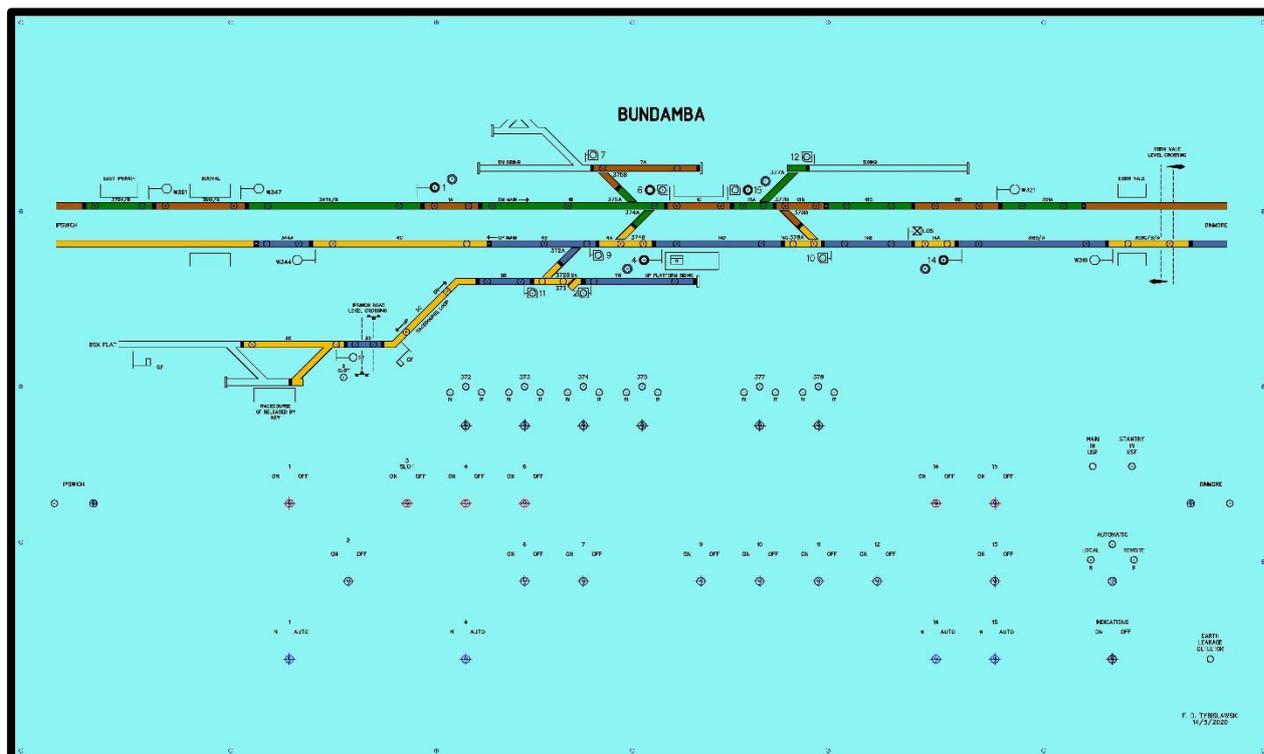


# PROCEED ORDER

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Above is the drawing for the replica Bundamba signal panel diagram. The original signal panel was installed in 1980 and removed from the station in 2006. This replica diagram was drawn in LibreCAD and was based on several images of the actual panel taken between 1988 and 2006.

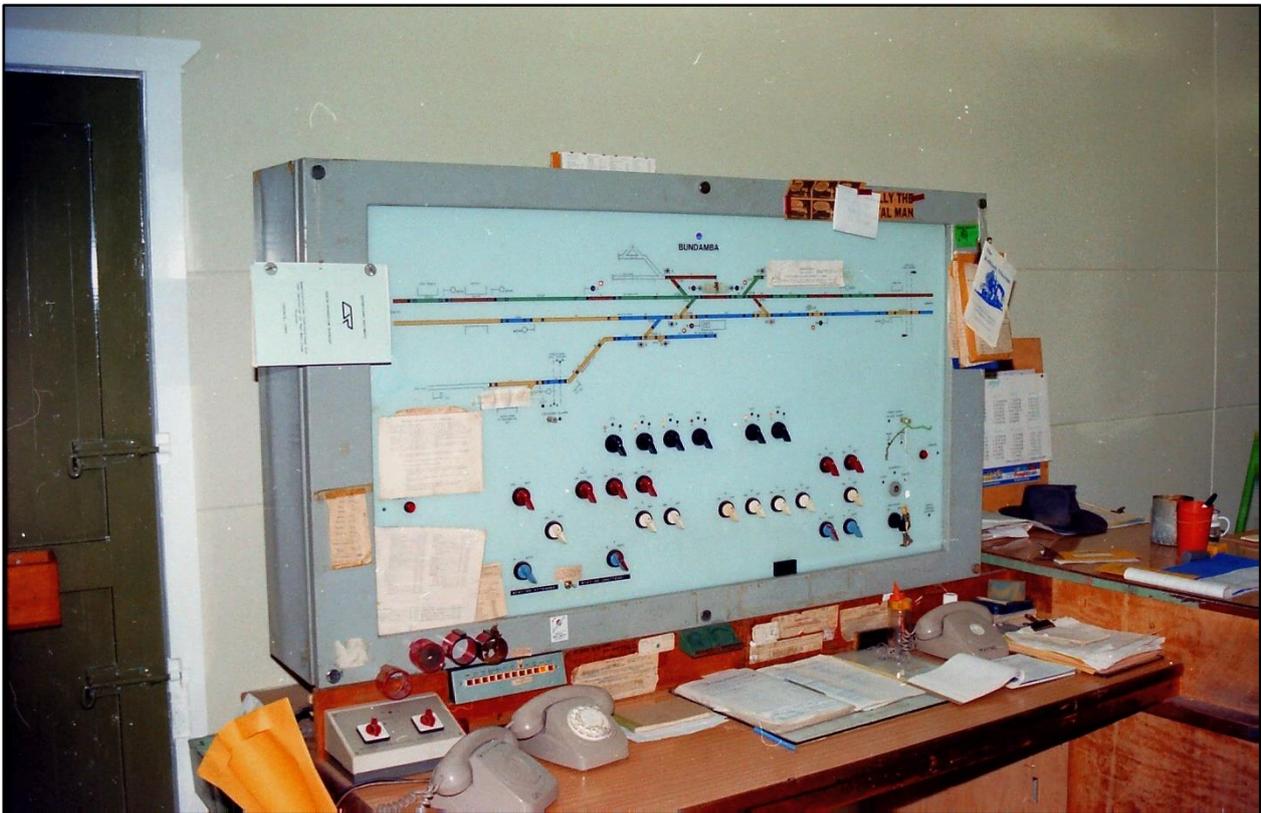
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# Signalling Bundamba 1980

While working on another project (the subject of a future article) it was necessary to look back at the signalling at Bundamba forty years ago, in August 1980. At that time the mechanically interlocked Bundamba signal cabin on the Down platform had just been decommissioned and removed (demolished) - replacing it was a new three-aspect colour light signalling system and a local control panel in the station building at Bundamba. The signals either operated automatically or were controlled by the Station Master using the local signal panel; it would be some time before remote control of the signalling from a centralized location in Brisbane was commissioned.

There wasn't anything particularly special about the signalling at Bundamba, there was the Up and Down Main Lines, Down Sidings at both the Ipswich and Brisbane ends, the Branch line to Swanbank and a dead-end behind the Up Platform. There are however a few points worth commenting on or investigating further when looking at the local panel and the numbering of points and signals at Bundamba.



*Above: The earliest image I have of Bundamba signal panel which is thought to have been taken in 1988. Already by this time the Down Siding is out of use and the Racecourse Platform siding is also out of use.*

The first signal at Bundamba was BA1 which was the Down Home signal on the Down Main Line, located between Booval and Bundamba, not far from the Bundamba Creek bridge. The signal numbering at Bundamba and indeed all the way to Wacol appears to have been part of a larger scheme to have that whole area controlled from one location with unique signal numbers at each station. Consequently, each station had a block of roughly 20 signal numbers allocated, Bundamba starting at 1, Dinmore

starting at 20 and so on through to Wacol with signal numbers starting from 80. The highest signal number at Bundamba was BA15 which was the Down Starter on the Down Main, located at the Ebbw Vale end of the Down platform.

Only 12 of the signal numbers at Bundamba between BA1 and BA15 were actually used, the remainder were spare, presumably for possible future alterations and additions in the same manner as signal cabins had spare levers for future alterations. The unused signal numbers at Bundamba were BA5, BA8 and BA13 which would allow for two Down signals with odd numbers, and one Up signal with an even number. It could also be argued that the signal numbers from BA16 to BA19 could also have been allocated if needed.

Looking at the photo of the local signal panel in the Station Masters office there was a space between the switches for signals BA7 and BA9 for an extra switch for signal BA8 to be added if it was needed at a later date, however there was no space reserved for switches for signals BA5 or BA13. So, it seems likely that if any additional signal was to be added at Bundamba it would have been numbered BA8. The only other possibility would be for additional signals BA16 to BA19 being added however due to the size of the panel there was only space for one additional switch to the right of the existing switch for signal BA15.

The numbering of points throughout the suburban area is a much wider subject and beyond the scope of this small article concerning Bundamba, however there were six sets of points or crossovers at Bundamba and these were numbered from 372 to 378 (inclusive) except that there was no number 376 points or crossover.

Looking at the photo of the local signal panel again there was a space between the switches for 375 and 377 points for an additional switch to be added should number 376 points ever be required. Likewise, there was space to the left of the switch for number 372 points and also to the right of the switch for number 378 points to add more points if needed.

So, what were the possible uses for signal BA8 and number 376 points?

That question may never be answered but there was prior to electrification another Up Siding on the Ebbw Vale side of the Up platform at Bundamba. It is possible that 376 points and signal BA8 were allocated to that siding however it was removed prior to the commissioning of the new signalling and electrification. This seems to be the most logical scenario.

A second possibility is that the dead-end siding behind the Up platform could have been extended towards Brisbane and joined with the Up Road to form a full-length back platform - again it is impossible to tell if that was ever proposed.

Forty years later, in August 2020, there are a number of obvious changes to the signalling and layout at Bundamba. The Down Siding at the Ebbw Vale end is gone and the sidings at the Ipswich end which once served the Rothmans Tobacco facility are also gone. The local control panel itself is gone, removed from the station building when it was partly demolished/partly refurbished in 2006. The panel had not been used for many years, its location and future are unknown.

Having grown up in this area I wanted to preserve something of the era (other than photographs and memories) when Bundamba was controlled by a signal panel operated by station officers day and night. A lengthy project which is advancing rapidly now is to make a replica of the Bundamba signal panel, and have it simulate the operation of trains. This is the project mentioned in the opening paragraph of this article and on the front cover is my self-drawn (with LibreCAD) plan of the panel (with a couple of personal minor alterations) which is being used in the construction of the replica. A future article about Bundamba will detail the replica control panel and the various trains which once shunted and worked through Bundamba in the 1980's.

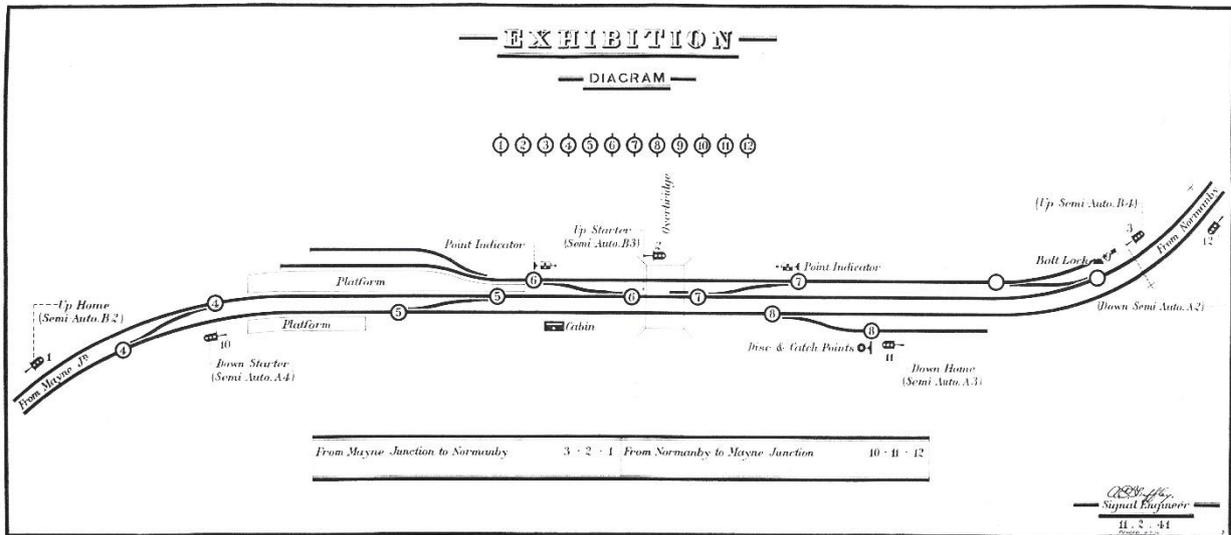
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## **Signalling Exhibition 1950 & 1967**

The Australian Railway Historical Library (Queensland Division) Ken Rogers Memorial Library has a number of signal cabin diagrams in its collection including two from Exhibition.

Exhibition cabin was, yet again for Queensland, not a big impressive structure - it was however typical for Queensland in many respects. The building was typical of many signal cabins, and with reference to a previous article on signal cabin building design, it neatly matches the Type 1 description. In terms of the number of levers and the complexity of the signalling arrangement it could only be described as small and simple - 12 levers existed at this time as shown on the adjacent two diagrams. The original diagram is dated 11-2-1941 and was signed by Tuffley - one diagram was revised 12-7-1950 and the second revised 19-7-1967. The 1941 date is concurrent with the construction of the Bowen Bridge Road overpass to replace the former level crossing, and also the installation of track circuiting and automatic/semi-automatic colour light signalling between Mayne Junction and Normanby.

The diagram dated 12-7-1950 shows six levers were used to control the six semi-automatic colour light signals installed in 1941. Three signals existed on the Up Line and three on the Down Line. The three signals on the Up Line were controlled from lever numbers 1, 2 and 3 while the actual signal numbers were B2, B3 and B4 respectively. On the Down Line signals numbered A4, A3 and A2 were controlled by levers 10, 11 and 12 respectively. All of these signals were three-aspect semi-automatic colour light signals.



Above: 1950 signal cabin diagram

All except one of the remaining levers operated points or crossovers. Lever number 4 operated a trailing crossover on the Mayne Junction side of the Exhibition platforms while lever number 5 operated another trailing crossover on the Normanby side of the platforms. Lever number 6 operated a trailing crossover between the back platform Up Sidings and the Up Line while lever number 7 operated the only facing crossover in the signalling arrangement, between the Up Line and the Up Siding. Lever number 7 utilised an escapement mechanism to co-operate the required Lockbar and Plunger needed for the Up Line as this was a main line facing point movement. Lever number 8 operated a set of points and catch points with an associated catch point disc for the trailing Down Line siding, located inside the Down Home signal and on the Normanby side of the cabin. Lever number 9 operated a Bolt Lock which released a frame used to operate one final trailing crossover, towards the Normanby end of the yard, with the crossover joining the Up Siding with the Up Line.

Considering the extent to which some Australian states and the UK invested in signalling infrastructure, it could only be said that the amount and complexity of the signalling installed at Exhibition was the bare minimum. No signals for shunting movements, movements through crossovers, or movements into or out of sidings were provided.

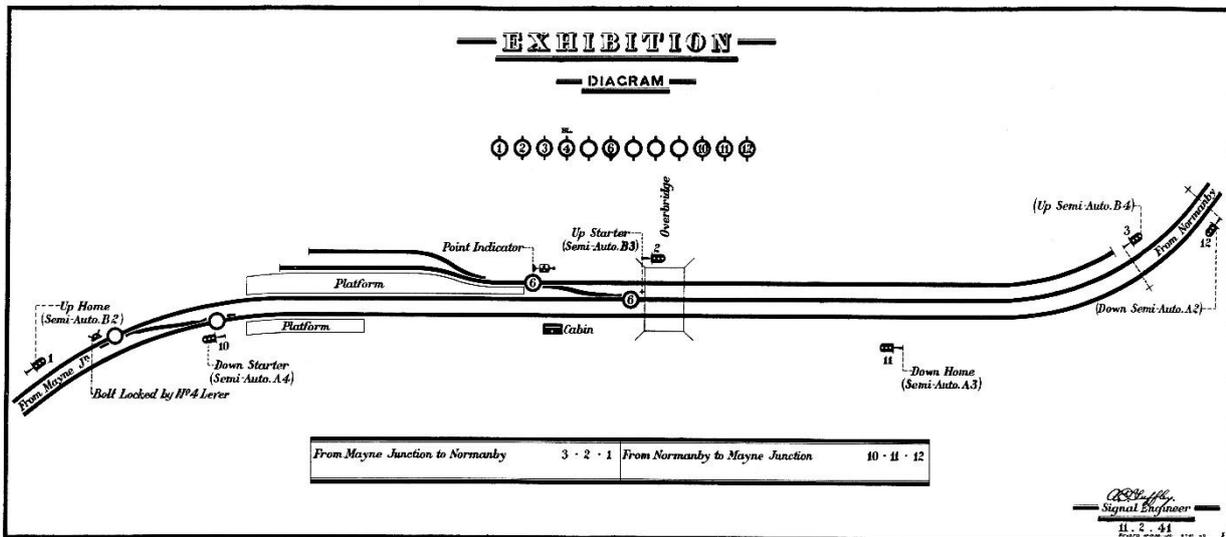
The 1941 instructions regarding the then new signalling at Exhibition show that signal B4 had a telephone located opposite it adjacent the Up Line, and a telephone was also located on the outside wall of Exhibition cabin to enable trainmen to communicate with the Control Officer in the event of delays at signals. The track circuit working of the signals provided for one signal at 'stop' and one at 'caution' together with a section of track known as an 'overlap' in the rear of each train.

When Exhibition cabin was cut-out the signal levers were pulled to reverse, and the block sections were implemented in accordance with the working timetable or special instructions issued. When the cabin was cut-in trains were belled in accordance with the rules and by means of

the block bells provided, the block indicators however on the automatic section were not used.

Approach indicators were provided in the cabin to indicate to the signalman when a train was on the track circuit approaching the station. Indicators were also provided in the cabin to indicate to signalmen the state of the track circuits between signals B3 and B4, and between signal A4 overlap and A6 (Mayne Junction).

Turning to the 1967 signal cabin diagram to examine the changes that had occurred 17 years after the 1950 diagram, the complexity of the signalling has decreased even more. A twelve-lever frame still exists in the signal cabin however only eight of the levers are in use. Levers 1, 2, 3, 10, 11 and 12 still operate the Up and Down main line signals. Lever number 6 operates the only remaining crossover operated directly from the signal cabin, the same crossover operated in the 1950 scheme. The Normanby end of the siding, previously worked from a bolt-locked ground frame, appears to be a dead-end now and not connected back to the main line anymore.



Above: 1967 signal cabin diagram

The only other operational lever was number 4 which was now a bolt lock used to release a ground frame to operate a crossover on the Mayne Junction side of the platforms. This was not the previous trailing crossover operated by lever number 4 but a new facing crossover.

The signalman faced towards the main lines when operating the levers and his cabin was located adjacent the Down Line roughly halfway between the Bowen Bridge Road overpass and the Exhibition Down platform. At the time this position was almost immediately opposite the Normanby end of the Up platform. Part of the concrete foundation of the signal cabin could still be seen in 2005.

The eastern wall of the cabin had the steps and entrance door while the western or Normanby end was basically half wall and half windows. The full front of the cabin facing the track was windows while the entire

back wall was all timber. A feature on the outside front wall was the large telephone cabinet mounted near track level and mentioned in the 1941 instructions regarding the new signalling. The cabin appears to be about 11 feet wide (as many were) and only slightly longer at perhaps 12 feet - the two windows on the end occupying about half the wall space and four windows fully occupying the front wall. There was no nameboard on the cabin or immediately near to it however the nearby platforms would have had Exhibition signs. The top and bottom panes of glass on most if not all windows have been painted white to reduce the glare entering the cabins interior.



*Above: DD17 1047 (built Ipswich Workshops 1951) running light engine passes Exhibition signal cabin, perhaps going to work or having recently worked a Shorncliffe service. The photographer and date are unknown but the existence of four point rods heading towards Normanby and two point rods heading towards Mayne Junction narrow the date to between 1951 and 1967.*

The signal cabin at Exhibition remained in use until mid-1970 when the signalling between Mayne and Normanby was upgraded. Signals A2, A3, A4, B2, B3 and B4 were placed out of use and Exhibition signal cabin was closed. New signals controlled from Normanby signal cabin (from a new small signal panel) were provided between Mayne and Normanby. The crossover at the Mayne end of Exhibition platform (referred to as an emergency crossover) remained and became electrically released from Normanby signal cabin - a three-lever ground frame was provided. Likewise, the crossover from the Up Sidings to the Up Line (referred to as the Exhibition Siding) also remained and was a two-lever ground frame electrically released from Normanby.

# Forgotten Stations

**Alkina** (North Coast Line, between Miriam Vale and Gladstone) was an Isolated Siding originally known as 312 Miles 18 Chains. The siding was built in the later part of 1926 and renamed Alkina very early in 1927. The siding consisted of a short loop siding (3 chains in length) on the northern side of the main line. The track in this area near the Boyne River just south of Benaraby, runs almost east west at this point. The loop siding, while close to the main line, had a fence between the main line and the siding, and also gates at each end. A catch point at the Gladstone end and a choke block at the Miriam Vale end prevented rollingstock accidentally entering the main line. A rail-level platform and name board also existed on the north side of the line, just on the Miriam Vale side of the siding points. No signals ever existed at Alkina, the Ordinary Staff or Electric Staff provided the safety to shunt the siding. It would appear that it was proposed to extend the siding in October 1939 and that the extension had been completed by November 1940. In December 1962 it was approved to remove the (ballast) siding at Alkina and by mid-1963 the siding had been removed. Alkina remained a Stopping Place as it continued to be mentioned in lists of stations until at least 1996.

**Barmundu** (Monto Loop, between Calliope and Many Peaks) was originally located at 18 Miles 19 Chains from Boyne Valley Junction. Before the line opened Barmundu was moved to 21 Miles 23 Chains and the previous location became Taragoola. When the line opened in July 1910 Barmundu was a temporary staff station for the Resident Engineers train, the staff sections being Calliope-Barmundu (OS white square) and Barmundu-Boynedale (OS blue round). Barmundu was also a watering station however no signals were provided. By 1911 Barmundu had closed as a staff station. Barmundu had a short loop siding on the western side of the line with choke blocks at both ends, a rail-level platform, station building, water tank, ash pit and coal stage. In February 1952 it was approved to provide a crossing loop and signals at Barmundu however in April the decision was reversed. The crossing loop was to be on the eastern side of the line, with a Home signal and Beacon at both ends. The Beacon at the Gladstone end was to be at 20 Miles 66 Chains and the Home signal at 21 Miles 6 Chains. The Beacon at the Many Peaks end was to be at 21 Miles 64 Chains and the Home signal at 21 Miles 44 Chains. In March 1978 the windmill, pump and pump shed were sold and removed, and in July 1981 the tank and tank stand were removed. The small loop siding was proposed for removal in August 1988 and approved for removal in September 1988.

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## SIGQ News & Information

The SIGQ Facebook Group recently attracted the attention of trespassers photographing signalling infrastructure which is unacceptable. The Facebook group was closed and relaunched by another person as the Signalling Record Group Queensland. SIGQ however still maintains a focus and following via its website, this journal, and proposes to re-publish a book and launch a new book in 2021.