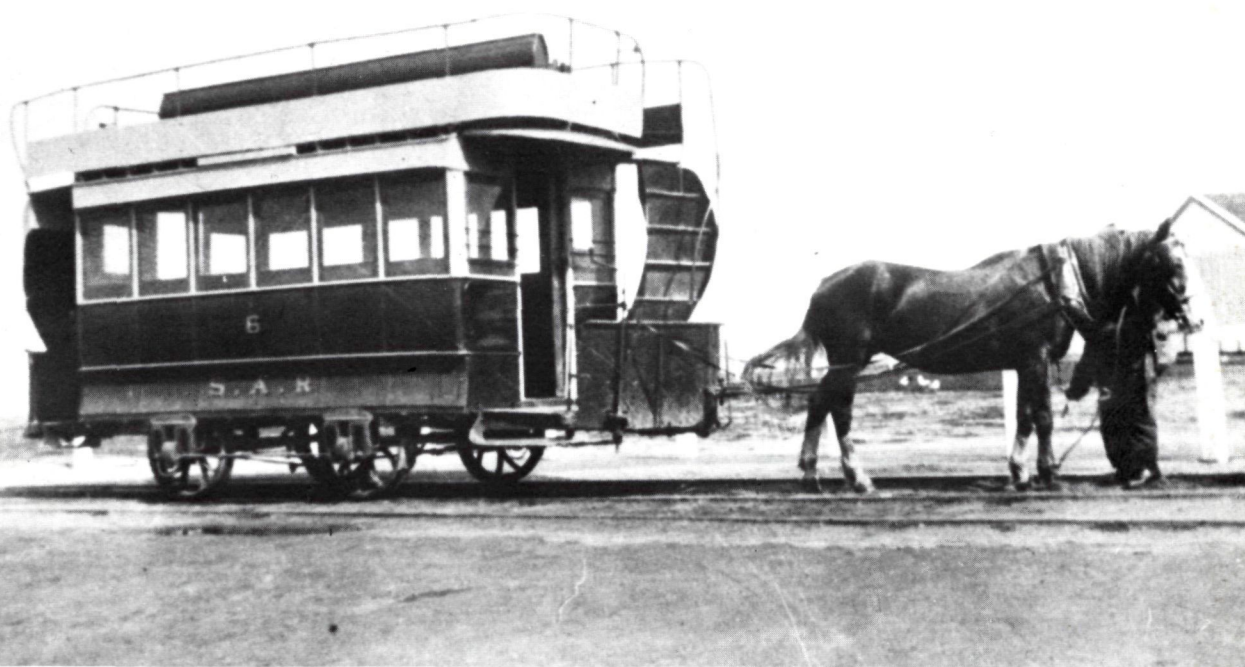


# TROLLEY WIRE

Journal of  
**AUSTRALIAN TRAMWAY MUSEUMS**

NUMBER 190  
OCTOBER, 1980  
ISSN 0155 - 1264



THE HORSE TRAMWAYS OF THE MOONTA DISTRICT

*Registered for Posting as a Periodical — Category B*

# TROLLEY WIRE

OCTOBER 1980

Vol. 21 No. 5

Issue No. 190

## EDITOR

## PRODUCTION

## SUBSCRIPTIONS

## DISTRIBUTION

Laurence Gordon

Bob Merchant

Norm Chinn

Mal McAulay

Peter Hallen

Published by the South Pacific Electric Railway  
Co-operative Society Limited, Box 103 P.O.  
Sutherland N.S.W. 2232

Printed by Newey and Beath Printers Pty. Ltd.,  
10 Belford Street Broadmeadow N.S.W. 2292

The opinions expressed in this publication are  
those of the authors and not necessarily those  
of the publishers or the participating societies.

**\$1.25** Recommended selling price.

All correspondence in relation to *Trolley Wire*  
and other publishing and sales matters should  
be forwarded to:

Box 103 P.O. Sutherland N.S.W. 2232

## CONTENTS

The Horse Tramways of the Moonta District	3
The Trolleybus Experiment in S.A.	18
Victor Harbour	21
Adelaide Transport News	22
City Section	24
Museum Notes and News	26

THERE ARE TRAMS AND TRAINS, but the distinction is not always clear. A big city system such as Melbourne is readily identifiable as the former but the 1861 Pitt Street horse line in Sydney, although using conventional horse tramcars was connected to the railway and used a step rail to permit the use of railway vehicles. The Sydney steam trams certainly ran in trains; the Kogarah to Sans Souci line was surely a 'street railway', just as the Semaphore, Grange and both Glenelg railways were.

Yet on the Upper Yorke Peninsula to the north of Adelaide there grew and flourished a network of initially horse, then later steam worked lines that make the foregoing look straight forward. Ken McCarthy traces the development and rationalisation of these lines in *The Horse Tramways of the Moonta District*, which commences on page 3 opposite.

It is hoped at a later date to have a look at the short lines that were based on the jetties at Port Broughton and Port Germein.

The two drawings on page 7 are reproduced from copies held by J.Harbison, Moonta National Trust Museum S.A.  
The original drawing for Fig. 1 bears the name J.B.Whittington, Wallaroo Bay  
27th August 1866.

FRONT COVER: *After the closure of the Moonta horse tramway in 1931 cars 5 and 6 were transferred to Victor Harbour to work the short line to Granite Island where they remained until that line closed in 1955. Car 6 is seen at Victor Harbour in the mid 1930s soon after arrival from Moonta.* -C.B.Thomas  
BACK COVER: *Adelaide's limited use of advertising cars is little known. However this classic depot photo of A type 14 at Hackney shows it ready to enter traffic disguised as a travelling circus tent for that great old Australian enterprise, Wirth's Circus in the late 1930s.* -S.T.A.

# THE HORSE TRAMWAYS OF THE MOONTA DISTRICT

SOUTH AUSTRALIA

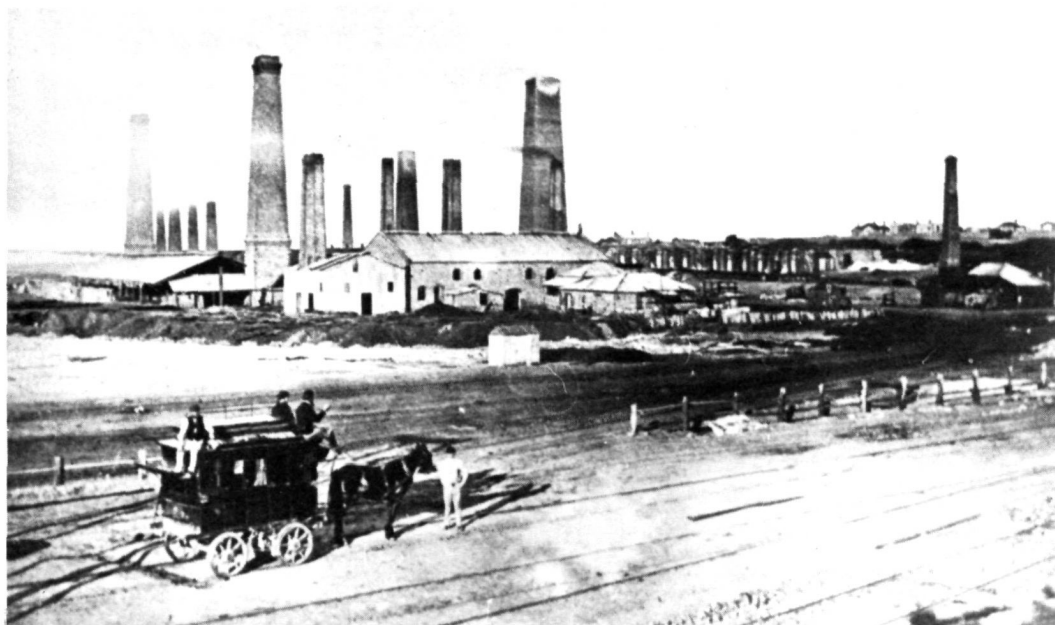


*Two horse cars in George Street Moonta. The front tram is the standard 5 ft 3 in gauge type built for the SAR, but the following tram is a 4 ft 8½ in gauge unit mounted on a broad gauge truck. This car could therefore be former MTT Adelaide tram 25. The streets of Moonta were decorated on this occasion for the 'Back to Moonta' celebrations of September 1927.*

This article deals with the story of the hitherto neglected subject of the horse tramways of the Kadina-Wallaroo-Moonta district of South Australia. The material has been written by K. McCarthy on the extensive data researched and supplied by Mr. Jim Harbison of Moonta. Mr. Harbison is the Chairman of the Moonta National Trust Museum Group; a very active band of people who have successfully established a major museum at Moonta Mines, have preserved the many relics of that area's mining heritage, and are presently developing a reconstructed mining museum known as "Wheal Munta" adjacent to the old school at Moonta Mines.

"If you have not been to Moonta, you have not travelled" ... was an old saying expressed by the miners of Cornish extraction who worked the rich copper lodes at Moonta S.A. between 1861 and 1923. This saying can still be applied to those interested in the field of Industrial Archaeology, and especially to readers of this magazine, if they have not visited Moonta ...

Cornishmen developed the early metalliferous mines in Australia. Their presence was particularly in evidence at the Glen Osmond, Kapunda, Burra Burra, Wallaroo (Kadina) and Moonta fields in South Australia and at Broken Hill in western New South Wales.



*A Kadina and Wallaroo Railway and Pier Company horse drawn carriage adjacent to the Wallaroo Smelters during the 1862–1880 period. - K. Magor collection*

The rich copper fields known as the Wallaroo Mines at Kadina S.A. were discovered in December 1859 while the lodes 10 miles to the south in an area known as Moonta were tapped in May 1861. The first Kadina ore was shipped from the port of Wallaroo and during 1861 a large smelters was erected at that port.

During 1861 "The Kadina and Wallaroo Railway and Pier Coy" Bill passed through the South Australian Colonial Parliament and became a private Act.<sup>1</sup> This approved the construction of a 5ft-3in gauge horse worked light railway from the Wallaroo Mines at Kadina, over some 5 miles of undulating countryside to the Wallaroo smelters and the 800 feet long pier at the port.

Construction was far enough advanced during March 1862 to enable the proprietors and the manager of the tramway to make an excursion trip along the railway, eastwards from Port Wallaroo for 4 miles to the construction rail head.<sup>2</sup> To demonstrate the capabilities of the undertaking four trucks were drawn from the port towards Kadina, one truck bearing 5 tons of ore, the rest being loaded with ballast.

The corporate title of this venture is not too clear. During October 1862 a local press report<sup>3</sup> stated that a company was being formed for the purpose of purchasing the railway between Kadina and Wallaroo, together with rolling stock, from Mr. Gouge.

During the following month<sup>4</sup> the Prospectus of the newly formed Kadina and Wallaroo Railway and Pier Company was released.

Although the Kadina and Wallaroo Railway and Pier Company announced that it expected to declare a dividend at the end of July 1863<sup>5</sup> Mr. A. Gouge still seemed to have an active interest in the undertaking for during May 1863<sup>6</sup> this gentleman purchased the horse omnibus "Magnet" which had been working the Adelaide to Glenelg route. He intended operating the bus "on the Wallaroo line of railway".

The Wallaroo Mines area is situated 1 mile south west of the town of Kadina. On 11 August 1863, however, the short extension of the horse railway to the "corner of the township" was opened when the first load of merchandise, consisting of ale and porter from Nankervis' Brewery, was transported from Kadina to Port Wallaroo.<sup>7</sup> At the same time the Kadina and Wallaroo Railway and Pier Company declared a dividend of 10% on the then capital of £25000.<sup>8</sup> This success prompted the Company to announce that it intended to proceed with the construction of a branch 5ft-3in gauge horse railway from Port Wallaroo to the rapidly expanding mining centre of Moonta 10 miles to the south. The Company planned to increase its capital to £40,000 or £50,000 to finance this expansion.

During October 1864 the Railway and Pier Company awarded the contract for the Moonta extension to a Melbourne firm<sup>9</sup> and six months later<sup>10</sup> during April 1865 the turning of the first sod ceremony was staged half way between France and Searle's Brewery and Sunnyside at Port Wallaroo.

On Friday 22 June 1866, as the Moonta railway construction was nearing completion, a trial was made on the Kadina and Wallaroo railway of a new large passenger carriage.<sup>11</sup> After being set up on a carriage (underframe) it was drawn by six horses to its destination.

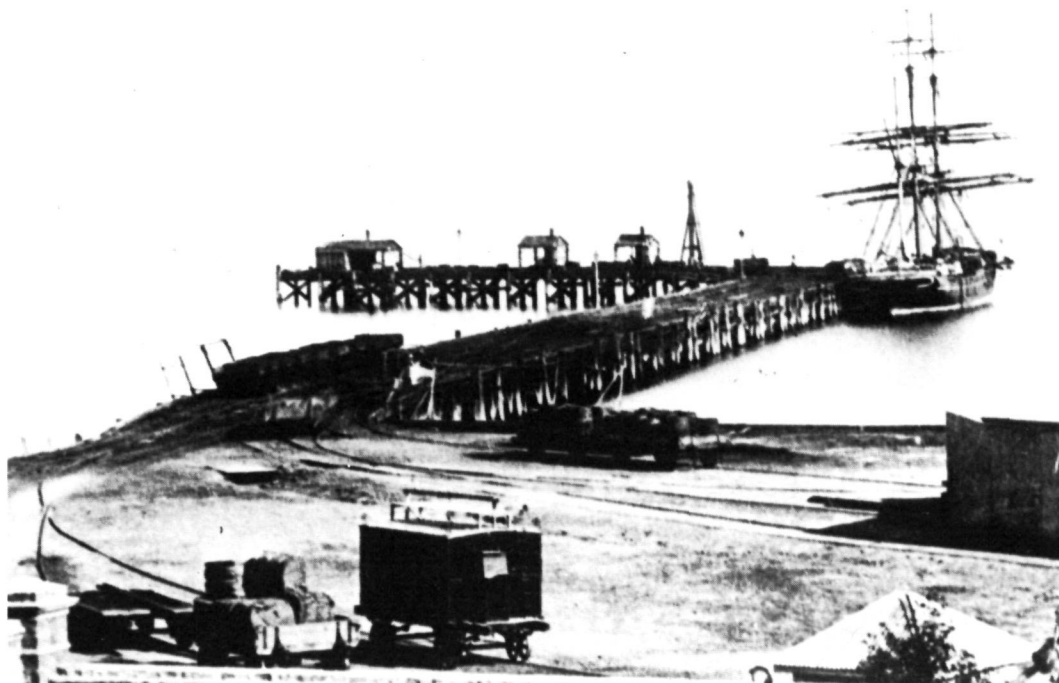
The "Register" for Saturday 28 July 1866 reported on the opening of the Wallaroo to Moonta railway, the 10 mile line cost under £18,000. The Moonta terminus of the railway was in the vicinity of Moonta Mines at a location known later as Yelta Siding. The principal traffic at the time of the opening was the carriage of copper ore to the Port Wallaroo Smelters.

The Moonta town area had been set out in the grid pattern in 1863 about 1½ miles west of the Moonta Mines region. Most miners, however, preferred to reside in the haphazard "occupation leases" at Moonta Mines, Hamley Flat and East Moonta. By January 1868 the Railway and Pier Company was able to report that the horse railway from Moonta Mines to Moonta town was nearing

completion. This short extension was opened on Friday 7 February 1868<sup>13</sup> the local newspaper noted that the people gathered at the terminus were disappointed at the lack of speeches which were expected to mark such an occasion. The directors quickly retired to the local Royal Hotel where the success of the venture was drunk to excess.

The ability of the Railway and Pier Company to pay 10% dividends was perhaps due to frugal rather than just economic operations. A report in the "Register" on 12 February 1870 revealed that the Company of this "celebrated £9,000 per mile railway" was at last erecting a station at Kadina. The account continued, however, that this building would not be an "ambitious affair, for the proprietors believe that bricks and mortar do not pay dividends.

Although the principal port for the copper industry was at Wallaroo, freight for Moonta was successfully landed at Moonta Bay as early as 1865. A short jetty was constructed at that location soon afterwards. Moonta Bay was too shallow to create any threat to Port Wallaroo. The 5ft-3in gauge horse railway was extended westwards from Moonta Town in 1870 by the Railway and Pier Company to a headland in Moonta Bay known as the "Old Landing Place". Local legend leads one to believe that this was done without the formality of



*Horse drawn carriage and goods trucks at Wallaroo Jetty during the period of Kadina and Wallaroo Railway and Pier Company operation between 1862-1880.*  
- K. Magor collection

the necessary Parliamentary Act. During February 1871 the Railway and Pier Company applied for the necessary permission for the Moonta Bay extension, possibly to not only formalise the recent railway extension but to seek approval for a further short expansion southwards along the shoreline to Moonta Beach.<sup>14</sup>

On 1 January 1870 the South Australian Railways opened an isolated 3ft 6in gauge horse railway from Port Wakefield, at the head of Gulf St. Vincent, 28 miles eastwards to the wheat area of Hoyleton.<sup>15</sup> In March 1876 an extension of 13 miles to Blyth was available for traffic and the Port Wakefield system was converted to steam locomotive working soon after.

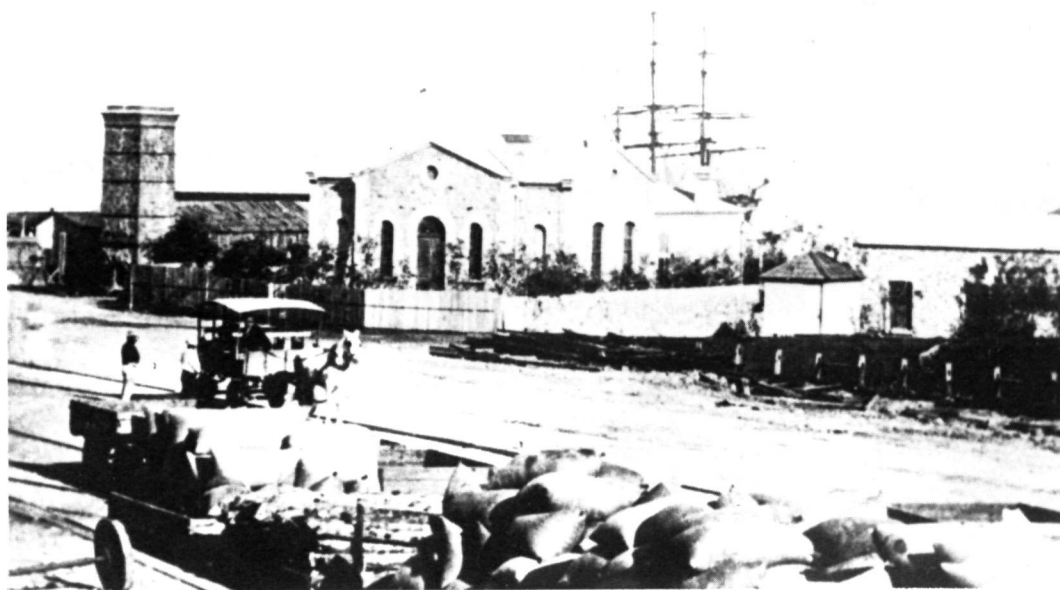
On 9 October 1878 a 34 mile 3ft 6in gauge railway extension westward from Port Wakefield to Kadina opened for steam locomotive working. The Governor of South Australia, Sir William Jervois performed the opening ceremony.<sup>16</sup> The isolation of this area came to an end on 15 January 1880 when the 3ft 6in gauge tracks reached the 5ft 3 in gauge Adelaide to Burra steam railway at Hamley Bridge.<sup>17</sup>

In January 1876 the necessary Bill for the construction of the Moonta Bay 5ft 3in gauge horse railway by the Kadina and Wallaroo Railway and Pier Company was passed<sup>18</sup> and on 2 February 1877 the "Register" was able to report that the horse railway extension was rapidly approaching Moonta Beach. Passenger services to the Beach were operating regularly by August 1877<sup>19</sup> but healthy financial returns could not be expected until

the planned brach railway from Yelta Sidings into the Moonta Mines area was constructed. This extension had been delayed due to difficulties in the route survey.

With the expansion of the Port Wakefield 3ft 6in gauge steam railway into the Kadina area, the Kadina and Wallaroo Railway and Pier Company opened negotiations with the government regarding the sale of their horse drawn railway to the South Australian Railways. The "Register" for 4 October 1877 reported that these negotiations had fallen through and the S.A.R. proposed to build a narrow gauge steam worked line parallel with the Company's horse railway between Kadina and Wallaroo.

During 1878 a new 1,720ft long jetty was completed at Moonta Bay and during July 1879<sup>20</sup> work gangs were busy breaking stone and forming cuttings to enable the 5ft 3in gauge horse railway to reach this jetty. In the meantime the "Register" for 25 October 1877 reported that the Railway and Pier Company had commenced work on the Moonta Mines to Yelta Siding line which would enable the lucrative mines traffic to be diverted from Port Wallaroo to Port Moonta pier. This was a shrewd move on the part of the Company. The S.A.R. narrow gauge railway extension from Kadina to Port Wallaroo would possibly take away the profitable traffic from the broad gauge horse railway between the Wallaroo Mines at Kadina and the Port Wallaroo Smelters, but dividends could



*A goods truck set up for passenger operation at the Customs House near Wallaroo Pier. This photo dates from the 1862 - 1880 period when the broad gauge line was worked by the Wallaroo Railway and Pier Company. - K. Magor collection*

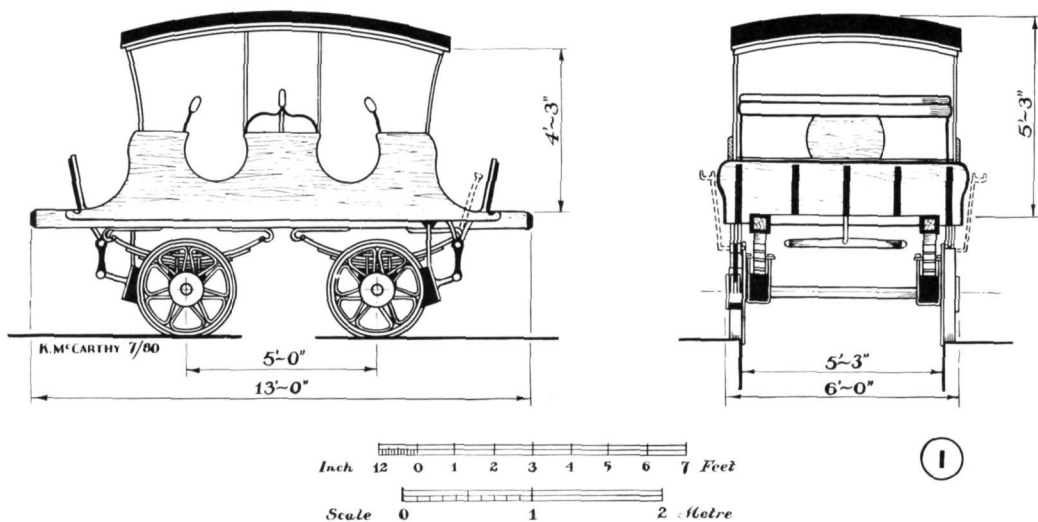


Fig. 1 Twenty seat horse car used on the Kadina-Wallaroo-Moonta railway.

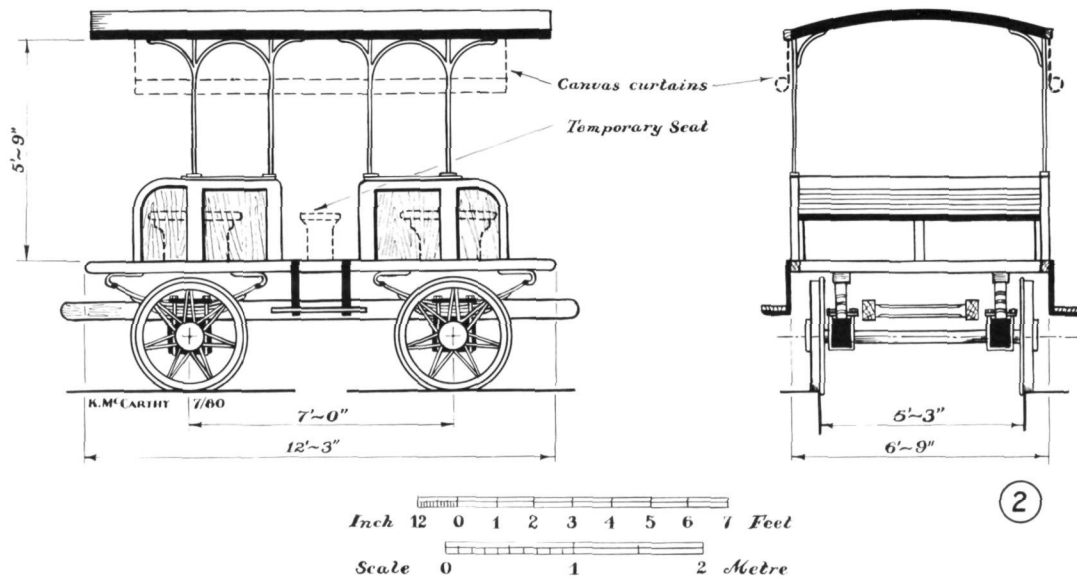


Fig. 2 Twenty five seat horse car used on the Kadina-Wallaroo-Moonta railway.



*A SAR V class 3 ft 6 in gauge tank loco is seen shunting on the Wallaroo pier during the dual gauge track days between 1880 and 1892. The stacks of the Wallaroo Smelters can be seen on the skyline beyond the sailing ship.*

- K. Magor collection

still be produced on Moonta Mines to Port Moonta traffic 10 miles south of the S.A. Railways new area of operation.

Further purchase negotiations between the Railway and Pier Company and the S.A. Government proceeded with the result that the Wallaroo-Kadina-Moonta horse railway was purchased by the S.A.R. for £90,000 on 1 March 1878. In addition to some 20 miles of track, 8 passenger trams and 174 waggons were included in the deal.<sup>21</sup> During June 1878 the Railway and Pier Company announced its final dividend<sup>22</sup> and during the following month, in the issue of 5 July the "Register" mentioned that the Pork Wakefield to Kadina steam railway construction was making good progress as the government engines had then reached 10 miles west of Port Wakefield. The S.A.R. extended their 3ft 6in gauge steam railway from Kadina to Port Wallaroo on 15 January 1880 but the 5ft 3in gauge horse tramway was retained for local traffic operating parallel to the new undertaking.<sup>24</sup>

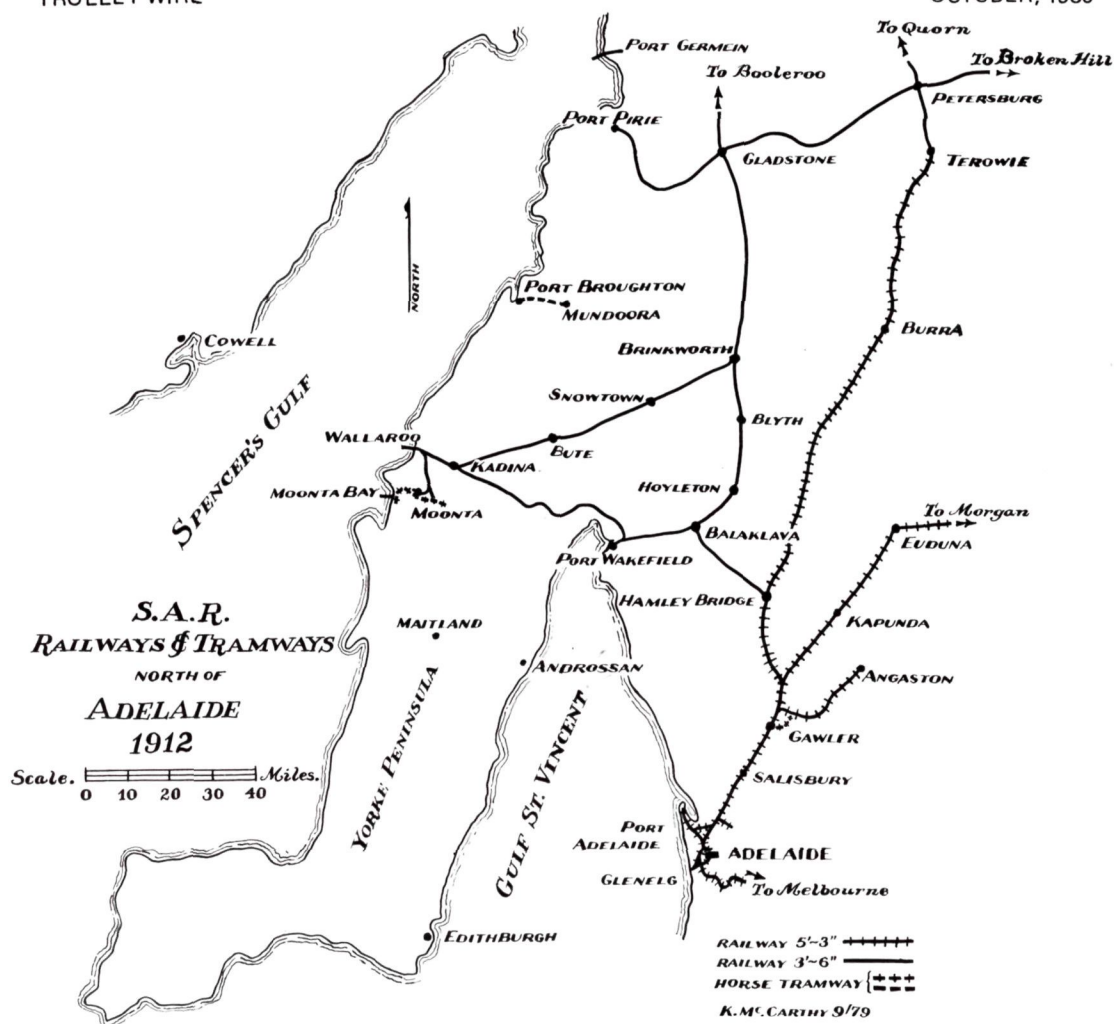
The S.A.R. continued with horse railway construction at Moonta Bay. In November 1879 the sea wall construction at Moonta Jetty and the plate laying were well underway<sup>23</sup> and the Moonta Jetty

extension was opened for traffic on Boxing Day 26 December 1879.

The 5ft 3in gauge horse worked railway between Port Wallaroo-Moonta Mines-Moonta Town-Moonta Bay remained in operation until Monday 11 November 1891 when steam operation on 3ft 6in gauge tracks commenced between Wallaroo and Moonta Town.<sup>25</sup> During the following year the Kadina loco shed and the Quorn turntable were transferred to Moonta yard to serve the steam locomotives<sup>25</sup> while just prior to the conversion the "Yorke Peninsula Advertiser" announced on 31 July 1891 that plans had been completed for a wooden railway station building at Moonta Town.

The mining companies at Moonta had employed three steam locomotives for shunting their 5ft 3in gauge sidings between 1885 and 1892 and these units were converted to 3ft 6in gauge after 1892.<sup>26</sup>

The broad gauge Moonta Mines to Moonta Bay railway via Yelta sidings and Moonta Town carried considerable local passenger traffic but the Moonta Town to Moonta Bay section was not converted to 3ft 6in gauge when the Moonta Mines railway sidings were altered. As a result of representations made by the Moonta parliamentary member Richard Hooper, the South Australian Railways



decided to develop the remaining broad gauge line into a horse tramway system.

The "Yorke Peninsula Advertiser" for 9 August 1895 reported that plans have been completed to connect the Moonta Bay to Moonta tramway to East Moonta by a new route along George St. Moonta Town. The approach of the Moonta Bay horse line at the western end of town was diverted in George Street and then extended eastwards along North Terrace (Moonta Mines) to East Moonta terminating at the junction of Verran Terrace and Deeble Street. A passing loop was constructed on the single track roadside line at Harvey Street near the school at Moonta Mines. During 1896 a new tram shed was erected at the eastern end of George Street and at the same time a branch tramway opened to Hamley Flat. This new line was largely on private right of way terminating at the Mitchell and Treuer Streets intersection in the "occupation leases".

The Tramway from East Moonta to Moonta Bay was 4 miles 2 chains in length while the Hamley Flat branch accounted for an additional 1 mile 10 chains. The capital cost of the tramway amounted to £11,034 and the six tramcars were valued at £1524 each.<sup>27</sup>

The Moonta Town steam railway station of 1891 stood at Blyth Terrace between Ellen Street and Blanche Terrace but this was relocated east of Blanche Terrace during 1908.

Brief details of the winter timetable which commenced on 1 May 1903 give some idea of the service frequency on the horse tramway. Between 9.40am and 7.15pm on weekdays 12 up and down trips were worked on the main East Moonta to Moonta Town service while between 6pm and 11.15pm on Saturday evenings, trams operated every 15 minutes to serve that late night shopping evening when trading was carried out until 10pm.<sup>28</sup>



*Two double deck horse trams are in view in this scene taken from the Town Hall tower in George Street Moonta circa 1910. The nearer tram is taking on a passenger at the Blanche Terrace stop while the other car is standing outside the tram depot. On the horizon to the east can be seen the chimney stacks and engine houses at the East Moonta Mines. - K.McCarthy collection*



*A top covered horse tram is approaching the Blanche Terrace intersection as it moves eastwards along George Street Moonta circa 1910. The Moonta Hotel is the first building on the left and the tower of the Post Office can be seen two blocks down George Street, to the left of the carriageway. - K.Magor collection*



*An open top and top covered horse cars are seen moving eastwards along George Street Moonta approaching Blanche Terrace circa 1910. The Moonta Hotel is the first building at the left. - K.McCarthy collection*

The Hamley Flat line operated with a similar frequency on Saturday evenings but only 4 return trips were made during week days in winter.

On 2 July 1894 the Port Wakefield and Port Pirie 3ft 6in gauge S.A.R. systems were linked by the Gladstone to Blyth extension but not until 1917 was approval granted for the conversion of the Port Wakefield-Kadina-Moonta-Hamley Bridge railway to 5ft 3in gauge. Work commenced on this conversion project in 1924 at a time when the Wallaroo and Moonta copper mines had closed. Towards the end of 1923 the Wallaroo and Moonta Mining and Smelting Company decided to close the mines due to the sharp decline in copper prices following the conclusion of World War I. This left wheat farming as the main industry of the upper Yorke Peninsular district of South Australia.

The broad gauge railway conversion was carried out by upgrading the 3ft 6in gauge tracks and laying

a third rail to cater for the 5ft 3in gauge vehicles. The last narrow gauge train on the Port Wakefield system departed from Hamley Bridge on 30 July 1927<sup>29</sup> and the main interchange point between the two gauges in the region was transferred to Terowie, a situation which continued until 1970.

The Moonta tramway service continued for another eight years after the closure of the mines, to become a victim of the financial depression. The system closed on 30 April 1931.<sup>30</sup> At the end of June the S.A.R. called tenders for the removal of the Moonta tramsheds, tramcars, harness etc.<sup>31</sup> Messrs. London and Matters of Moonta were the successful tenderers and the "People's Weekly" on 12 September 1931 reported that the shed was then being demolished.

At this time a bus service to serve the tram terminals was established while the normal S.A.R. railway service continued to pick up passengers at

*Two horse cars are shown standing at the Moonta Bay waiting shed on a hot summers day awaiting passengers for the long journey to Moonta, East Moonta and Hamley Flat, circa 1920. / K.Magor collection*



Cross Roads (North Yelta) and Yelta Sidings for trips into Moonta so the rapidly dwindling residents of the mining areas were still served with public transport to the business area of Moonta.

The Moonta tramway system served a population of some 12,000 people in the 1890-1910 period and carried out all the urban duties of similar facilities in much larger towns and cities. Miners and businessmen were carried to and from work, shoppers used the trams to reach the Moonta commercial district while holiday makers were carried westwards to the beach at Moonta Bay during the long hot dry summers. It is recorded<sup>32</sup> that during the Christman-New Year period in 1896 the trams carried over 10,000 people to Moonta Bay.

In all probability the early horse drawn passenger vehicles on the Kadina-Wallaroo-Moonta railway were awkward vehicles adapted from carriage designs of steam railways. Such vehicles were used on the Goolwa horse railway<sup>33</sup> between 1854 and the introduction of more conventional lightweight double decker tramcars in 1879.

By 1892, when the Moonta Railway was being transformed to a more conventional horse tramway, double decker, double ended, four wheel tramcars were in use seating 16 passengers on each deck.

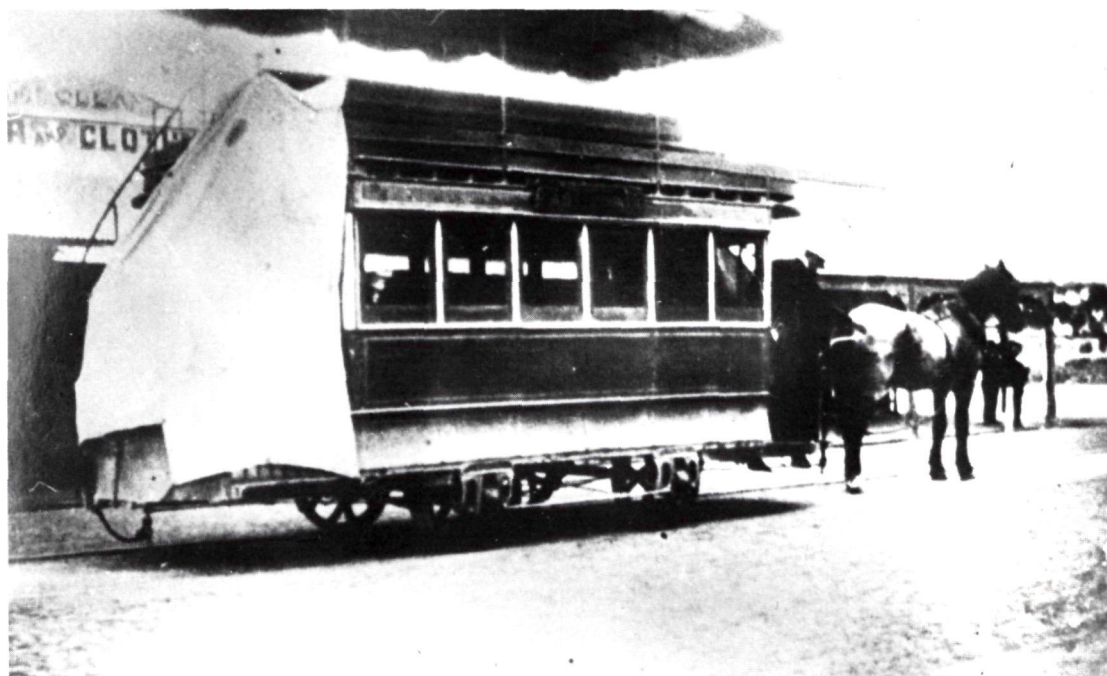
Inward facing longitudinal seats were fitted in the lower saloon while passengers were accompanied on the upper deck by outward facing longitudinal "knife board" seats. The cars carried six saloon windows on each side of the lower saloon while photos of the tramway period reveal that some cars were fitted with canvas awnings on the upper deck while others were open.

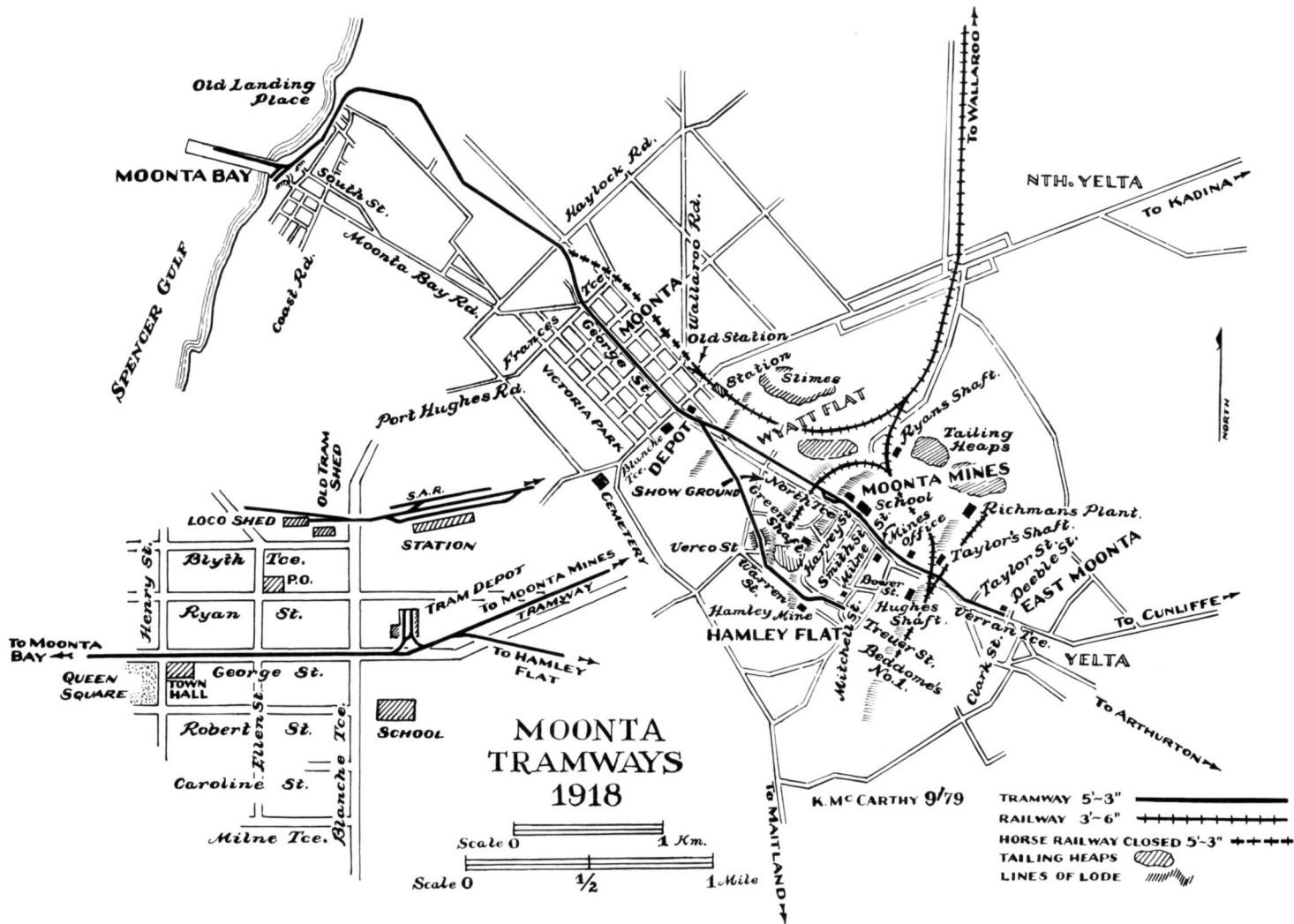
Identifiable parts from the Moonta tramcars indicate that the rolling stock was constructed by both John Stephenson of New York and Duncan and Fraser of Adelaide.

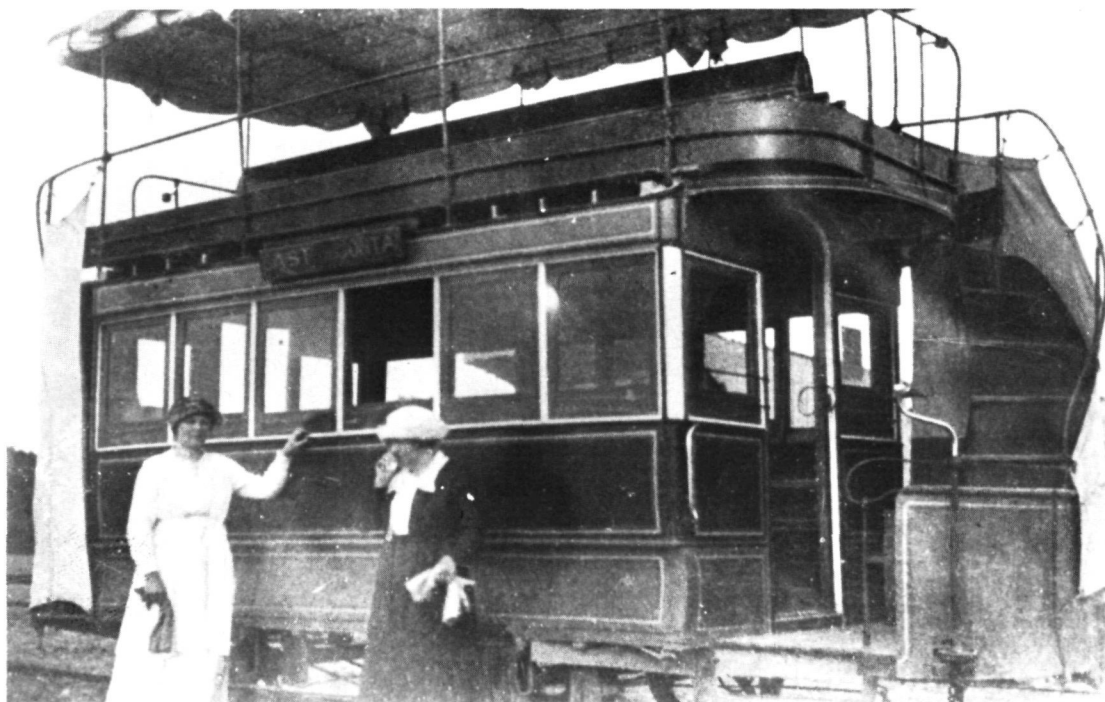
After the closure of the tramway in 1931 double decker cars 5 and 6 were transferred to the S.A.R. tramway at Victor Harbour to work this summer-time tourist service to Granite Island. Both cars had been constructed by Duncan and Fraser in 1883.<sup>34</sup> Car 6 was withdrawn from traffic at the end of the 1954-55 summer season while car 5 followed in 1956 after being operated by the local kiosk owner on Granite Island for an additional season.<sup>35</sup> The remaining cars had been written down in value to £34 by 1931 and these were sold locally in Moonta for use as sheds.<sup>36</sup>

The account of the Moonta Tramways, however, does not finish at this point. A visit to that district on 1 September 1979 revealed that plans

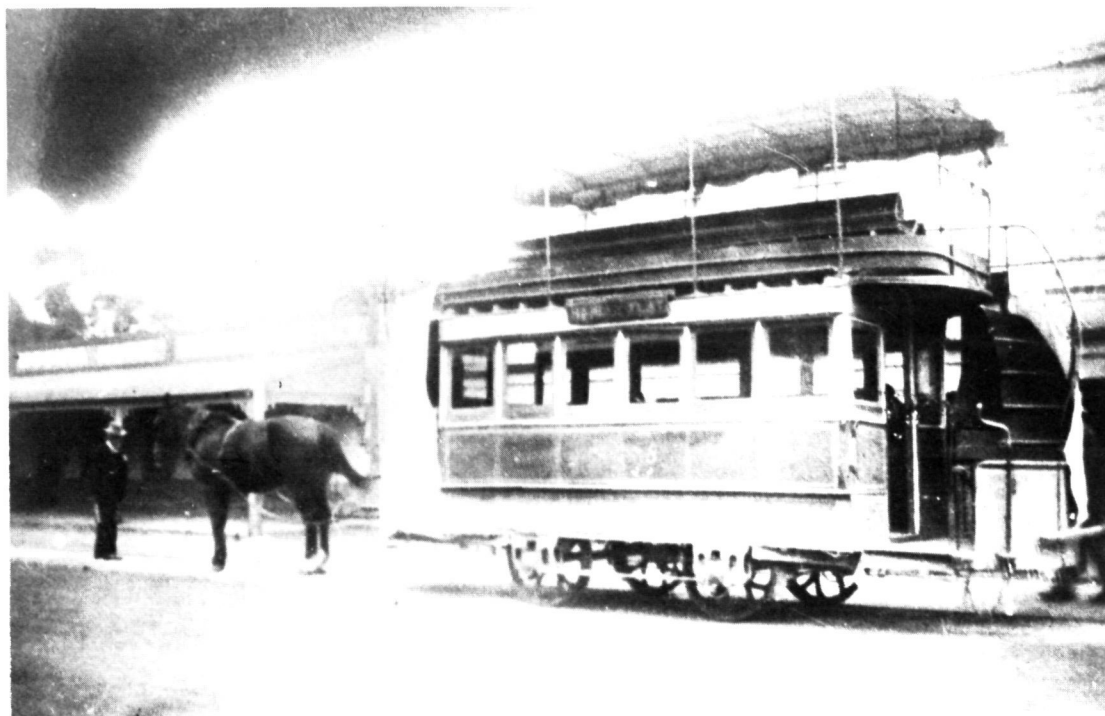
*A horse tram bound for East Moonta outside the Moonta Hotel at the George Street, Blanche Terrace intersection Moonta, circa 1925. The tram depot was situated near the trees seen to the right of the horse. - The National Trust of South Australia, Moonta Branch.*



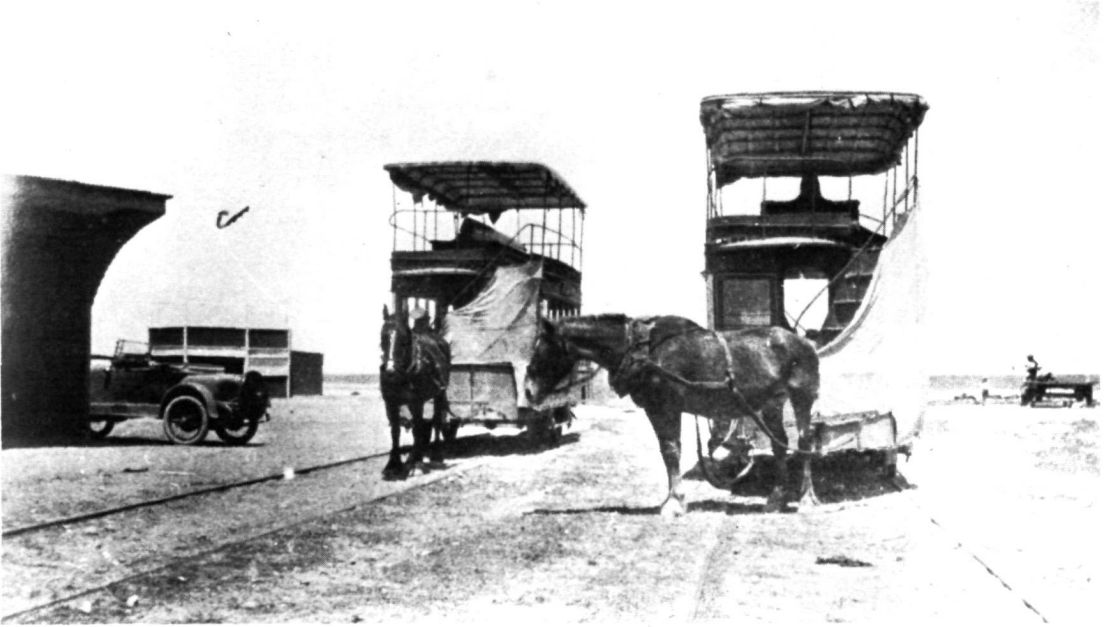




*A horse car at Moonta Bay, later to return to East Moonta, circa 1925.  
The waiting shed can just be seen through the windows on the far  
side of the car. - The National Trust of South Australia, Moonta*



*A horse tram bound for Hamley Flat outside the Moonta Hotel at the  
George Street, Blanche Terrace intersection, circa 1925.  
- The National Trust of South Australia, Moonta Branch.*



*Two horse cars at the Moonta Bay terminus, circa 1925 – 1930. The tramway waiting shed can be seen at the left, with the bandstand/kiosk beyond the motor car. A trolley, possibly used on the jetty, appears at the right. - The National Trust of South Australia, Moonta*

are being formulated which may result in a portion of the tramway being reopened for tourist traffic.

The Moonta Branch of the National Trust has established a very interesting museum in the large school at Moonta Mines. This school was in use between 1878 and 1968<sup>37</sup> and at one time catered for 1,100 pupils. The buildings and grounds have been renovated and interesting exhibits of artifacts, models, photos, plans and maps now fill the class rooms, clearly illustrating the social and industrial history and development of the area.

At the rear of the school a restored double decker horse tram is on display. The writer was fortunate in meeting the Chairman of the Moonta Museum Group, Mr. James Harbison, who has carried out considerable research on the industrial development of the area. Accompanying the tramcar, in the large school weathershed areas, large exhibits have been accumulated and these largely consist of horse and early motor vehicles, mining and agricultural machinery.

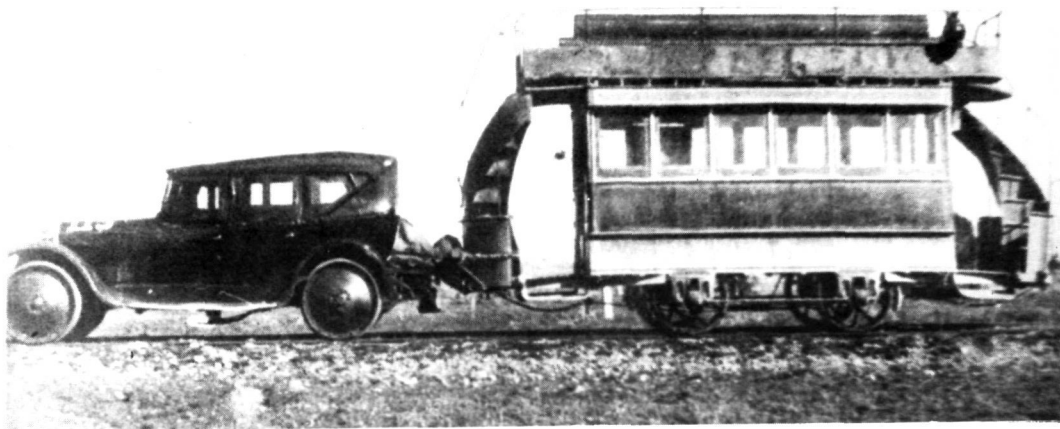
The main museum development has now moved to the area adjacent to the school where mining exhibits are being restored to form the "Wheal Munta" collection. A poppet head, mining shaft and horse whims have already been assembled and a dual 2ft and 1ft 6in gauge skipway with mining trolleys has been constructed. During September a

large tram shed in this area had almost reached completion and the first lengths of 5ft 3in gauge rails were in position to receive the horse car.

A large pile of rails has been accumulated near the new tram shed and this plant may be eventually used to relay part of the tramway from Moonta Mines along the original route towards Moonta Town to enable a tourist tram service to be reintroduced.

A visit to the Moonta-Wallaroo-Kadina district is highly recommended for readers interested in the study of Industrial Archaeology. When first entering the district one should visit the Moonta Mines museum to view the photographs and maps and to also obtain the brochure which sets out the routes of local tours and the locations of interesting historical sites, architectural gems and the positions of relics which could easily be missed by the misinformed tourist.

The museum is opened to the public on Saturdays, Sundays and Wednesdays as well as on Public holidays from 2pm to 4pm. Further details can be obtained from (088) 25.2172 or P.O. Box 23 Moonta S.A. 5558. Readers are assured of an interesting experience as the historical mysteries of the Upper Yorke Peninsula district between the Gulfs are unfolded.



*Horse car 5 or 6 being towed from Moonta after the closure in 1931. These two tramcars worked for a further 24 years on the Victor Harbour – Granite Island tramway. - K.Magor collection*



*The new tram depot recently constructed at the Moonta Mines Museum, East Moonta. This photo was taken on 1 September 1979 and part of the 2 ft / 1 ft 6 in dual gauge skipway and the developing mines exhibition can be seen at the right. - K.McCarthy*



*Double deck Moonta horse car at the rear of the Moonta Mines Museum at East Moonta. When photographed on 1 September 1979 this tram was soon to be transferred to the new depot building. - K.McCarthy*

## References

1. "Register" March 24th 1862.
2. Ibid.
3. "Register" October 14th 1862.
4. "Register" November 17th 1862
5. "Register" July 27th 1863
6. "Register" May 8th 1863
7. "Register" August 14th 1863
8. "Register" August 15th 1863
9. "Register" October 7th 1864.
- 10 "Register" April 7th 1865
- 11 "Register" June 23rd 1866.
- 12 "Register" January 20th 1868.
- 13 "Register" February 13th 1868
- 14 "Register" February 3rd 1871
- 15 ARHS "Bulletin" No.102 April 1946 page 45
- 16 "Register" October 10th 1878
- 17 ARHS "Bulletin" No.102 April 1946 page 46
- 18 "Register" January 31st 1876
- 19 "Register" August 6th 1877
- 20 "Yorke Peninsula Advertiser" July 18th 1879
- 21 Oswald Pryor "Australia's Little Cornwall" page 176
- 22 "Register" June 13th 1878
- 23 "Yorke Peninsula Advertiser" November 4th 1879
- 24 "Yorke Peninsula Advertiser" November 6th 1891
- 25 ARHS "Bulletin" No.102 April 1946 page 47
- 26 Robert Buttrims "Locomotives of Wallaroo and Moonta" "Light Railways" Oct. 1977
- 27 "People's Weekly" August 12th 1955
- 28 "People's Weekly" January 17th 1964
- 29 John Wilson "Rails to the Burra" page 15.
- 30 "People's Weekly" April 25th 1931
- 31 "People's Weekly" Juen 30th 1931
- 32 Oswald Pryor "Australia's Little Cornwall" page 178
- 33 ARHS "Bulletin" No. 199 May 1954
- 34 Kim Bird. "South Coast Limited" p.41
- 35 "Trolley Wire" August 1978 page 9
- 36 "People's Weekly" March 13th 1963
- 37 Malcolm Wehr "The Cornish Triangle" page 47.

# THE TROLLEY BUS EXPERIMENT IN SOUTH AUSTRALIA

by P.C. Keynes

On 29 February 1932, the Municipal Tramways Trust placed in service a converted Garford petrol bus which had been modified into Australia's first Trolleybus.

The engine, clutch and gearbox had been replaced by a Dick-Kerr type 130, 80hp traction motor. Rheostatic braking was also installed. The original air brakes were now supplied by a small 600v compressor. Both brakes were operated by the same foot pedal. A speed of 33 miles per hour was obtained. Cost of conversion, but not including transfer value of the old bus was £1200.<sup>1</sup>

The experimental Trolleybus operated between Payneham and Paradise over a lightly trafficked tram line utilizing the existing facilities. The trials were considered a success and positive plans were made to introduce new Trolleybuses on a large scale.

Adelaide at this time had an extensive and modern tramway system with the opening of the Glenelg interurban line in 1929 being hailed by all as the finest example of electric railroading in Australia. Why then did the Municipal Tramways Trust suddenly become involved in such a new and different type of transport? It has been suggested that it was simply due to the Trolleybus "craze" which gripped public transport operators about this time. However, a glance at some of the reasons given by operators during this era indicate that there were excellent reasons for the introduction of Trolleybuses.

A report<sup>2</sup> by the Christchurch Tramways Board of New Zealand justifying the introduction of Trolleybuses on their North Beach line was typical of the general feeling concerning Trolleybuses during the period.

The report listed the advantages of Trolleybuses as -

1. Heavy permanent way renewals on an unprofitable line are avoided.
2. The saving of heavy track maintenance which is of higher and more expensive standard since the motor car came into general use.
3. Use of existing Power Plant and Overhead wires. Use of locally produced electricity instead of petrol, the price of which is manipulated by powerful overseas combines and subject to heavy local taxation. (How relevant this is in 1980.)

4. The service of people who have come to prefer travelling on rubber rather than on steel.
5. Quicker and more uniform acceleration than the petrol bus. No fumes and no risk of fire. Classed as trams for fire insurance purposes. Almost silent in operation.
6. Having a lateral movement of 12 feet on either side, passengers can be picked up and set down safely at the kerb and without holding up other street traffic.
7. Cost of maintenance of vehicle lower than petrol bus. Depreciation also less. A life of 12 years is being given Trolleybuses while petrol buses are being written off on the basis of a 7 year life.

Bear in mind that the country was just struggling out of the depression and financial considerations were of the utmost importance. To further justify their choice, the report went on to give the operating costs of their fleet. It was estimated that trams cost 11.78 pence per mile to operate, petrol buses 11.94 pence per mile, but Trolleybuses only 9.72 pence per mile.

The Municipal Tramways Trust had always been concerned with the poor financial showing of



*A contemporary press photo of the 'Green Goddess' trolleybus on the Payneham to Paradise route, 1932. - Paul Simpson clipping collection.*



*AEC 404. Like their Sydney bretheren, these buses had additional diagonal bracing added to their bodywork a number of years after being built. - H.D.Ellerton*

their Port Adelaide Tramway system. Economies were tried, ending in the introduction of the famous one man Birney tramcars in 1925. However, by 1932, the Birney's had been branded a failure<sup>3</sup> due to their slow loading and their failure to keep to the timetables. Considering that the one man cars were expected to operate on a timetable designed for two man operation this should have come as no surprise. As a trip from Adelaide to its Port also involved changing vehicles at Albert Park it became obvious that something better was needed in this area. The Municipal Tramways Trust could see the Trolleybus as an alternative to petrol buses in the re-organisation of this system.

The Mack petrol buses used by the Municipal Tramways Trust at this time were running about 197,000 miles per year, consuming petrol at the rate of 6.91 miles per gallon at an average running cost of 7.4 pence per mile.<sup>4</sup> Obviously the Trust hoped for an improvement on these figures using Trolleybuses.

With the success of the "Green Goddess" as the converted Garford became known it was decided to convert the Port Adelaide Tramway system and some petrol bus operated lines to electric traction.

Thirty AEC chassis fitted with Metropolitan Vickers 90 h.p. motors were imported and fitted with local double deck bodies made by J.A. Lawton & Sons. The first line of the new system, to Tusmore in the eastern suburbs was opened on 5 September 1937. The Port Road lines followed on 3 April 1938. The system expanded until it reached a total of 91 vehicles by 1953.

However, by 1957 the original fleet (most of which had travelled in excess of 1 million miles) were worn out and were scrapped. When no replacements were ordered it became obvious that the Trolleybus system was on borrowed time. This was confirmed by some anti-tram propaganda<sup>5</sup> issued by the Municipal Tramways Trust in September 1957. The message was clear. A table of costs suggested the trams were costing 78.4 pence per mile, trolleybuses 56.2 pence per mile and diesel buses 51.6 pence per mile. As the remaining trolleybus fleet aged and the new standardised diesels were introduced it was obvious that the gap between the two would increase. Indeed, it was probably only the newness of the Sunbeam Trolleybuses (build 1952-53) that prevented the system being abandoned along with



*AEC 404 leaving Beaumont terminus for Largs, 1957. - H.D.Ellerton*



*A line up of Adelaide's first three trolleybus fleet types at Port Adelaide Depot. Leyland three axle double deck 434 in the old tuscan red colour scheme; AEC 419 and Leyland 'Canton' 484 in the new silver and carnation red scheme. - H.D.Ellerton*

the street tramway system. The single deck trolley-buses carried on until 1963 when the 26 Leylands (built during the 1939-45 war) started to show the effects of old age. If the Leylands were scrapped it would have left only the 30 Sunbeams to operate the system. The upkeep on such a small non-standard fleet would have been prohibitive.

Announcing the closure of the system, the Chairman of the Tramways Trust Board stated,<sup>6</sup> "Apart from the obvious benefits from fleet standardisation it is estimated that there is an ultimate saving of approximately £50,000 annually in cost of operation."

The only concession to the trolleybuses were that they are "Popular with Passengers"!! So the die was cast and the Trolleybuses which "looked rather like friendly elephants on skates"<sup>7</sup> were scrapped.

Was the Trolleybus experiment in Adelaide a failure?

## REFERENCES

1. Description of Trolleybus Number 216. Minutes of the 3rd Australian & New Zealand Tramway Conference 1932 Page 88.
2. Report "Trolleybuses in Christchurch, New Zealand". Minutes of the 3rd A & NZ Tramway Conference 1932 Page 79.
3. Comment by Sir William Goodman, General Manager Municipal Tramways Trust. Minutes of the 3rd A & NZ Tramway Conference 1932 Page 112.
4. Report "Some notes on the serviceable and economic life of the Motor-Bus". Minutes of the 3rd A & NZ Tramway Conference 1932 Page 97C.
5. "Trust Answers 15 questions for the Press". "Among Ourselves" Volume 4 Number 69, Aug/Sept. 1957 Page 12.
6. "Diesels to replace Trolleybus Fleet within 2 years". "Among Ourselves" Volume 6 Number 95, Jan/Feb 1961-62 Page 6.
7. "The Advertiser" 10 June 1978.



## VICTOR HARBOUR



*The Goolwa to Port Elliot horse worked railway in South Australia was extended to Victor Harbour in 1864. The port facilities were moved to Granite Island in 1875 and the railway was extended there over a causeway. Wharf traffic was horse worked and remained so after the lines to Goolwa and Strathalbyn changed to steam in 1885. Small steam locos were used over the causeway and on Granite Island from about 1910 for some years until traffic levels fell.*

*A horse tram service between Victor Harbour and Granite Island commenced in 1895 and continued during summer until 1955. One of the ex-Moonta cars 5 and 6, transferred in 1931, is seen above on the Granite Island end of the causeway.*

## ADELAIDE TRANSPORT NEWS

The Glenelg line has settled back to its usual pattern of operation after the Golden Jubilee celebrations in December 1979. H351, painted in the original colour scheme, runs coupled with gold painted 377 and provides the only regular example of running non consecutive numbered cars coupled. However, 377 does not display any external numbers. H380 which was painted with murals by high school students in May 1979 has been withdrawn from traffic. Underneath its colourful exterior it is an unrefurbished silver car and the need for an overhaul has caught up with it.

The South Australian Liberal Government has announced that the proposed LRT line from the City (and a connection with the Glenelg line) to Tea Tree Plaza will not be built but that a busway will instead be built, using the Mercedes O-Bahn guideway system, as indicated in the last election campaign, for much of its length.

The busway scheme is considerably cheaper than the LRT, mainly because it is shorter with the buses using existing roads, particular-

ly at the City end. It is also claimed to be the least visually intrusive, which is an extremely sensitive issue, because of the absence of overhead wires and a narrower right of way. There will still be seven crossings of the River Torrens however.

That the right of way will be narrower is unexplained. The buses would be narrower than LRT vehicles, but not significantly and it is unlikely that the O-Bahn system would permit clearances to be reduced below that for railed vehicles. Whilst it is intended to use articulated diesel buses it is claimed that options are being left open for other propulsion methods, including trolley buses, which will require overhead and supports which will be no less visually intrusive and space consuming than for LRT.

The O-Bahn system has to date only been applied to a test track and is only under consideration by two German cities for use in restricted locations and over short distances. Adelaide will therefore be the pioneer of its application to longer distances.

*STA railcars, driving trailer 2102 and motor car 2002 stand at Bridgewater, the limit of suburban working in the Adelaide Hills. This view emphasises the curved sides of these cars and shows to advantage how the elevated driving cabs and radiators extend to the full height of the loading gauge. - Ian Hammond*



## STATE TRANSPORT AUTHORITY

## ADELAIDE South Australia

## COMPOSITION AND LOCATION OF BUS FLEET AS AT 30 JUNE 1980

SERIES, MAKE & COLOUR SCHEME				HACKNEY/CITY	MORPHETTVILLE	PORT ADELAIDE	ST. AGNES	ELIZABETH STH	ALDGATE	LONSDALE	Total Active	Total Stored
100	AEC Regal Mk6	Circle	31-46	8	7						15	1
		Silver	117-130	1							1	13
200	DAIMLER	Silver	201-235	1						11	12	23
	PROTOTYPES	Silver	240,250,260		1				1		2	1
	ARTICULATED	Brown	280a,290					1		1	2	
400	AEC Swift	Beeline	1-7 b	7							7	
		Silver	401-563 571-692	103	64	57		61			285	
700	AEC Swift	Silver	701-766	66							66	
800	LEYLAND Worldmaster	Beeline	(80)1-(80)7 c									6
		Silver	808-816									7
900	LEYLAND Worldmaster	Red Ned	270		1						1	
		Silver	901-946		8						8	
		Promotions	939									1
1000	VOLVO B59	Silver	1001-1307	123	70	47	55			11	306	
		Circle	(1)292-(1)307 c		1						1	
1400	VOLVO B58 Hills	Brown	1401-1420									
	Express	Brown	1451-1495						1		1	
EX PRIVATE BUSES	Various	Various	7101-8511	14	28		2	3	23	28	98	21
TOURIST COACHES	Orange	Orange	51-81		21						21	
MUSEUM BUSES	Various	Various	See notes									10
TOTALS				323	201	104	57	65	25	51	826	86

NOTES: a. Volvo articulated bus 280 is owned by Volvo Australia, is grey painted and bears no numerals.  
b. Ex 564-570.

c. Numerals in brackets are not carried on the buses as fleet numbers.

\* For bus assignment purposes Hackney and City Depots are regarded as one depot.

AEC Swift buses 557-563 have subsequently been renumbered 8-14 respectively and painted in a red-white-blue livery for the City Loop service which commenced on 29 September 1980.

Museum buses are stored at Hackney Depot and are STA owned except where indicated:-

## NUMBER YEAR MAKE

65	1925	Mack	Under restoration at Yatala Gaol
208	1925	Garford Double Deck	No motor or transmission
104	1936	AEC Regent Double Deck	Derelict
115	1947	Daimler Double Deck	Owner T. Tate
623	1954	AEC Regal Mk4	Owner AETM
7114	1962	Commer TS3	Freighter body, ex Bowmans
7605	1955	Bedford SBG	CAC body, ex Ex-Servicemens
7714	1961	Bedford SB3	Syd Wood body, ex Footes
7304	1965	AEC Reliance	Freighter body, ex Campbells
7	1957	Leyland Worldmaster Mk2	ex 807, formerly 808, Beeline livery
?	1961	AEC Regal Mk6	Approved for preservation, not yet selected, Circle Line livery

In addition, Leyland Worldmaster 905, which is the only MTT/STA motorbus to have covered one million miles, is currently stored at Hackney, but is not an approved museum bus. It operated as 7914 in the Henstridge colours for some years in the private bus fleet before returning to its original position in the STA fleet.

COMPOSITION OF TRAM FLEET AS AT 30 JUNE 1980

		CITY DEPOT	
		Active	Stored
H type	Red	351,357,358,363-376	
	Silver	378,360-362	355,356,379 *
	Gold	377	
	Art		380
		22 active	4 stored
			* 379 is undergoing refurbishment

# CITY SECTION

## *News of the Melbourne and Metropolitan Tramways Board*

### TRAMCARS & BUSES

The latest Z3 tram in service to the end of September was 149 on the 17th, with the body of 157 being received on the 19th.

Additional Z cars entered service from Brunswick Depot on the North Coburg route on Monday 1 September. The Sunday roster became Z car the day before and the Saturday roster the following Saturday.

The new MAN buses are being received from the body builder at the rate of about ten per month. This suggests that Doncaster Depot will cease to run AEC Mk6 buses before the end of the year and that the full 130 bus order will be completed by June 1981. It is believed that about 15 of the Mk6s will need to be retained unless the order is extended.

### TRACKWORK

The major track renewal job in Malvern Road, from William Road to Orrong Road was completed by mid September, but the former crossover west of Orrong Road was not renewed.

The crossover in St. Kilda Road, north of Commercial Road, which has been out of service for about a year due to removal of the crossing frogs, was completely removed on 4 August.

A short length of double track in Burke Road Gardiner north of the railway crossing has been set in concrete using new rails. It is at the staggered street intersection of Wills Street and Carroll Crescent, both of which handle heavy east-west traffic to and from the south eastern freeway.

### PUBLICITY & FARES

An extensive advertising campaign urging the public to use public transport commenced

in early September in the media. A theme has been 'Take one, twice daily'. As well as using TV, radio and newspapers, roadside hoardings Carry posters.

The effectiveness of this campaign would be somewhat mitigated by the increase in fares for all passenger services early in August, with MMTB routes effective from the 3rd. One section is now 30c, two sections 40c, three 50c, four or five 60c, six to ten 80c, eleven or more 90c. Concession fares for children and pensioners are 15c for one section and 25c for two or more sections. The Day Tripper concession cards and monthly permits either increased in price or reduced the number of journeys for which they were available.

Four Metro Cards have been introduced for travel on MMTB and Vic Rail services; central area, central area and inner suburbs, central area to outer suburbs and the greater area to nearby country towns such as Lara, Bacchus Marsh, Wadong, Healsville, Belgrave and Pakenham.

### TRANSPORT REPORT

Some months ago Mr. W.M. Lonie, a retired BHP executive, was commissioned by the Victorian Government to head a group to enquire into all aspects of transport—passenger and freight, all modes—in Victoria. A series of reports, many controversial, has been issued.

The reports concerning public transport in Melbourne and suburbs call for a rationalisation and co-ordination of tram bus and train services in some areas, especially at night and weekends, the closure of seven tram routes and eight electric railway passenger services and the re-arrangement and substitution of bus services

in lieu. The major recommendations are:

The closure of the following tram routes —

Footscray — Moonee Ponds  
City — West Maribyrnong  
City — South Melbourne Beach  
City — South Melbourne — St. Kilda Beach  
City — Camberwell  
Kew (Cotham Road) — St. Kilda Beach  
North Richmond — Prahran

The last named route really means two routes —

North Richmond — St. Kilda Beach  
City — Prahran

The closure of the following electric railway passenger services —

Camberwell — Alamein  
Eltham — Hurstbridge  
Flinders Street — Upfield  
Flinders Street — Port Melbourne

Flinders Street — St. Kilda  
Flinders Street — Sandringham  
Newport — Altona  
Newport — Williamstown

Bus services should be re-arranged to complement remaining tram and train services and to act as feeders to the railway.

Costs and benefits should be studied for replacing obsolete trams with buses rather than new trams.

Successive State Governments are accused of allowing the public transport systems to become out of date which has allowed the private car to become the dominant means of transport.

The conclusions, if adopted, would appear to only accelerate the decline of public transport.



*The swing door cars are gone and now the railway line itself is threatened! A two car train from St. Kilda to Flinders Street approaches Albert Park. The St. Kilda Beach via South Melbourne tramway joins the railway at this point and the disused short branch to Albert Park Beach passes under the bridge. The St. Kilda railway was the second line in Victoria and opened on 13 May 1857. Between 1859 and 1867 the Brighton line was linked to St. Kilda station by a loop line from Windsor.*

# ★ Museum Notes and News

## FERNY GROVE . . .



### Brisbane Tramway Museum Society

As reported in the August issue of TW, the Ferny Grove Museum was officially opened by the Governor of Queensland, Sir James Ramsay, on Sunday 10 August 1980.

Although lack of time and the necessity to attend to other tasks meant that the terminus track parallel to McGinn Road was not completed for the opening, a major mass concrete pour was undertaken on the outside track (nearest to McGinn Road) on Saturday 2 August. Both tracks in this area had overhead wire erected on the straight and up the curve to the depots within a week of the opening and the outside track came into revenue service on Sunday 17 August.

Since then, the remainder of the outside track to the limit of the rails has been dug out and one further load of concrete poured. All the concrete on this track was poured to a thickness of 10 ins (250 mm) from railhead and reinforced to provide for future use of trolleybuses on this

road.

The next major trackwork project to be undertaken will be the single track paralleling McGinn Road to the corner of that road and Samford Road and the curve off the uphill track to the depots which will eventually be incorporated into a triangular junction at the present museum front gate. This line and curve has been pegged out and earthworks quotes are being obtained.

Car 65 has been withdrawn from service due to wheel wear. The workshop staff are considering the the best way of removing the wheel and axle sets for re-profiling. Car 136 has had the metal panels on one end and side removed for inspection of the wooden body framing prior to restoration work commencing. Drop centre 341 has returned to the workshop to complete the repainting job commenced some time ago.

*The ever popular 65 running at Ferny Grove before its recent withdrawal.*



# ST KILDA . . .



## Australian Electric Transport Museum

### New Building

A contractor commenced erection of the new two track tram depot and display hall in October 1980 with the pouring of concrete footings. The building will be 9m wide, 38m long and 4.9m high sides (29ft 6 in X 124 ft 7 in X 16 ft 3 in), of steel framed construction. It will ultimately contain two tracks which will join the main line beyond the end of the present depot fan. The new building is approximately in line with the existing trolleybus shed and immediately west of it. The building is being financed from the AETM's own resources.

### Grounds Programme

The grounds programme received a further boost recently when the painting of the entrance building and substation was completed. Both have received cream walls with bright red roof and brown trim to match the inspector's cabin, signal box and waiting seat. The former timber

fence which separated the car park from the entrance building has been replaced with a line of concrete posts.

### Display Extended

Displays relating to Adelaide's transport history have further been extended by the addition of cases showing equipment and documents used by both motormen and conductors in their daily duties. Old badges and a display of items relating to staff and ticket safe working systems are included.

### Workshop Activities

Apart from the continued restoration of cars 1 and 42, a significant recent project has involved making a number of improvements to car 303. It was found that some surplus H type car parts could be incorporated conveniently into the brake adjustment system, while at the same time, the opportunity has been taken to further revarnish the folding doors.



*Ian Seymour is seen carrying out routine servicing of a controller on car 1.*  
Paul Shillabeer

# BYLANDS . . .



## Tramway Museum Society of Victoria

With the completion of concreting the centre poles and transformer pad, work commenced on Saturday 30 August to fit the double bracket arms and the supporting iron work to the steel poles. The system of hoisting, holding and securing the arms and supports proved basically sound and was aided by use of the tower waggon and extension ladders. Work is progressing on finishing the scraping and painting of the last of the arms and supports needed and their installation.

The electric welder was repaired and returned to service only to immediately break down again. Investigation revealed bad workmanship in the repairs so it was returned to the electrical contractor concerned. Unfortunately this means a further delay to welding the rail joints in the depot fan area and therefore completion of this track job. While the track is serviceable, extra care is needed and the track cannot be filled to enable the horse to pull the tramcar to and from the depot. This shunting is being performed manually for the time being.

Friday 12 September saw the culmination of six months effort by the Society to arrange with the MMTB and a private purchaser the sale of a complete W2 tramcar. The Society needed a com-

plete tramcar set of equipment for use on future restoration work of the two Geelong tramcar bodies, but did not really want to have to scrap the body to get the equipment. A chance remark by a visitor at the AMRA Exhibition at Camberwell Civic Centre last March indicated that he wanted a tramcar body. An approach was made to the MMTB setting out the position and 489 was allocated. The body left Preston Workshops on 10 September for Ferntree Gully (where the Society is to remove the equipment) while the bogies went to Bylands on the 12th, accompanied by the bogies from 492. These are amongst the last spur gear bogies remaining and while the project has cost the Society a lot of money, the bogies will be useful in the future when W2s are obtained.

Also on 12 September the rewound core of the transformer was placed back inside the tank of the unit, bolted into place and the whole transformer lifted onto the concrete pad at the rear of the substation building. This operation took advantage of the presence of the crane at Bylands for unloading the bogies.

On Monday 22 September, the Society received its second M&MTB bus in the shape of 622. It is one of the underfloor engine buses bought by

*The horsecar stands isolated on the mainline as the depot turnout is removed prior to renewal. 25.4.80. / K.S.Kings*



the Board that entered service in November 1956, thus becoming known as one of the 'Olympic Games buses' because they normally operated the Heidelberg route to the site of the Olympic Village. By coincidence, 622 also ran the last trip operated by this class of vehicle for the MMTB. (See news item TW August 1980). It has a J.A. Lawton (Adelaide) body on an English AEC Mk 4 chassis. It is in remarkably good condition except for several minor marks and dints on the exterior and should prove another interesting exhibit in the Society's display of historic trams and buses.

Last year the City of Prahran celebrated its centenary by closing Chapel Street for a weekend and devoting the area to a carnival and associated activities. It has been decided to hold a

similar function again this year and the Society has been asked to run the horse trams. Permission has been given by the MMTB for use of its tracks. The two cars, 253 and 256 will each operate in both directions on separate tracks. Alan Antcliff and Newton Williams will bring 253 from Mildura for the occasion and it will be stored at Bylands until the Australia Day Cavalcade in 1981 when it is expected that both cars will again be used.

Details of this latter event have still not been received from the Premier's Department Committee, but are expected to be the same as this year, with a vintage electric tram service along Flinders Street and Wellington Parade with the horse trams on the Simpson Street siding.

## ALBION PARK . . .

### Illawarra Light Railway Museum Society



#### Locomotives

Ruston Hornsby diesel loco Bn 285298 returned to service on 13 September after receiving a major overhaul. Since its arrival at Albion Park in March 1978 this unit was found to have a thirst for sump oil. This was found to be due to a faulty front end oil seal which had been patched with fibre glass by the previous owners.

Mr. Jim Tooley, the father of a junior member, received experience on Ruston diesel engines many years ago in England and he offered to rectify the fault. This proved to be a major job due to a damaged and bent sleeve, but by devising special tools and techniques the sleeve and oil seal were finally removed. The seal housing has been brazed and resurfaced and the reassembled engine is now 'as good as new'.

During late August the four wheel and axle sets for the tender of the Hudswell Clarke loco *Cairns* (Bn 1706) returned from Garnock Engineering of Port Kembla with reprofiled wheel treads and journals. At the end of September new bearing brasses were delivered and by mid October these were awaited from the machinist to enable the tender bogies to be reassembled. While the bogies have been removed the opportunity has been taken to cut back the paintwork on both the tender and loco so that repainting could be undertaken; bearing rollers on the bogies have been renewed; the footplate floor

rebuilt and the frame straightened and other damage repaired which was no doubt due to some long forgotten accident.

While *Cairns* has been out of service the regular monthly open day operations have been worked by the Davenport loco *Kiama* (Bn 1517/1596).

#### Rolling Stock

Member Bob Frier's efforts at Albion Park have resulted in all the skips, explosive waggons, hoppers etc in the museum compound being restored and repainted, a contrast to the state in which most of these items were received.

The former International circa 1918 bus body has almost been completely rebuilt externally. By mid October new crown light upper window sashes had been fitted to one side and the two end bulkheads while the final five sashes for the remaining side were being constructed. At the same time most of the traditional half round cover strip beading had been fitted to the side and end body panels while on 13 September one side of the body was lined out with yellow striping and corner flourishes. This item is almost unrecognisable when compared with photos of when it arrived from Goulburn in May 1977 in a very sorry and derelict state.

### Stationary Engines

Allied Constructions donated an interesting two cylinder stationary steam engine to the Society and this arrived at Albion Park on 15 September. So far its original function remains a mystery, but it carries a builders plate from the WAGR Midland Workshops dated 1942, which may result in some reader being able to solve its origins.

### Trackwork

During September and October efforts have been concentrated on track extensions eastwards from Yallah station to the present lease boundary. (See map TW October 1979, page 30). The first TGR point set made up with 50lb rail has been used on this extension to provide the passing loop siding in the station yard. Trackwork at Albion Park now amounts to a total of 620 m of 2 ft gauge plant. This is made up of 300 m of the main line, 120 m of branch track along Croom Road to Tongarra Road and 200 m of sidings in the compound. In addition there is 200 m of 2ft gauge track used by the electric tramway and a further 40 m of standard gauge line on which *South Bulli No. 2* loco and other rollingstock stands.

Negotiations for the extension of the museum leased area have almost reached a successful conclusion and when settled a further 400 m of track will be constructed through the new site to provide an operating circuit of 700 m.

### Yallah Station

Work is nearing completion on the fitting of new soffit panels under the roof eaves at the rear of the Yallah station building. The interior of the structure is now in marked contrast to its appearance when it was last used by the NSWGR. Power now enters the building along a permanent pole line, the floors have been covered with wall to wall carpet and seats and picket fencing have been erected on the 30 m long platform.

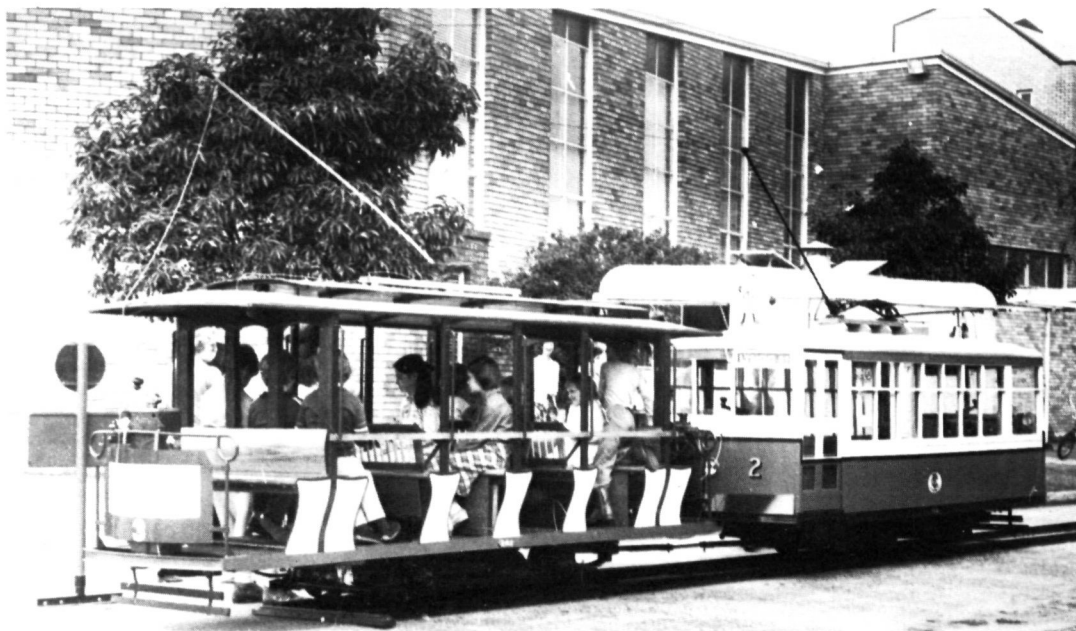
Ornamental lamp standards have been obtained and these will soon be erected at the station.

### Second Tram

A seven bench 21 seat open toastrack, four wheel, half scale tramcar shared the working with the birney car on the open day of 10 August. On that day almost 700 passengers used the two trams which handled capacity loads throughout the day.

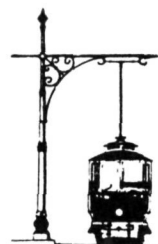
The two cars worked in multiple unit at the Combined High Schools Hall in Lysaght Street Fairy Meadow on the weekend of 23 August on the occasion of the Illawarra Model Railway Exhibition.

This operation was again undertaken at the Sydney Showground during the October Labour Day weekend when the coupled set carried over 5000 passengers along almost 200 m of portable track at the Model Railway Exhibition.



*Half size open toastrack and Birney safety cars coupled in multiple unit at the South Coast Model Exhibition. 24.8.80. / K.McCarthy*

# LOFTUS . . .



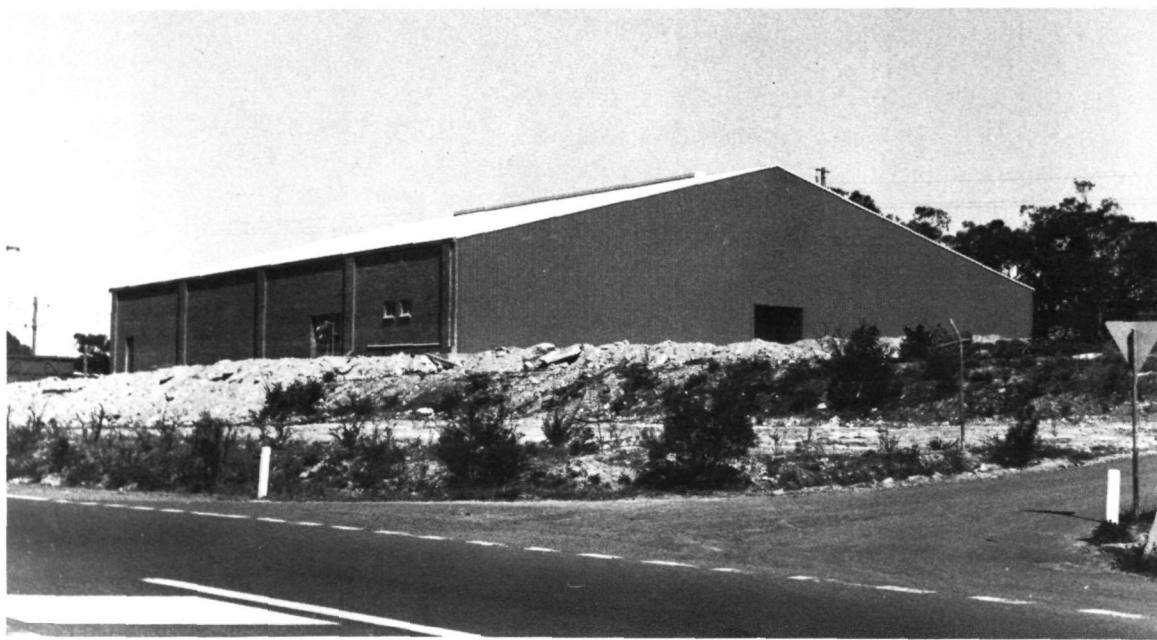
## South Pacific Electric Railway

Work on the new depot at Loftus Station slowly drags on. Some of the sub contracted finishing work has not been entirely satisfactory. Although this is a major project for the Society the building is only a minor one in the commercial/industrial scene and the problems encountered are not uncommon in this regard in Sydney.

The adjacent new Loftus railway station is unattended from early in the evening and has suffered much vandalism recently which has also extended to the depot. As a result it has been decided to go ahead with further fencing as a matter of urgency although this could result in the enclosing of the south end of the building being delayed. The railway boundary fence is to be let out on contract (digging post holes in the compacted earth and rock soon drains enthusiasm away).

Meanwhile work at the old site is not neglected. Finishing touches are being applied to R1 1979 and refurbishment continues on LP 154. Bob Casey has dismantled the mechanical operating components of the PC5 controller of P 1497 and is overhauling them prior to re-assembly. (The PC5 is a remote electro-pneumatic camshaft controller equipped for multiple unit operation.)

The Society once more mounted a display at the AMRA Model Railway Exhibition at Sydney Showground over the holiday weekend of 4-6 October 1980. The display utilised the bookshop signalbox and free standing display boards, which although appearing to the ones used in 1979 were actually new ones built by Bob Cowing and are narrower for easier handling in transport.



*The new museum building at Loftus after completion of the exterior walls on all except the south end. This view is from the Pitt Street and Princes Highway cnr.*

