other mechanical and electrical equipment are in proper working order.

xviiii) To see that each Signal-box is provided with an Order Book of foolscap size, and that all current orders concerning the safe working of the traffic, and operative at the particular place, are neatly and legibly recorded in such Book

To also see that Signalling and Overhead Diagrams are available for reference in Signal Boxes or Offices where necessary.

xix) To carry out any other duties which may be imposed by the General Superintendent of Transportation or the Superintendent to whose District they are attached from time to time.

Fog Signalling

4. The Block and Signal Inspector must satisfy himself that Fog Signalmen are provided where necessary in his District, and that any essential examinations of Fog Signalmen are conducted in accordance with current instructions on the matter.

Correspondence Concerning the Duties of Signalmen

5. The Signalmen at any place at which a Station-master is located shall be directly under the orders of the Station-master, and every instruction or report passing between the Block and Signal Inspector and any Signalman concerning the duties of the letter shall be sent through the Station-master.

6. Every report to or from any Signalman at an intermediate Signal-box shall be forwarded through the Station-master at the Station on whose pay-roll such Signalman is entered.

7. Correspondence from a Block and Signal

Continued on page 90

FORTY YEARS AGO

THE OLD STAFF-WORKING SYSTEM

Henry James

The following article was published in 'The Victorian Railways Magazine' for November 1926. The introduction to the article read "Harking back to the 'Eighties, Mr. James, late Special Officer of the Rolling Stock Branch, recalls with example and anecdote some of the vicissitudes and risks of the train staff-working system then in vogue on the many miles of single track". Although Mr. James claims that anyone with memories of the 1880's could have told similar tails, it is a pity that few did so. It is amusing to realise that the 'modern' days Mr. James writes about are further from us today - sixty-seven years - than the days he was writing about to his original audience.

Visiting Spencer Street Station a few months ago I noticed that the engine of the just-arrived Sydney Express was fitted with an automatic staff exchanger, thus enabling the train to run through staff stations at up to 40 instead of 20 miles an hour

This is a step in the right direction. There is not the slightest doubt that if all engines were so equipped, the total annual saving effected in time and fuel consumption would be very considerable, and, in many instances increased loads could be taken.

My memory goes back over a good many years of train running on the Victorian Railways. I had my first trip, as a fireman, from Geelong to Colac in February, 1878. In staff-working I have seen many strange and, what would appear to the present generation of railwaymen, almost incredible things take place.

Electric staff-working on single lines is pretty general now, but 40 years ago it was practically unknown in Victoria. The old system of staff and ticket was then in use. On one occasion, about the year 1880, I was fireman on a ballast train on the Geelong - Melbourne line. One day we left Geelong, following the first passenger train, with a rake of empty trucks, to load up rails about four miles on the Melbourne side of Little River. It was a clear morning. As the men were engaged in loading the driver suddenly noticed a train leaving Werribee, about six miles away, and coming towards us. The line is straight and the country open in this locality. It was a passenger special which the ganger in charge of our train, and the stationmaster at Little River, had forgotten. This train had the staff. We had nothing. I think at that time it was permissible for a ballast train to work independently of the staff, providing they were not going through the section. There was no Manor Station in 1880.

Off we went to Little River, allowed the special to pass, and then went out again on the main line and completed our loading. How would that do in 1926?

In 1882 I was stationed at Ballarat, and one afternoon was on a train booked to Stawell.

On arrival at Trawalla there was no staff there for the Trawalla - Beaufort section. A great number of staff stations at that time were not telegraph stations, and Trawalla was one of them. We were time-tabled to cross an up mixed train at Beaufort, five miles away, The S.M. said we must go on. This the driver refused to do. The S.M. then came to the engine, carrying a red flag, and said he would ride on the engine and take all responsibility. Away we went to Beaufort with no staff or other authority except the S.M.'s verbal instructions.

After 44 years I often laugh as I remember the appearance of the station master during that trip. He was a short, stout, elderly man, with a very red, fat face. His upper lip and chin were shaven, and, as he stood in the gangway between the engine and tender, the vibration caused him to tremble like a huge blanc-mange. But it was just another case of "all's well that ends well."

A couple of years later, in 1884, I was fireman of a mixed train from Ballarat to Stawell. At Ararat, the driver of an up goods train, which was crossing us there, came to our engine and told the driver he had made the mistake of overcarrying the Great Western - Stawell train staff to Armstrong. These two intermediate stations, Armstrong and Great Western, were non-telegraph, and consequently were isolated from each other and from Ararat and Stawell at either end.

On arrival at Armstrong my driver decided to go on, although the staff he should have had was at Great Western. We had not the continuous brake in those days, and the line, which has since be regraded and deviated, had many curves which made us a little anxious, as we thought that if the S.M. at Great Western discovered his mistake, he might send the staff on by trolley. We ran safely through the section, however. When approaching the station I saw the S.M., staff in hand (the staff we should have been carrying) waiting to exchange with us. He had not noticed the mistake. In fun I exchanged with him; then after the guard had given the starting signal I walked back to the station and challenged him with not exchanging staffs. With a perplexed look on his face he said, "Well, I could have sworn I did, and I noticed you were smiling as you exchanged."

On the return trip, about an hour later, I told him all about it, and he was greatly relieved. It had worried him considerably to think that, when he was so sure of giving me the staff, he had not done so after all.

I could tell many similar stories about the old days. How, for instance, on one occasion a driver on the Ballarat - Maryborough line considered he had sufficient authority to run through a 10-mile section when he had a short length of hickory stick with a piece of paper fastened round it, with Clunes - Talbot written on it; how, in another case of a mixed train waiting at Beaufort to cross an up goods train which was running late, the driver uncoupled his engine from the mixed, went out without a staff to look for the goods, and found it struggling up near the top of the hill about a mile and a half away and came back to Beaufort "light engine"; or how, again, in the early days of the North East, when it was a single line from Newmarket, and the early down goods trains used to run through to Seymour without staff, ticket, or anything else. The last goods, running

ahead of the fast down passenger train, used to collect and deliver the train staff tickets all along the line.

I suppose everybody who remembers the times of which I write could recount many similar instances, and wonders, as I do now, how the running was so successful. It is a good thing that such lax days are over, and that, even on distant branch lines, the present day regulations are so framed that safety first is the keynote.

BLOCK & SIGNAL INSPECTORS

Continued from page 88

Inspector, calling for a report in regard to any irregularity discovered either in the course of checking the Train Register Books or whilst travelling through the district, shall in the first instance be sent direct to the Stationmaster, or, in the case of Signalmen under the supervision of the Superintendent of Melbourne Yards, direct to the Signalman concerned. The report of the Signalman concerned shall in every instance be promptly forwarded through his immediate Superior Officer to the Block and Signal Inspector, who, as soon as all inquiries have been completed, shall forward the correspondence, with any remarks which may be considered necessary, to the Metropolitan Superintendent, the District Superintendent, or the Superintendent of Melbourne Yards (as the case may be); who shall forward the correspondence, with his recommendation, to the Superintendent of Goods Train Service.

8. In the event of any serious irregularity, such as a breach of any Rule or Regulation, or in cases where he has been specially so instructed the Block and Signal Inspector, in addition to complying with the preceding clause, is to forward a copy of his memorandum (or a special report when necessary) to the Superintendent of Goods Train Service.

Checking of Train Register Books

9. Every person employed checking the Train Register Books shall have been passed by the Block and Signal Inspector as competent in the Signalling Systems applying to the Train Register Books allotted to him for checking, and also in Fog Signalling and in a suitable Interlocking Frame, and shall be familiar with the special instructions in force at the various Stations and Junctions.

The Block and Signal Inspector shall instruct every employe appointed to act as Train Register Book Checker, in his duties, and satisfy himself as to his competency before permitting him to undertake the work, and shall advise the Superintendent of Goods Train Service the names and positions of the men so utilised.

10. In every instance in which any entry or entries in a Train Register Book or Books reveals any irregularity or breach of any Rule, Regulation, or other Instruction, the Checker must bring such irregularity, omission, or error under the notice of the Block and Signal Inspector without delay, and if the Inspector be not personally available, and the fault be a serious one, he shall communicate with him by wire or telephone, and in addition shall promptly advise the Metropolitan Superintendent, Superintendent of Melbourne Yards, or District Superintendent, as the case might be, who will take any further action necessary.

Special Notice to the Staff

11. Employes are prohibited from working Block, Lock and Block, Electric Train Staff, or Electric Train Tablet Instrument or any Interlocking Frame, unless certified as competent therefor.

12. Any employe who desires to learn the working of any kind of Signalling Instrument or any Interlocking Frame, shall apply through his Superior Officer to the Metropolitan or District Superintendent, or the Superintendent of Melbourne Yards, and such application is to be referred to the Block and Signal Inspector for his recommendation.

M.J. Canny
General Supt. of Transportation

LETTERS TO THE EDITOR

Glenn Cumming writes:
Here is some more news on Toowoomba. Unfortunately it is sad news.

I have been informed that in the mechanical signalling at Toowoomba is no more. Power signalling has replaced the 2 mechanical signal boxes that you described in your original article.

The new signalling is based on a solid state interlocking of the 'Microlock' style manufactured by Union Switch and Signal in the United States and installed by Ventura Projects. The signalling is now controlled from the C.T.C. panel at Brisbane Control and there is no control panel at Toowoomba. The power signalling extends as far as Harristown to the south on the Warwick line and to Willowburn on the Roma line. I understand that some rationalisation of the track work at Toowoomba yard has also taken place, but that the mechanical frames are still in place.

In addition, all electric staff working on the lines beyond Toowoomba is believed to have been superseded by train order working.

As is the custom these days, a very interesting location has been changed forever.