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SIGNALLING RECORD SOCIETY OF VICTORIA INC

The Ballarat East Signalman and Block and Signal Inspector on the occasion of the SRS Tour to Ballarat (and Bacchus Marsh line) on 17 September 1990. Ballarat East was fitted with a 39 lever Rocker frame, of which the most interesting feature was the two gatewheels for working the gates across Humffray Street. Ballarat East was the last box in Victoria to have this feature. The furthest set, closest to the window, worked the main line gates and the second set, closer to the camera, worked the gates across the goods shed road. On the block shelf can be seen the single Winters Block instrument for the section to Warrenheip. The short section to Ballarat A box was worked by the Track Block System. With this system the main lines were track circuited and the Homes controlling the entry into the section were controlled by the track circuits. In addition, Ballarat A electrically released the lever working Home 15 for moves toward Ballarat A box. Ballarat East was brought into use on 5 April 1886 with a 25 lever frame. When the Buninyong line was opened on 12 August 1889, a new box named 'Ballarat East Junction' was provided at the physical junction. This was later renamed 'Ballarat East A Box', while the original Ballarat East became 'Ballarat East B Box'. A new frame of 39 levers was provided on 19 April 1891 at Ballarat East B, although most of the extra levers were spare. Ballarat East A Box was abolished on 5 February 1900 and the junction relocated to the Up end of the Ballarat East platforms and worked from Ballarat East box. Ballarat East was abolished in late June 1992, but the box is preserved in situ.

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Minutes of Meeting held Friday September 17 2004, at the Surrey Hills Neighbourhood Centre, 1 Bedford Avenue, Surrey Hills

Present: - J.Black, W.Brook, B.Cleak, G.Cleak, G.Cumming, C.Gordon, J.Gordon, G.Henderson, W.Johnston, K.Lambert, D.Langley, R.Lloyd, B.McCurry, J.McLean, T.Murray, T.Penn, C.Rutledge, B.Sherry, P.Silva, R.Smith, F.Strik, F.Tybislawski, A.Wheatland, R.Whitehead & R.Williams.

Apologies: - S.Malpass, A.McLean, G.O'Flynn, L.Savage & R.Taaffe.

Visitors: - Geoff Hampson & Vance Findlay.

The President, Mr. David Langley, took the chair & opened the meeting @ 20:08 hours.

The President welcomed our interstate members and visitors to the meeting, especially Frank Tybislawski from Brisbane who was attending his first SRSV meeting.

Minutes of the July 2004 Meeting: - Accepted as published. C.Rutledge / T.Murray. Carried.

Business Arising: - Nil.

Correspondence: - A number of faxes and letters had been sent to arrange the bus for the signal box tour.

The public liability insurance certificate was received from Civic Mutual Insurance.

Various items of sundry correspondence were sent and received in relation to the organisation of the forth-coming signal box tour. F.Strik / K.Lambert. Carried.

Reports: - Tours. Glenn Cumming described the final arrangements for the Signal Box Tour to be held on Monday 20 September 2004 in the Eastern District. Many questions regarding the tour were answered.

Peter Silva reported on progress with the Market Street Signal Bridge and outlined plans for the future. Please contact Peter Silva for further information.

Web Site. Peter Silva advised that he has made some alterations to the SRSV website but stressed the point that it would be better if the website had its own webmaster. Please direct all comments and questions to Peter.

Rod Smith asked if the website was to promote the SRSV or to feature signalling history or both.

General Business: - Glenn Cumming announced to the meeting that he would be stepping down from the position of Syllabus Items Organiser at the 2005 Annual General Meeting in March 2005.

Keith Lambert advised that the new Platform No.1 at Spencer Street Station should be ready in another month.

Keith Lambert described plans for the rearrangement of the Goods Lines at Spencer Street.

Keith Lambert described progress with the new underpass at Narre Warren.

Keith Lambert tabled copies of interesting pictures from the 1960's and early 1970's that he found on an internet website.

David Langley asked about the testing of the new railcars on the Gippsland Line.

Colin Rutledge gave a detailed explanation of the progress of the testing so far. The tests conducted so far have been very comprehensive. The Up Line between Moe – Warragul has been approved for testing at speeds up to 160 km/h and is the first section of track to be approved for high speed running, hence the testing is being performed on this section of line.

Colin gave a detailed description of tests and testing arrangements. Track circuit hardware is changed over for the different tests because 15 types of track circuit have to be tested.

A comparison of the performance of the Velocity railcars versus the Sprinter railcars was given and Colin Rutledge gave his perspective of travelling in the new Velocity railcars. High speed running is believed to

have caused the platform canopies at Yarragon and Trafalgar to wave up and down more than was expected.

Rod Smith compared this series of tests to the testing done in New South Wales following the rear end collision at Brooklyn in 1986.

Colin Rutledge replied that Victoria is doing more testing on track circuits than anyone else because this is a high priority issue.

Wheel profiles on Sprinter railcars are causing problems between individual vehicles. Rail profiles have been measured. Results of rail grinding were discussed.

Colin Rutledge gave an update on signalling alterations at Bairnsdale to correct issues and problems.

Rod Smith asked about axle counters. Colin Rutledge provided an answer and noted that there was no rail / wheel interface issue.

Graeme Henderson provided some details about works in New South Wales. Miniature Electric Staff between Cootamundra West – Parkes is to be replaced. Upper Quadrant Signals between Marulan – North Goulburn are to be replaced next month. The takeover by ARTC rolls on, otherwise very quiet at the moment.

Frank Strik asked about the future of the Murwillumbah Line. Graeme Henderson replied that the line had a "To Be Advised" status but noted that level crossings had been deactivated.

Frank Tybislawski gave an overview of the signalling project at the Rosewood Railway in Queensland. The mechanical lever frame from Wulkuraka is being rebuilt at Kunkala.

Frank Tybislawski noted that it was quiet for signalling works in Queensland at the moment. Works underway at the present time included installation on ATP on the Mount Isa Line and another new coal line along with further duplication in Central Queensland. The Train Order and Direct Train Control systems were compared and discussed.

Reg Lloyd reported that a new tricolour LED signal has been provided at Illawarra Junction.

Frank Strik reported that a new equipment room has been constructed at Kyneton.

It was noted that there were errors in the photo captions on the Museum Victoria website for the 150th Anniversary of Railways in Victoria.

The Quail Map Co. Rail Atlas of Tasmania has been released.

Jack McLean issued an invitation for people to visit the Wingrove Railway in his garage at 60 Kenmare Street, Box Hill North.

Syllabus Item: - The President introduced himself as the Syllabus Item.

David Langley presented a selection of slides from his collection to give our interstate a visitors a look at "typical" Victorian signalling.

The presentation was thoroughly enjoyed by those present at the meeting, probably more for the great collection of slides rather than being able to identify all the locations.

At the completion of the Syllabus Item, The President thanked Keith for the entertainment & this was followed by acclamation from those present, along with the promise of a future invitation to do it all again at a future meeting.

Meeting closed @ 22:12 hours.

The next meeting will be on Friday 19 November 2004 at the Surrey Hills Neighbourhood Centre, 1 Bedford Street, Surrey Hills, commencing at 20:00 hours (8.00pm).

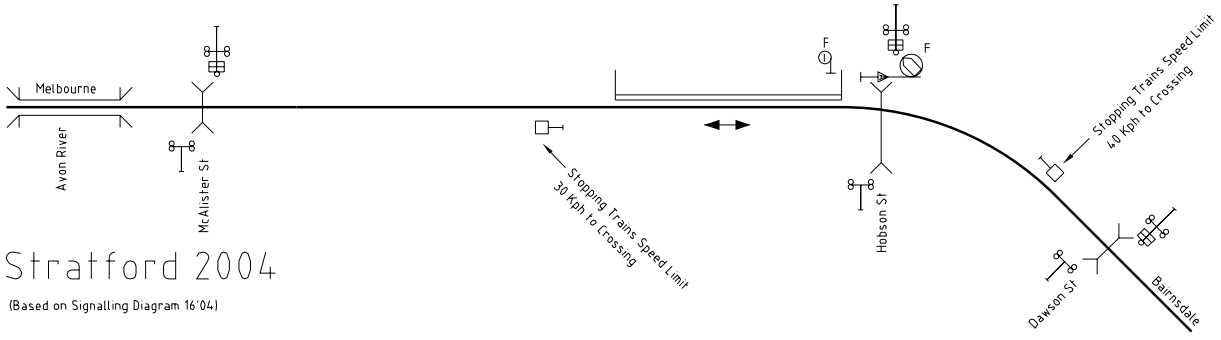
SIGNALLING ALTERATIONS

The following alterations were published in WN 43/04 to WN 3/05 and ETRB A circulars. The alterations have been edited to conserve space. Dates in parenthesis are the dates of publication, which may not be the date of the alteration.

19.10.2004 **Stratford** (SW 2147/04, WN 53/04)

On Tuesday, 19.10., level crossing predictors were provided at the flashing lights at McAlister Rd (221.839 km) and Princes Hwy (222.535 km). The flashing lights at Hobson St (222.234 km) were restored to service.

A Down two position Automatic signal was provided between the platform and Hobson St. and is situated 30 metres from the platform. This signal will normally display Proceed, but may be restored to



Stop by means of a 5P keyswitch at the Down end of the platform. If a Down train is delayed at the platform the keyswitch must be used to restore the signal to stop and the flashing lights will stop operating 40 seconds later. If an Up train is delayed at the platform for longer than 4 minutes, the flashing lights at Hobson St will recommence operation. The keyswitch must then be used to cancel the flashing lights by restoring the signal to stop. The signal will remain at stop until the next train arrives at Stratform.

SW 1041/04 is cancelled. Diagram 16/04 was brought into use.

21.10.2004 **Bendigo** (SW 2142/04, WN 44/04)

From 1600 hours on Thursday, 21.10., Operating Procedure 117 (Book of Rules, Section 34) is to be replaced by the following:

117 Bendigo Co-ordination of Local Movements

Local movements are carried out in the Independent Siding on the Up side of the main line and the Bendigo Goods Tracks on the Down side. All movements within these areas will be co-ordinated by the Signaller.

Bendigo Goods Tracks

Six tracks, numbered 1 to 6, are provided on the Down side of the main line. Connections are provided to the main line at both the Up and Down ends. Crossovers are provided between Tracks 3 and 6 adjacent to the Mrytle Road overpass, the points between Nos 3 and 4 Tracks being secured with hand locking bars. Clearance point boards are provided at the end of each siding and these also indicate the road numbers to arriving trains.

Prior to signalling a train into Bendigo Yard, the Signaller must contact the Shunter to determine which road the train will arrive into. The Signaller must advise the Driver, but the Driver must obtain permission from the Signaller to pass the Clearance Point Boards. Before ceasing duty the Shunter must advise the Signaller of the status of each road, and, if the next train will arrive before a Shunter commences duty, the road that train will arrive on. The Signaller must record this information in the TRB.

Independent Siding

This siding is located on the Up side of the main line and is connected to the main line near the Up end of the platforms. Various groups of tracks lead from the siding:

* No 3 Road. A single track running behind No 2 Platform. Stop Board 1 is provided at the exit of this siding.
* Carriage Shed. This consists of No 4 Road, which runs parallel to No 3 Road and 4 roads inside the Carriage Shed. Stop Board 2 is provided at the exit of these sidings. Permission for moves into the carriage shed must be obtained from the Station Masters Office. If maintenance staff require to book out a road in the carriage shed for carriage maintenance, this will be organised through the Station Masters office.
* Vehicle Maintenance Shed. Two roads are provided with an inspection pit in one of the roads. Stop Board 3 is provided at the exit of these sidings. Permission for moves into this area must be obtained from the Supervisor. A Hand locking bar and padlock are provided on the points leading to the inspection pit. The key is held by the Supervisor who must ensure that the points are locked except when a move requires operation of the points.
* Wagon Service and Storage Area. Five roads, with lifting jacks being provided in one of these roads. Stop Board 4 is provided at the exit of the Wagon Service Area and Stop Board 5 at the exit of the Storage Area. Permission for moves into this area must be obtained from the Great Northern Locomotive Depot Office. A derail is provided to protect the area on No 5 Road used for lifting jacks and this derail must be locked on the rail whenever work is being undertaken.
* Locomotive Depot. Two roads lead off the Independent Siding twoards the Turntable and Locomotive Fueling facilities. Stop Board 6 is provided at the exit of No 2 Road of the Loco Depot and Stop Board 7 at the exit of No 1 Road. Permission for moves into this area must be obtained from the Great Northern Locomotive Depot Office.
* Freight Centre. This leads off the Up end of the Independent Siding. Stop Board 7 is provided at the exit of this siding opposite the Derail. The derail must be locked on the track whenever loading or unloading operations are being carried out.

Each Stop Board is square with a red background and white lettering. The number appears on the lefthand side. A Clearance Point Board is provided opposite each Stop Board.

Whenever a movement is to enter the Independent Siding past Homes 16 or 18 or a Stop Board, the Driver or Tractor Operator must contact the Signaller and state the train, locomotive, or tractor number, the signal post or Stop Board number, and the destination of the movement. Provided an opposing movement is not being performed, the Signaller may grant permission after obtaining permission from the operator of the destination siding and recording the details of the movement in the TRB. When the move is in clear in the siding, the Driver must inform the Signaller who will record the details in the TRB.

(03.11.2004) **Moe - Herne's Oak Loop** (SW 2169/04, WN 43/04)

Absolute Block Working will be in force for all Sprinter Rail Car movements over this section.

When a Down Sprinter has departed Moe, the Signaller at Morwell must place and sleeve lever 6 normal. The lever must remain sleeved until the Sprinter has cleared the section complete. This may be checked by the Signaller observing the tail lamps at Morwell or by the Driver of an opposing train carrying out a roll-by inspection.

Similiar instructions apply to levers 14 and 16 at Herne's Oak for Up Sprinters. Proving the Sprinter has

arrived complete may be carried out by the Signaller at Warragul, a roll-by inspection, or by a qualified person at Moe (if on duty).

SW 2065/04, 2165/04, and 2167/04 are cancelled.

(03.11.2004) **Morwell** (SW 2166/04, WN 43/04)

Sprinter Rail Cars are not permitted to run via No 2A Road.

04.11.2004 **Seymour - Albury (Broad Gauge)** (SW 2172/04)

On Thursday, 4.11., the radio channel will be changed from Channel 1 to 12. The Tocumwal and Oaklands lines will remain on Channel 1 and change of channel boards will be provided at 115km (Tocumwal line) and 207 km (Oaklands line).

08.11.2004 **Geelong A** (SW 2176/04, WN 43/04)

On Monday, 8.11., double compound 74/75 was replaced by two sets of points further out. Dwarf 64 was relocated 20 metres in the Down direction. Points 73 were relocated 20 metres in the Down direction and restored to use. Levers 68, 69, 92, 95, and 97 were taken out of use. Diagram 26/04 replaced 26/96. WN entry states that W siding was booked out of use, but this may have only been for the period of alterations.

07.11.2004 **North Melbourne** (SW 239/04, WN 44/04)

On Sunday, 7.11., additional track circuits (697 and 759 tracks) were provided as part of the turnout fouling project.

11.11.2004 **Diggers Rest** (SW 2183/04, WN 44/04)

On Thursday, 11.11., a Works Siding was provided. The siding trails into the Up main line at the Up end of the station 40 metres outside Post 3 (Home 10). The siding points are rodded to a catch point in the siding and secured by an 'X' pattern Annett lock. A duplicate lock is provided on lever 10 and removal of the key will secure the lever normal.

Movements to and from the Works Siding will only be carried out under the cover of an Absolute Occupation for the section Diggers Rest - Wintergardens (sic).

Diagram 30/04 replaced 16/01.

13.11.2004 **North Melbourne** (SW 240/04, WN 45/04)

On Saturday, 13.11., additional track circuits (406 and 506 tracks) were provided as part of the turnout fouling project.

14.11.2004 **Lydbrook Loop - Cranbourne** (SW 241/04, WN 45/04)

On Sunday, 14.11., the approach timing on the following signals was reduced: CBE790 (to 42 seconds); LBK680 (to 53 seconds) and LBK 683 (to 61 seconds).

(16.11.2004) **Spencer Street** (SW 243/04, WN 45/04)

Lever 172 will be operated to allow a movement into or out of No 1 Track (not yet in service). Amend SW 235/04.

(16.11.2004) **Broadmeadows** (SWP 3/04, WN 45/04)

Amend Operating Procedure 28A, Book of Rules Section 34.

A 3 or 6 car Comeng train or 6 car Siemens train is not to shunt or dock to or from A Siding while another 3 or 6 car Comeng train or 6 car Siemens train is stationary at No 1 platform (Up platform) or departing to the Up main line.

20.11.2004 **Narre Warren** (SW 248/04, WN 46/04)

On Saturday, 20.11., the pedestrian crossing at Narre Warren - Cranbourne Road was abolished. The pedestrian boom barriers and warning bell were removed.

20.11.2004 **Carrum** (SW 246/04, WN 46/04)

On Saturday, 20.11., additional track circuits (7 & 11 tracks) were provided as part of the turnout fouling project.

(23.11.2004) **Spencer Street** (SW 235/04, SW 251/04 & SW 250/04, WN 44/04 & 46/04)

The new No 1 Track was commissioned (for Standard Gauge moves only). Home 167 was provided to control moves from No 1 Track. Home SST 178 (lever 179) will display an approach operated Low Speed aspect for moves into No 1 Track. Only one movement at a time is permitted in No 1 Track unless permitted by the Manager Rail Safety.

A road crossing crosses No 1 Track and Annett locked hand gates are provided to protect road traffic. An Annett lock (key labelled SSS-1) is provided on Points 175 to secure the points normal (away from No 1 Track). A duplicate lock is provided on the Up side road gate to secure it across the road. A second set of Annett locks (key labelled SSS-2) are provided on the Up side gate post. One Annett lock secures the Up side road gate across No 1 Track and the second secures the Down side road gate closed to road traffic. A final Annett lock (key labelled SSS-3) is provided on the Down side road gate to secure it across No 1 Track.

Each gate is provided with a gate bolt to secure the gate. When the gate bolt is inserted the Annett key can be released.

Normally the gates are open for road traffic with the Signaller at No 1 Box holding Annett key SSS-3. To open the gates for rail traffic, the Signaller must inform the Crossing Supervisor who will collect the Annett key. This will be used to unlock the gate bolt on the Down side gate and allow the gate to be

closed across the road. Insertion of the gate bolt allows Annett key SSS-2 on the Up side gate post to be withdrawn. This key is then used to unlock the gate bolt on the Up side gate and allow it to be closed across the road. The gate bolt is inserted and this allows Annett key SSS-1 on the Down side gate post to be withdrawn. This key is use to unlock Points 175 and the Signaller informed. To re-open the gates for road traffic the reverse procedure is followed.

(Note: Diagram 37/04 shows Home 290, which applies to Up moves along No 1 Track, and Points 241, located between Nos 2A and 2B Tracks, but these are not yet in service.)

Diagram 37/04 replaced 15/04.

23.11.2004 **Long Island Junction** (SW 252/04, WN 47/04)

On Tuesday, 23.11., boom barriers were added to the flashing lights at Western Port Hwy (62.635 km) on the branch.

28.11.2004 **Ararat** (SW 2194/04, WN 46/04)

On Wednesday, 28.11., a dual control point machine was provided to operate the derail and wheel chrowder at the exit of the stabling siding and the rodded connection to Points 17 was removed. The derail and wheel chrowder is now worked by lever 19 and will operate independently of the grade release. The instructions were re-issued and Diagram 32/04 replaced 16/04.

28.11.2004 **Flinders St A** (SW 253/04, WN 46/04)

On Sunday, 28.11., additional track circuits (143, 572, & 761 tracks) were provided as part of the turnout fouling project.

29.11.2004 **Footscray** (SW 255/04, WN 47/04)

From Monday 29.11., Up Werribee line trains will terminate at Footscray each evening from 2200 hours until the last train. (this working will cease in late December and recommence from 24.01.2005).

In addition to the instructions in Operating Procedure 14, Book of Rules, the Train Controller must check that there are no trains approaching Footscray before giving permission for the Signaller to withdraw the Annett key from the circuit controller. The Signaller must clip the points reverse and verbally advise the Driver before hand signalling the train to proceed. The hand locking bars are not to be used. An employee must be stationed on the Up platform to inform the Driver of all trains that the train will be terminating at Footscray.

During the time that suburban trains will be terminating at Footscray, two Down and one Up Geelong trains will pass through Footscray. The Up movement will require the suburban train to shunt to the Down line and re-dock into the platform. For Down movements the Down line must be clear and the Annett key restored to the lock so that the signals are cleared for the train.

29.11.2004 **Alphington** (SW 256/04, WN 48/04)

On Monday, 29.11., the A light on Automatic S294 was lowered 450mm.

02.12.2004 **Reservoir** (SW 258/04, WN 48/04)

On Thursday, 2.12., Automatic T445 was converted to LED lights.

03.12.2004 **Thornbury** (SW 257/04, WN 48/04)

On Friday, 3.12., Automatic T300 was converted to LED lights.

03.12.2004 **Brighton Beach** (SW 263/04, WN 48/04)

On Friday, 3.12., Sidings B and C were restored to service together with Points 27, 31, and 33.

05.12.2004 **Flinders St D** (SW 260/04, WN 48/04)

On Sunday, 5.12., additional track circuits (90, 162, 181, & 345 tracks) were provided as part of the turnout fouling project.

(07.12.2004) **Franklin St Junction** (SW 262/04, WN 48/04)

Amend Diagram 37/04 by renumbering 532 on the Through Country Line to be SST532.

12.12.2004 **Westall** (SW 265/04, WN 49/04)

On Sunday, 12.12., additional track circuits (9, 28, & 73 tracks) were provided as part of the turnout fouling project.

17.12.2004 **Spencer Street** (SW 266/04, WN 49/04)

On Friday, 17.12., Home 177 in No 1 Track was brought into service. Home 177 is situated on the righthand side of the line and controls Up moves towards the dead end. It will display a low speed aspect towards the dead end. SST178 will display a medium speed aspect for moves toward Home 177. SW 250/04 is cancelled. Diagram 47/04 replaced 37/04.

17.12.2004 **Castlemaine** (Rail News Victoria)

On 17.12 the Castlemaine - Maryborough was taken out of service between Castlemaine and Moolort to allow the Victorian Goldfields Railway access to Castlemaine.

The points at Maldon Junction were clipped reverse (for the Maldon line). The miniature Staff Lock was disconnected. At Castlemaine panel, Crossover 13 was clipped normal and Home 10 (from the Maryborough line) was abolished and crossed. The flashing lights at Rowe Street were converted to a standard three track circuit level crossing and the interlocking with Home 10 was removed.

On this day, or shortly thereafter, the Muckleford - Maldon railway line was extended into Castlemaine.

Continued on Page 18

Afternoon Shift at Ballarat East Signal Box

Monday 19 March 1984

By David Harvey.

(Dedicated to the memory of Alan Jungwirth)

Ballarat, that was our destination. We'd caught the pass to Geelong, then hopped on to the Walker railcar that budged its way up the raising grades to Warrenheip, and then scooted down into Ballarat. It was like stepping back in time, 2 position signals as far as the eye could see, 4 wheeled wagons that clutter up every road, loco sheds, turntable, signal boxes, interlocked gates, this was a working museum, the only thing missing was the steam engines. As our train departed Ballarat I positioned my self at an open window of our carriage and, approaching Ballarat East signal box, I glimpsed the figure of a signalman gazing down upon our passing train. I was hooked. I had to get back there one day, and I did.

Ballarat East signal box worked the up end connections to Ballarat goods yard, the junction to the short branch to Eureka, and two sets of interlocked gates at Humffray St, one set protecting the Goods shed tracks and the other the double line to Warrenheip. The section between Warrenheip and Ballarat East was worked under the Double Line Block system. The section onwards from Ballarat East to Ballarat "A" box was worked under the Track Block system whilst the branch to Ballarat East to Eureka used Train Staff and Ticket working. There was also the single track Loco Road which ran from Ballarat "A" box to the loco depot on the up side of Humffray Street.

Ballarate East signal box was situated approximately 1 kilometre from Ballarat station, 118 kilometres (73 miles) from Melbourne via Bacchus Marsh, or 155 kilometres (97 miles) from Melbourne via North Geelong and is approximately 432 metres (1415 feet) above sea level.

Let us turn back the clock 20 years and re-create an afternoon shift at Ballarat East.

The early afternoon

On Monday, 19 March 1984, I commenced duty at 1200 midday and relieved signalman Lucken who had started the previous evening at midnight. Bert had worked the 4 hours longer and I started 3 hours earlier as there were staff shortages and no extra men were available. Signalman Lucken's position in Ballarat was the Annual Leave Relief where he would work a five week stint at one box between Warrenheip and Linton junction and then on to another. He had also been a signal assistant at Gordon, Bungaree, Windermere, Burrumbeet and at Murtoa with its 78 lever frame. I was one of three local relief signalmen where I could work five different boxes in five different days.

At this stage there were 28 signalmen in Ballarat with one attached to Ballarat train control and the remaining 27 working Warrenheip, Ballarat East, Ballarat A and B, Ballarat North Junction (C box) and Linton Junction (D box). Ballarat 'A' was worked by special class signalmen whilst the others were designated 4th class. Ballarat train control was located at the down end of No 2 platform in a very unassuming location.

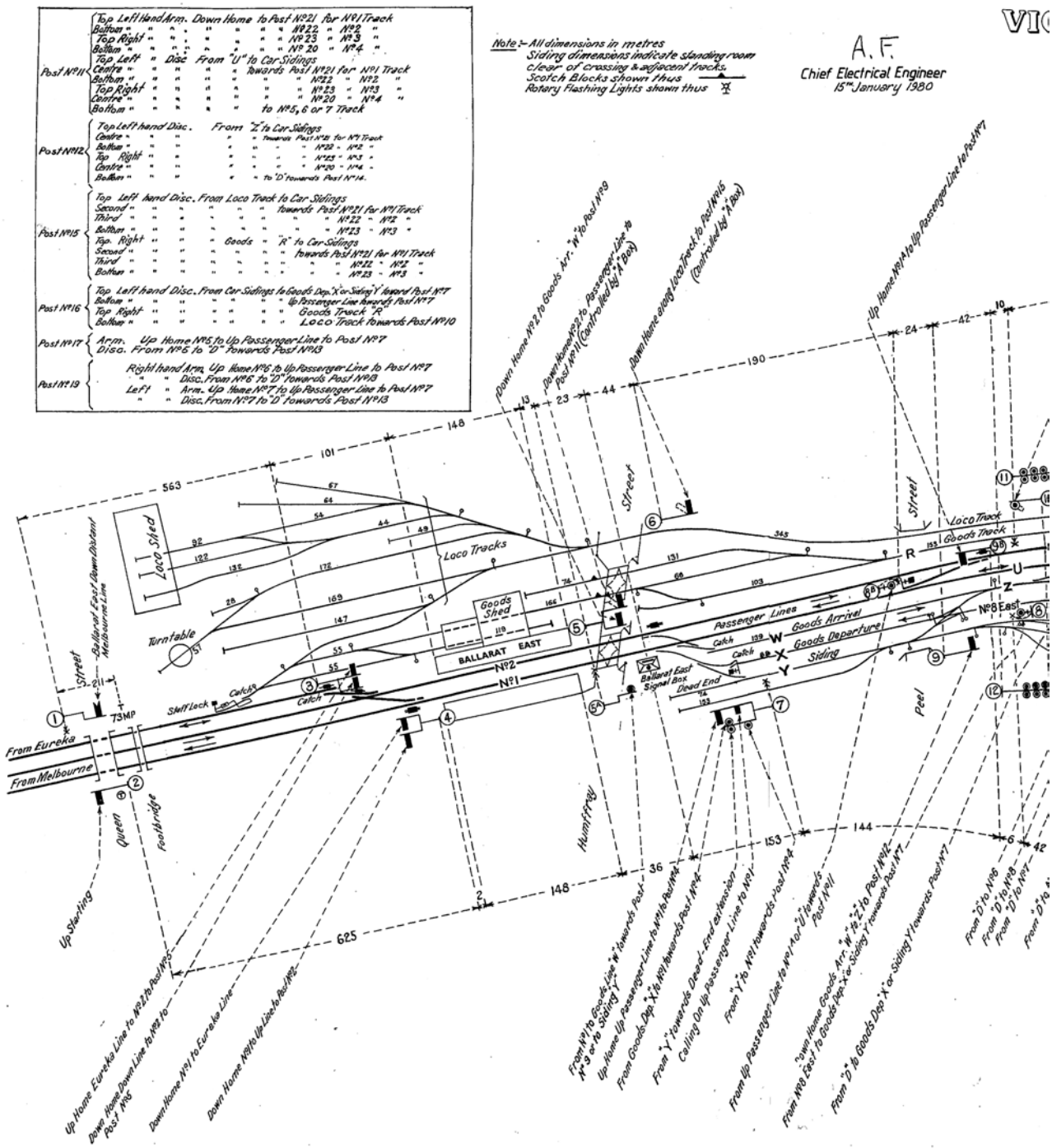
After Signalman Lucken advised me of the train running he left and I prepared to make

(Left) Looking towards Ballarat from the footbridge at King Street on 6 September 1990. Ballarat East signalbox is at the top right of the photograph. The track immediately underneath the photographer is the erstwhile Eureka (Buninyong) branch. By the date this photo was taken the branch had been lifted except for a short stretch which formed a headshunt for the wagon repair centre in the former Ballarat East goods shed on the left of the picture. Despite this the signalling for the junction was still intact, as was the staff lock and the rodded catch points in the lead to the repair centre. The staff lock must have been very inconvenient as. the shiny top on the rails showed that the points were still in regular use, at least for moves from the repair centre, and each occasion would have required the Staff to be fetched from the box.

myself at home as I would have a long shift. The first of the trains started at 1213 hours when Ballarat "A" Box belled out an Up goods. I got line from Warrenheip, and at 1215 hours, 9146 Up Interstate goods passed with C501 leading and two brand new "A" class Locomotives, A71 and A73 with equal to about 60 vehicles. It appears that the two A class engines were most likely on their delivery run from South Australia. Warrenheip sends the train arrival bell code at 1236 hours.

At 1308 hours "A" Box bells No 224 Up Geelong Goods. I get line to Warrenheip, send the departure signal, wait until it is acknowledged, then I send the 2-2-2 bell code (assisting engine in front), and Warrenheip acknowledges. This tells the signalman at Warrenheip that he will have to shunt and remove the assisting locomotives on its arrival. At 1310 hours, T 367, T 332 and T 374 hauling 42 tarped GY wagons and a ZLP guards van begin its assault on the 6 kilometer climb up the Warrenheip Bank. No 224 is a 2230 hours Through Goods ex Maryborough Monday to Friday that is due to depart Ballarat East at 0133 hours. It appears this train is now running 12 hours 37 miuntes behind schedule according to the working time table dated 31st Oct 1982. I receive and acknowledge train arrival from Warrenheip at 1337 hours. A whistle is heard at 1345 hours, it is W 250 going to the Loco shed along the Loco road. I swung the gates and it crosses the road safely. Though the Loco road doesn't go through the gates they are still to be swung to protect the open crossing against road traffic.

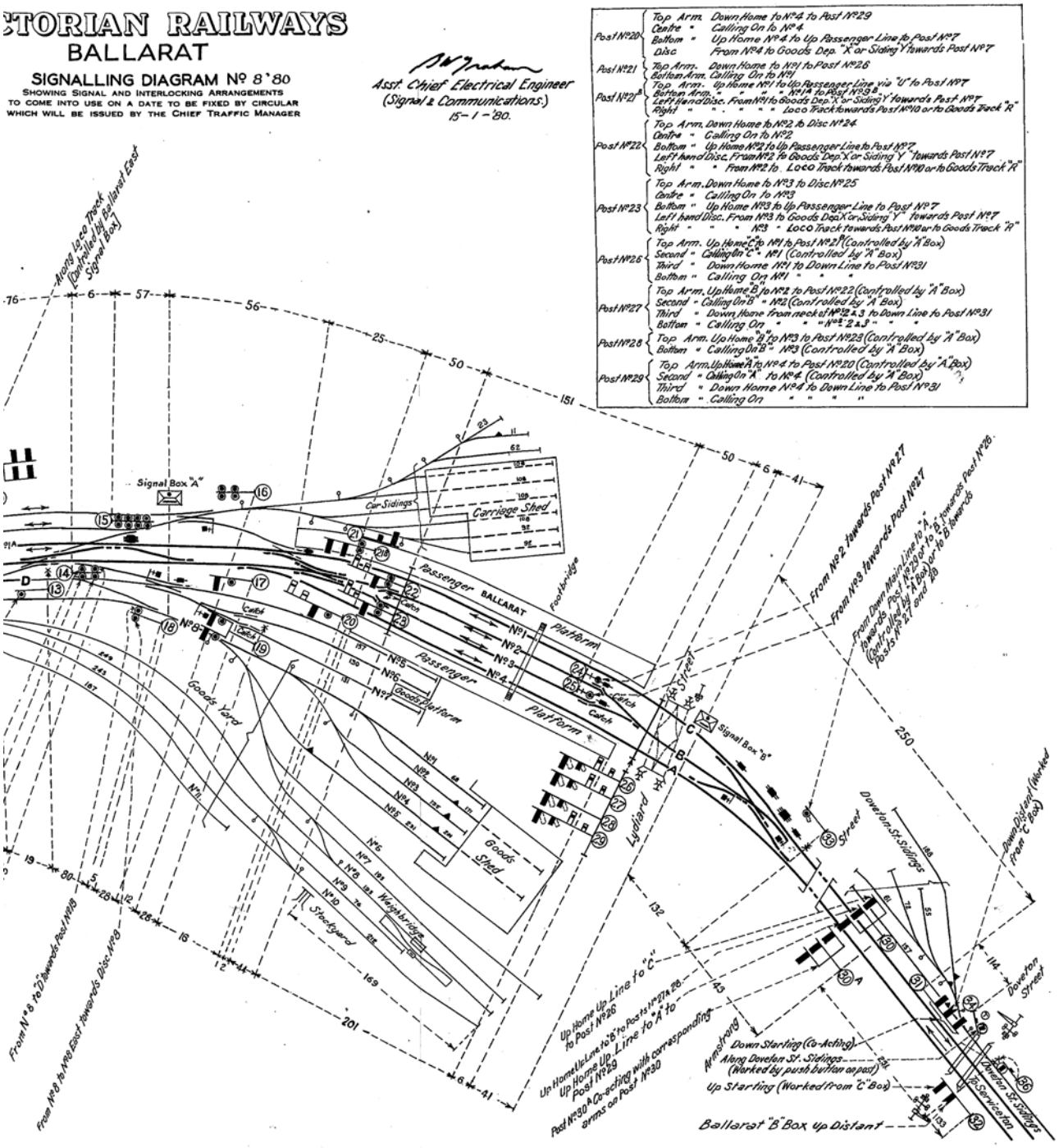
At 1348 hours "A" Box rings out an Up Goods (2 long rings), and slowly No 428 goods (ex Donald Monday to Friday as required) appears. I swing the gates, get line and depart it to Warrenheip at 1354 hours as No 428 Goods with T-351 and T-359 grind past with an endless rake of GYs, complete with customary flapping yellow tarps. Every now and again you could see the wheat escaping from the doors and the corners of these 4 wheel wagons, spilling their load



like a slightly running tap. By the end of the grain season the Up line from Ballarat to Warrenheip is just like a green strip of carpet as the wheat had self seeded, whilst the down line remained clean from this sprinkling of lost grain.

At 1401 Warrenheip applies for line for a Down Pass from Ballan under the 4 bells. It departs Warrenheip at 1408 and I acknowledge his 2 bells and then bell it on to "A" Box. Seven minutes later B 61 creeps through, at 1415, with 8115 a local Ballarat Pass. The Pass arrives complete so I clear it off on the Block instrument and immediately Warrenheip gets Line and departs a Light Engine, which in turn I relay on to "A" Box with the appropriate bells. Just then, 3 long engine whistles are heard, which is the whistling code for engines shunting in the yard wanting to go towards the Up main line from the Goods Departure road. I swing the gates and "A" Box rings me on the block phone, "it's the Eureka Pilot," he states. Having given the pilot the appropriate signal I grab the Ballarat East – Eureka Staff, as this section of line is worked under Train Staff and Ticket Rules, (Tickets not issued). I leave the box and go to the staff exchange platform where engine Y 152 stops and the shunter advises me that when they return they wish to arrive into "Y" Siding via the Up line. With that, the pilot makes its way along the main line to post No 4 where it has to wait for the Light Engine to pass from Warrenheip as the Eureka line swings over the Down Main line. Under the Double Line Block rules, (except at Terminal Stations) the line must be clear 400 meters beyond the Home Signal. The Light Engine, T 367 ex 224 Goods passes at 1430 hours and the Eureka Light Engine departs at 1433 hours.

Ballarat East signal box is double storied of timber construction with about 20 rickety wooden steps to be climbed before reaching an outside landing with an external timber door. Upon opening said door there is a washbasin and a glass paned window that looks out on to the street. To the immediate left is another door marked " toilet' and to the



(Left) Looking towards Melbourne from the former Up passenger platform at Ballarat East on 6 September 1990. For some reason at Ballarat East the Down platform had been removed, except for the shelter shed, while the Up platform remained but had been cleared of buildings. In the foreground is the junction home for the Eureka line. In the background a Y class and a tank wagon sit around the turntable in the former Ballarat East loco depot. (Right) The box diagram in use in 1984. The diagram was drawn in 1900 and was one of the last of this style in use. In this style of diagram each line of rail was shown. The normal lay of interlocked points was shown by a black point. This can be most clearly seen with the catch points 25 and 28 which, of course, normally lie for the derailing position.

right, another door that steps up into the signal box. The outside door rattles then again the whole box creeks and groans. I can now hear somebody climbing the steps and opening the outside door. It then closes and a loud knock wraps upon the inner door which then opens. "I'm looking for 9121 goods," is the request from a goods guard. "It will be here about 1530 - 1545 hours" is my reply. The guard travelled to Ballarat on 8115 Pass that arrived at the platform at 1417 hours. We then briefly exchange pleasantries, and also discuss the sad state of the rail industry and how his job as a goods guard will soon be abolished. With an hour to wait till his change over he decides to nick up the street for a few supplies. Upon leaving he places his guard's kit bag under the steps and then makes his way up Humphrey street toward the Eastern Station Hotel where its brightly painted windows proudly advertise the fact that topless bar maids are on the premises and that braised rabbit and veggies can be purchased for lunch for the princely sum of $2. Now I'm not saying that the guard went to the hotel, that would be against the regulations, but I have to say that braised rabbit is quite a tasty dish.

The late afternoon

"A" box then bells out an up pass, I get line to Warrenheip and at 1447 hours, B 61 passes with the local Melbourne pass. At 1502 hours a whistle is heard; it's the Eureka pilot challenging the home arrival signal. I make the road to the up line and show the driver a green flag from the box as there isn't a signal to cover this move, and only then does Y 152 leave the former Buninyong line and travel down the up line (No 1 road). It then gets the set back disc on post 5A to allow it to make its way into Y siding which leads to the maze of tracks within Ballarat yard. Tagging along behind Y 152 were two empty fuel tankers. The Eureka line's only traffic these days is generated by tankers of fuel to a local petroleum distributor. Weekly Notice No 39 from the year 1937 states that all Buninyong line trains are to carry the train staff. According to the working time table (Western and South Western Districts) dated 31-10-1982 the running of trains between Eureka and Buninyong were discontinued on and after 1 March 1947 whilst the Ballarat to Buninyong Passenger service was withdrawn on the 24 November 1930. (Sadly the Ballarat east to Eureka section closed for all traffic on the 1st of December 1986.)

Ballarat train control phone rings; he tells me a pilot to Warrenheip will depart the yard with in 10 minutes. I tell control the train running information including that No 437 goods has just rattled past at 1528 hours. Today No 437 goods was hauled by veteran locomotive B 70 with a rake of 51 empty 4 wheeled GY wagons which entered the Ballarat yard via the goods arrival road. No 437 goods runs Monday to Friday as required departing North Geelong yard at 1315 hours and due at Ballarat at 1640 hours. I send train arrival to Warrenheip at 1530 hours and once again he asks line clear under 5 bells.

A whistle signal is heard (short, long) which means A siding to the up line. "A" box then phones "Bona for Warrenheip" he states (A Bona is a railway term for an engine and guards van only). I make the road, swing the gates get line clear and depart Y 154 and a CP van at 1535 hours. Warrenheip in turn sends me train departure for a down goods. I then wander out to the staff platform and hand up to the driver of Y 154 a printed form, which is known as a T.R. 97. If all concerned (e.g. Track gangs, Gatekeepers, Signal boxes, Intermediate stations) are not advised a special train is running the driver of the special must be warned in writing by the T.R. 97 form. A T.R. 97 will be issued for one or more of the following circumstances:

1. When the special train notice is not placed on the notice board before 0730 hours the previous day.
2. On lines where special train signals are authorized but such signals were not carried.
3. Where the special train signals were carried, but the train is running between 1615 hours and 0730 hours. (Special train signals were carried on the rear of trains to indicate a special train will follow or run in the opposite direction). Special train signals were not to be carried on a number of country lines including Geelong to Warrenheip and Sunshine to Dimboola.

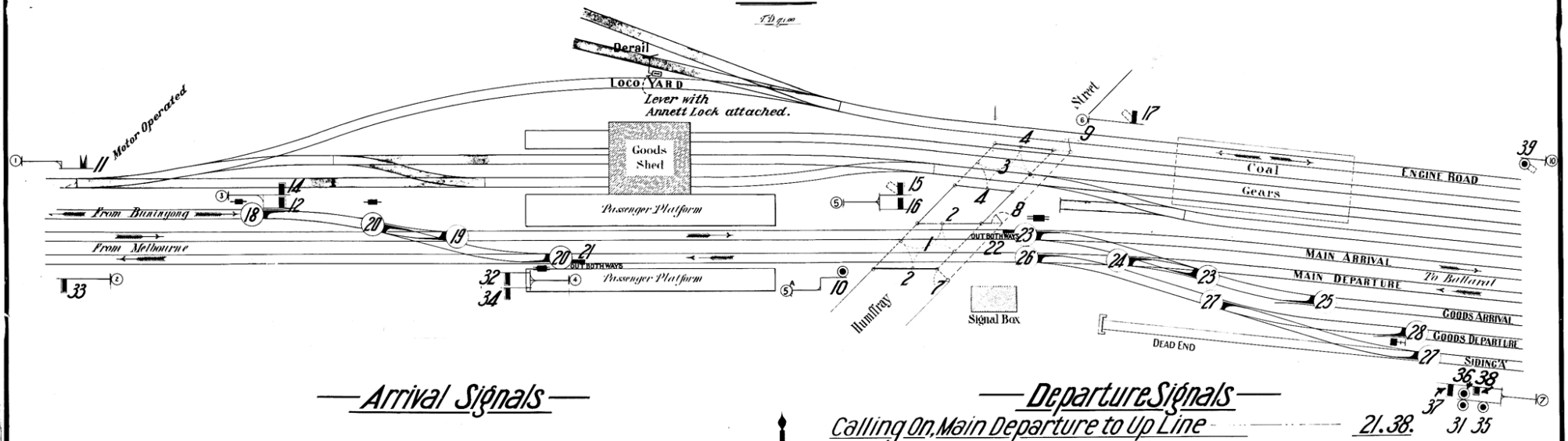
The ground bell rings, so I close the gates and place both

— V. R. —

— BALLARAT EAST —

— DIAGRAM —

K. C. H. COUSIN.
Signal & Telegraph Engineer
6-2-'67



— Arrival Signals —

Melbourne to Main Arrival	22. 15. 12. 11.
„ „ Goods „	26. 25. 23. 22. 16. 12.
Buninyong to Main „	22. 18. 19. 21. 15. 14.
„ „ Goods „	26. 25. 23. 22. 18. 19. 21. 16. 14.
Loco. Yard to Engine Road	17.
Up Line to Goods Arrival	25. 24. 10.
„ „ „ Siding "A"	26. 27. 10.

— Departure Signals —

Calling On, Main Departure to Up Line	21. 38.
Main Departure to Melbourne	21. 33. 34. 37.
Goods „ „ „	21. 26. 28. 33. 34. 36.
Siding "A" to Melbourne	21. 26. 27. 33. 34. 35.
Main Departure to Buninyong	18. 20. 21. 32. 37.
Goods „ „ „	18. 20. 21. 26. 28. 32. 36.
Siding "A" to Buninyong	18. 20. 21. 26. 27. 32. 35.
Engine Road to Loco. Yard	39.
Siding "A" to Dead End	31.

(Above) Looking towards Ballarat over the Humffray Street level crossing from the former Ballarat East Up platform on 31 May 1985. Ballarat East signalbox is on the right. Humffray Street was the last level crossing in Victoria to have two full sets of interlocked gates. As can be seen from the diagrams the second set (on the left here) protected the two roads leading to the former goods shed. The engine road, far busier than the tracks leading to the goods shed, crossed Humffray Street beyond the second set of gates. Post 5 controlled moves from the Down main line to either the Passenger Lines or Goods Arrival (Road W). The use of a Home signal for a move into a siding was an old practice which lasted longer at Ballarat than anywhere else. (Photo Andrew Waugh) (Below) Looking towards Melbourne over the Humffray Street crossing. The normal means of access to this type of signal box was by means of a stairway at the end away from the gates. With the taller boxes, however, it was common to provide a door in the middle of the back wall and a stairway at the rear of the box. The lean-to extension of the upper landing houses the toilet; these were not an original feature of most boxes but we do not know when this convenience was provided. (Photo David Langley)

(Above) Looking north along Humffray Street on 7 July 1987. The Engine Road can be seen crossing Humffray Street in front of the first set of gates. Ballarat East was a tall box, probably to give a clear sight over the former station buildings towards Melbourne, and had been extended at the Down end in 1891. The extension is clearly marked by the original corner post, three windows from the left, and the off-centre locking room windows (Photo Andrew Waugh)

down home signals to proceed as 9121goods approaches. The guard that had arrived earlier is now standing on the up line outside the box and as the engine is about to pass him he raises both his arms and forms a diagonal cross in front of his face with them. This was a procedure to advise loco crews that they were to cross another train, to change crew or change guard, as was to occur in this case. This "arms being crossed in front of the face business" was quiet a common sight prior to driver to guard radios being introduced. The guard of 9121 is leaning out the van door, one hand hanging on, the other clutching his two-way radio, no doubt barking out instruction to the driver to ' red light' his train so he can effect his change over. At 1547 hours 9121 goods grinds to a holt, the new guard throws his bag up through the open door closely followed by himself. It's not hard to miss these brightly painted yellow and green AVAY brake vans. At 1552 hours C510 and S315 with equal to 94 vehicles are away on its journey to Adelaide. Warrenheip sends train arrival at 1553 hours for the Bona, as do I for 9121goods.

At Ballarat East there is a T.R. point located opposite the signal box. This is where a locomotive entering traffic encounters its first signal upon leaving the confines of a locomotive depot. The fireman of engine W250 has rung A box informing the signalman that they are ready to enter traffic. There isn't any verbal communications between East box and the T.R. point, so when the pilot is ready to depart the fireman rings a buzzer type bell, which sounds in the East Box. I swing the gates and restore the control lever No 39 to its normal position and place lever 17, Post 6, to proceed. At 1555 hours W250 takes off in the direction of "A" box along the loco road.

Warrenheip gets line and departs a local goods at 1608 and at 1620 hours Y154 goes on to the goods arrival with equal to 10 vehicles. It's just rubbish that was in siding A at Warrenheip; a couple of louve vans and container wagons which will make their way to the Ballarat North workshops for repairs. At 1621 hours I send train arrival to Warrenheip and once again he asks line clear for another Geelong goods which he departs at 1626 hours. I then use the description bells: long, long, short, short, short, for a goods to "A" box (if this train was a Pass I would have sent; long, long, short, short).

As soon as Warrenheip departs a train to Ballarat East, the signalman there will also bell it on to the signalman at "A" box using these bell codes. This tells the signalman at "A" box that a train has left Warrenheip but it doesn't tell him if it's from the Melbourne or Geelong line. The description bell gives the signalman time to clear the main lines, which may be blocked from shunting. Another reason for giving "A" box warning is that the Track Block system is in force between East box and "A" box so in consequence "A" box has to electrically release the two down home signals on post 5. When the release has been given a light will appear in the block indicators above levers 15 or 16 if the indicator light button has been pressed. This time the release has been given for the goods arrival road so I swing the gates, make the road and at 1638 hours No 239 goods hauled by X 39 and T 407 makes its way onto the arrival road hauling 17 petrol tankers, 2 safety wagons and a ZMF brake van. No 239 goods is a North Geelong to Mildura fuel train, which departs North Geelong yard at 1202 hours Monday and Wednesday only whilst on Tuesday, Thursday, and Friday No 239 will originate ex Ballarat Yard. No 239 departs Ballarat Monday to Friday at 1645 hours. I send train arrival to Warrenheip at 1640 hours. At 1647 hours "A" box bells out the up Horsham pass (short, short, short, long), so I obtain line clear and at 1649 hours loco B69 roars past as if there's no tomorrow, on its way to Melbourne via Bacchus Marsh.

Now you may ask how does the signalman at Warrenheip know to which direction the trains are to travel seeing that Warrenheip is a junction station? At most signal boxes a daily train wire is telephoned which lists the trains that are to run the following day. Also there is a local arrangement of bells on the Double line block system between Warrenheip and Linton Junction. A goods going to Melbourne or Ararat would be signalled under 5 bells (is line clear for fast goods) whilst a passenger train would have 4 bells. Goods trains going to or from Geelong, Maryborough or Skipton would be signalled under 4 pause-1 bells, (Is line clear for livestock through goods or ballast train) whilst passenger trains use 3 pause 1 bells. This applied in both directions as most trains from Geelong went into the Ballarat yard whilst most trains from Melbourne kept to the main line. If all else fails you'd just pick up the block phone and

tell them as there are no description bell between Warrenheip and Ballarat East.

At 1730 hours Warrenheip asks 'Is line clear' under 3 pause 1 bells for 8121 passenger (pass off the Geelong line) it departs Warrenheip at 1737 hours, I then bell "A" box (long, long, short, short), and at 1743 hours locomotive B72 hauling a 3 car N set passes with only minutes to travel till its journey ends. This pass, which ran via North Geelong loop, was running 16 mins ahead of time (the working timetable table shows 1757 hours at Ballarat East). This train only has two stops, Spencer Street and Ballarat. It appears to be the longest non-stop broad gauge passenger journey that one can make in Victoria, a distance of 156 kilometers in 2 hours 10 minutes, whilst the down Horsham pass (8105) travels the same way of a morning Monday to Saturday but is only allowed only 2 hours 3 minutes.

At 1744 hours I clear the pass off the block and straight away Warrenheip asks line clear again under 5 bells and duly departs this down goods at 1750 hours. Soon I can see the headlight of this train as it rounds the curve and crosses the Caledonian Bridge still 1.5 kms from the box. Even the down distant signal gets a run which isn't that hard to pull over seeing that it is motorized, so at 1800 hours 9127 interstate goods with X48 and Australian National Loco 966 pass with dynamic brakes screaming as it attempts to hold back its load of containers all bound for Adelaide.

At this time of the day I'd had better think about placing the two gate lamps out on the interlocked gates. These kerosene-powered lamps will last all night and it will be the day shift signalman's job to clean, polish and refill them ready for the following evening.

(Below) An overall view of Ballarat East looking towards Melbourne from the goods lines. The two sets of gates can be clearly seen with the main line gates on the left and the gates over the lines to the former goods shed on the right. The former goods sheds can be seen in the distance. The coal gears were on the right in this photo, but they had long been removed and the embankment made good. (Photo: David Langley)

Evening

It is 1819 hours, two long bells ring out from "A" box. It's No 430 Up wheaty with T355, T320, and T359 in charge bound for the port of Geelong with 17=34 bogie wheat hoppers. No 430 is a through goods that originates the other side of Maryborough every Monday to Friday and departing Ballarat at 1615 hours. It is running just over 2 hours late according to the W.T.T. The T.R. bell rings, it is T323 going from the loco to "A" box. It goes one way as No 430 goes the opposite direction.

The signalman at Ballarat East doesn't get any warning of engines returning to the loco sheds. Most engines will whistle just prior to the road crossing then stop and the fireman will leave his engine armed with a red flag or lamp to protect the passing of this engine from road traffic whilst the signalman will swing the gates on the other side seeing that the loco road doesn't go through the interlocked gates.

The next couple of movements were pretty straightforward with Y152 returning to the loco at 1828 hours followed by Y154 at 1835 hours. Both Y class engines were gainfully employed as day shift pilots in the Ballarat yard. At 1904 hours Warrenheip asks is line clear for a down Geelong goods which he departs at 1910 hours. I than bell it on to "A" box under long, long, long, short, short which he acknowledges, but I don't get the electric release for the home signals. I ring the shunters cabin "Where do you want No 441 goods?" I ask. "Leave it sitting on the main line, its black banned by the A.R.U.," states the shunter.

At this time it was one of the Australian Railways Union's ploys not to go totally go on strike but just have selective black bans on various trains. They would just hold them up for one hour, two hours or whatever, and this action would cause major delays to the following trains as the effect snow balled. No 441 is a Monday to Friday as required goods, North Geelong yard to Ballarat, which has just arrived at 1925 hours with T399 and T340 in charge. I show the driver a red light out the window and he acknowledges with a short pop on his whistle. Ballarat yard black banned, the mainline blocked by 40 GH wagons and two passenger trains approaching Warrenheip at a great rate of knots. This

(Above). Looking towards Ballarat A box and the passenger station from the Humffray Street gates. Ballarat East box worked the connections to the Up end of Ballarat goods yard, and the points from the Down Main line to the Goods Arrival Road can be seen in the foreground with the lead from the Goods Departure Road next to it. The goods yard itself was located around the curve behind the trees, as was the passenger station. Ballarat A box can be seen in the distance. The passenger lines between Ballarat East and Ballarat A were worked by Track Block.

is a brilliant tactical move by the A.R.U. designed to create maximum disruption through very little effort. The fireman from the blocked wheaty arrives at the box.

It is now 1928 hours. I tell him the whole story and his reply is "we're a Maryborough crew, how are we supposed to get home?". The Ballarat train control phone rings, "shunt that wheaty on to the Eureka line, there are light engines at the starter at Warrenheip and the Pass is right behind it," Control tells me. I give the fireman the Ballarat East – Eureka train staff and he departs mumbling something about how he always misses his changeover and ends up working overtime. I swing the gates, as the train will have to draw forward to clear the Eureka junction points, and also get the signal release from A box.

Its now 1933 hours, the fireman from 441goods has told the driver all the news and the train is now moving forward as the fireman is walking toward the rear of the train to advise the guard of the circumstances, after all, driver to guard radios and train to base radios are only on most interstate and some intrastate services. The train stops clear of the points and I make the road so it can set back on to the Eureka line. I can see the guard waving the train back with a green light. The guard relays this to the fireman and in turn the fireman relays the setback signal to the driver. 441 goods begins to set back with its wagons noisily protesting as the slack in the automatic couplers are taken up. The 3-2-1 signal is received from Warrenheip. This is the train-waiting signal. Its now 1935 hours and T323 makes its way along the loco road as its day is completed. It will soon be refueled and sanded in readiness for its next arduous task, which will be the Ballarat day shift pilot.

No 441 goods has finally cleared its rake of vehicles from the main line and it is now 1937 hours. I send train arrival to Warrenheip. He acknowledges and asks line clear and departs light engines, also at 1937 hours. At 1945 hours T359, T320 and T355 pass through. These locos were off No 430goods which left here at 1819 hours. It appears that No 430 goods was also black banned and its 17 wheat hoppers are now sitting in C siding at Warrenheip. The 3-2-1 train-waiting signal is again received and acknowledged. At 1946 hours I send train arrival to Warrenheip and again he asks line clear and departs a train at 1947 hours. It's the local Ballarat Pass; I bell him on to "A" box and at 1955 hours it sails past with B75 taking the honours. With its journey nearly over it arrives into No 4 road (No 2 platform) where the carriages will be cleaned and watered in readiness for its next adventure which will be the 0645 departure to Melbourne tomorrow morning. The train arrival signal is sent to Warrenheip; straight away he gets line and departs another down pass at 1958 hours. At 2004 hours, X46 eases the down Dimboola pass through on its way to No 1 platform. At 2006 hours the locos from the black banned wheaty that was left at Warrenheip, T355, T320, T359 make their way along the loco road to the sheds after their short and unsuccessful attempt to make it to the port of Geelong.

Late

After all the excitement, if you could call it that, it was time to make my tea and pop the kettle on as there was a lull in the traffic. The still night air is pieced by the shrill of three long whistles (goods departure to up main line). I then dispatch B67 at 2124 hours with 9174 up goods hauling equal to 35 vehicles. It crosses on the double line with 8145 down pass with B68 in charge at 2129 hours. I send train arrival to Warrenheip, he gets line clear, and departs a down Geelong goods. Within 10 minutes yet another B class loco No 61 makes its way on to the goods arrival road at 2140 hours with 15=30 louvres. This train generally doesn't go into the Ballarat yard for this is 9141 Mildura fast goods but tonight

it will have to shunt. I would have to say at this time (March 1984) the Mildura fruit train took precedence over all other trains when it came to safeworking. Passenger and interstate goods train would be shunted aside to let 9141 goods maintain its timetable, as it would have to travel to Mildura, pick up the fresh fruit and be back in Melbourne the next day well before the sun as up.

One night whilst working at Warrenheip, the story went something like this: 9174 up Melbourne goods was at the up home departure signal waiting to go to Bacchus Marsh but blocking it was 9147 down interstate goods which was sitting at the down home arrival Bacchus Marsh line. In turn blocking it was No 430 up Geelong goods that was sitting in B road, which is the end of the double line before it turns into single line to Geelong. Due to the length of 430 goods it had electrically track locked the Bacchus March line junction even though 430 goods wasn't physically blocking the junction. 430 goods had earlier detached two bank engines from the front of its train and they had been squirreled away in A siding.

The reason for all this hold up was that we were waiting for 9141 goods, the Mildura fruit flyer, that soon appeared as it rounded the curve off the Geelong line. Five train movements at Warrenheip, I never saw that again. It's just that every thing arrived at once, but then it was always a bit of a bottleneck between Warrenheip and Ballarat North in the early evening.

"A" box bells out 2 long rings, l swing the gates, get line clear to Warrenheip and at 2208 hours, X32 blasts its way passed the box with 9196, a Monday to Friday through goods which originates in Donald, 182 kms distant on the Mildura line. What a train load of rubbish, louvres bogie wheat wagons, GYs loaded with wheat, 4 wheeled KMQs with standard shipping containers, flats, open wagons and the unforgettable smell of bitumen tanks. To top it all off was the ZLP guards van tagging along belching out a thick cloud of smoke from the potbelly stove that was probably filled to capacity with briquettes.

As the van passed the box, B68 was making its way along the loco road from "A" box. As 9196goods slowly grinds its way up Warrenheip bank it's passed on the double line by 9147down interstate goods, which is hauled by C508 and C505. I bell it on to "A" box at 2213 hours. 9147 and 9170 goods had a change of guard at Bungaree. At 2215 hours l send train arrival, Warrenheip's answer to that is that he asks line clear and departs another goods that has originated in the Geelong yard. I send long, long, long, short, short rings on the description bells to "A" box and ring the shunters cabin asking were they want this train. It's to go onto the goods arrival road, so l make the road, close the gates, and when the train has passed the distant signal and in view of the home, place the homes to proceed. No 443 goods with X34 and T409 up front slowly snakes its way into the yard.

It is now 2234 hours and engine T352 makes its way along the loco road toward the sheds. I have no idea where this engine originated from, perhaps off the Maryborough line. The goods arrival road holds equal to 30 vehicles. No 443 goods has equal to 46 GH wagons and has stopped at the down home (post 9) in the yard, still with its tail end foul of the up and down lines. 443 goods begins to move forward, the slack in the automatic couplings is taken up. It's a hard sound to describe when the slack is taken up between 4 wheel wagons. It's a bit like a domino effect as each vehicle is shoved a little further than the last until the guards van is whipped forward, going from a standing start to 20 km/h in less than one second.

At 2238 hours No. 443 clears the down line and l send train arrival to Warrenheip and once again he asks line clear for a down pass. It departs Warrenheip at 2246 hours, l bell "A" box (long, long short, short) but he's already given me the electric release for the down home on post No 5. I have swung the gates and all signals to proceed. A headlight is seen in the distance as the express crosses over the Caledonian bridge. At 2253 hours the Overland to Adelaide hauled by X51 and Australian National loco 930 slink passed with 16 passenger cars in tow. With an air of importance the express vanishes into the maze of racks in the Ballarat yard On some nights a good laugh could be obtained just by watching the Overland pass by. People in the carriages couldn't see out but with the light behind them, you could see in. There were some weird and wonderful sights to be seen on that train so much so that it would prompt you to ring your mate in the next box to tell him to watch out for car number such and such. After all, Rule 7 states that the safety of the travelling public is the most important duty of a railway man.

Next we had the down Vinelander heading for Mildura with B80 up front passing at 2316 hours.The consist tonight of 10 cars includes two wooden sleepers cars but l failed to note their names. I send train arrival to Warrenheip and advise train control of all the news. There are three train control phones at Ballarat East: one for Geelong, one for Melbourne, and one for the Ballarat board.

Long short whistles are heard, it's 9174 goods wanting to depart from Y siding to commence its journey to Melbourne. So once again the gates are swung and line clear is obtained to Warrenheip and at 2332 hours, X37 is on its way with its load of containers. Fifteen minutes later I can still hear it blasting its way up Warrenheip bank. My relief, signalman Linahan arrives at 2355 hours and I proceed to tell him of the entire train running saga that's been and gone during my shift.

With all that said and done, I make my way down those rickety steps into the cold night air and out to the briquette shed where my trusty bicycle has been waiting. Upon entering Humphrey Street I glance back, and there gazing out of the window is signalman Linahan, the same man who gazed out of the box upon the train that I was travelling on when I was a lad all those years ago. Its funny how some things don't change with time?

Peddling hard up Scott's Parade that parallel the railway line, I can still see the 40 GH wagons on the Eureka line that stretch back under the Queen street bridge. I wonder if the Eureka line ever saw trains this big?

All the train movements in this account were dealt with in accordance with the rules and regulations. Its just that some of the safe working procedures may not of been mentioned in this article, however it doesn't mean to say that they never happened.

Acknowledgements /References.

* Weekly Notice extracts—(Lambert-Jungwirth)
* Signalling Record Society, tour notes Sunshine to Ballarat show day tour 24/09/1992
* Working timetable Western and South Western Districts 31/10/1982

SIGNALLING ALTERATIONS

(continued from page 7)

Castlemaine A box was restored to service to work the branch, back platform, and sidings on the Down side. The line is worked by Train Staff and Ticket with the section Castlemaine - Muckleford (Black ticket boxes).

At Castlemaine A, Posts 4, 5, 8, 9, 10A, 13, and 14 were brought into use. The interface to the panel was not commissioned. Catch 65 was spiked reverse and levers 64 and 68 (pilot lever from panel) were sleeved. No track circuits were commissioned. Unused arms and discs on Post 10A were covered with hessan.

19.12.2004 **Hampton - Sandringham**
(SW 267/04, WN 50/04)

On Sunday, 19.12., pedestrian gates were provided at the Crisp St foot crossing (18.136 km).

(21.12.2004) **Craigieburn - Donnybrook**
(TS 76/04 & 79/04, WN 50/04)

The Up and Down lines were slewed to a temporary alignment between 27.132 km and 27.800 km to allow construction of the freeway underpass.

(21.12.2004) **Brighton Beach**
(SW 269/04, WN 50/04)

Siding A was restored to service.

13.01.2005 **West Footscray**
(SW 8/05, WN 2/05)

On Thursday, 13.1., Dwarf 28 was removed (setback moves from Up platform). Amend Diagram 17/96.

15.01.2005 **Franklin Street**
(SW 3/05, WN 2/05)

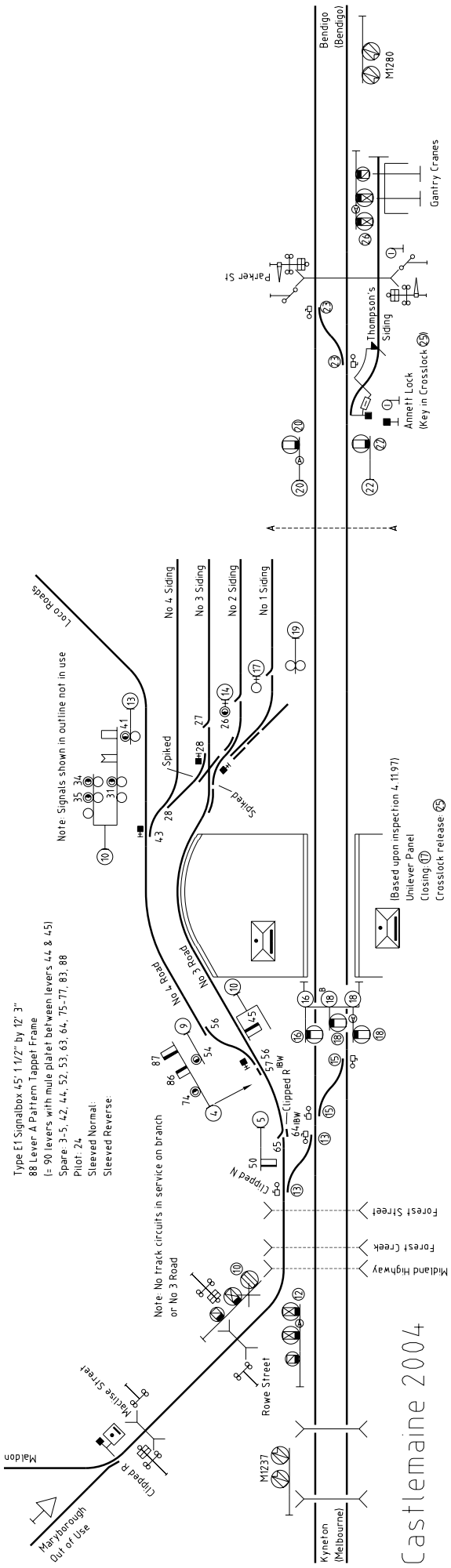
On Saturday, 15.1., an additional track circuit (412A track) was provided as part of the turnout fouling project.

16.01.2005 **Franklin Street**
(SW 4/05, WN 2/05)

On Sunday, 16.1., additional track circuits (431A, 533A, & 586A tracks) were provided as part of the turnout fouling project.

(18.01.2005) **West Tower - Creek Siding**
(SW 11/05, WN 2/05)

Access to the Creek Siding (formerly the Great Northern Terminal) will be co-ordinated by Southern Shorthaul Railroad (SSR). The Signaller West Tower must not permit a rail movement into the Siding until authority has been obtained from SSR. SW 1266/99 is cancelled.

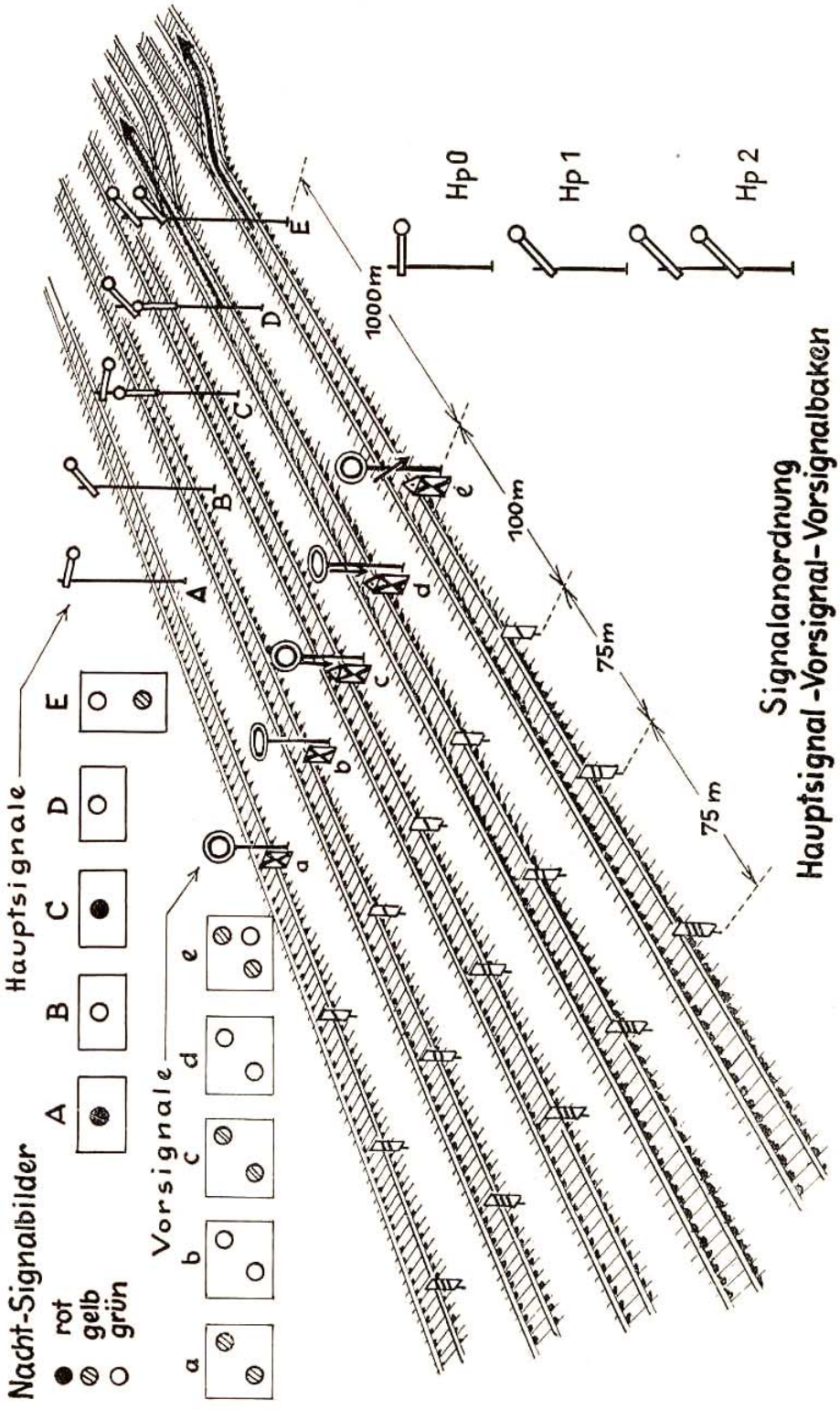


German Railway Signalling

I would like to thank Warren Doubleday for supplying the diagram at left from a 1953 Trix catalog to illustrate, far better than I could explain in words, the indications and uses of Hauptsignale and Vorsignale.

The first and third tracks shows the Hauptsignale (Home signal) and Vorsignale (Distant signal) at Stop. The second track shows both signals at clear. The fourth track shows the signals at clear for a straight (full speed) movement. The last track shows the signals at clear for a diverging movement; note that both arms of the Hauptsignale are off (Hp2), while the disc of the Vorsignale is on, but the arrow is off.

The night signal aspects (Nacht-Signalbilder) are shown by the dots: red (rot), yellow (gelb) and grün (green).

The three boards located 100 metres, 175 metres, and 250 metres in advance of the Vorsignale are Vorsignalbaken (Distant signal beacons) which provide advance warning that a train is approaching a Vorsignale.

The markers located at the foot of the Vorsignale are Vorsignaltafel (Distant signal notice boards) which seem to indicate whether the Vorsignale can show for a diverging move.