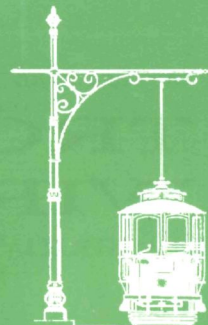


# TROLLEY WIRE



**No.285**

**MAY 2001**

**\$8.25\***

Print Post Approved PP245358/00021



**THE TRAMS THAT NEVER CAME**

# TROLLEY WIRE

AUSTRALIA'S TRAMWAY MUSEUM  
MAGAZINE

MAY 2001

No. 285 Vol. 42 No. 2 - ISSN 0155-1264

## CONTENTS

THE TRAMS THAT NEVER CAME.....	3
GLENELG TRAM REFURBISHMENT PROJECT.....	16
HERE AND THERE.....	20
MUSEUM NEWS.....	24

Published by the South Pacific Electric Railway  
Co-operative Society Limited, PO Box 103,  
Sutherland, NSW 1499

Editor.....Bob Merchant  
Sub-editing and Production.....Dale Budd  
Randall Wilson

\*Cover price \$7.50 plus \$0.75 GST

Subscription Rates (for four issues per year) to expire  
in December.

Australia .....	\$A30.00
New Zealand/Asia.....	\$A36.00
Elsewhere.....	\$A40.00

All correspondence in relation to TROLLEY WIRE  
and other publishing and sales matters should be  
forwarded to:

PO Box 103, Sutherland, NSW 1499  
Phone: (02) 9542 3646 Fax: (02) 9545 3390

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

Typesetting and finished art by National Advertising & Design  
Studios - Canberra Tel: (02) 6239 6287 Fax: (02) 6239 6693

Printed by National Capital Printing - Canberra  
Tel: (02) 6280 747 Fax: (02) 6280 7817



Sydney R class 1740 crosses the Princes Highway at Loftus on its return journey from the Royal National Park to the Sydney Tramway Museum on 25 February 2001.

Ross Langford-Brown

### Front Cover:

*The latest addition to the Ballarat Tramway Museum's fleet is Bendigo 18 (renumbered 45 whilst in Ballarat), dressed in a gold livery to celebrate the Golden Jubilee of the discovery of gold in Victoria in 1851.*

Warren Doubleday

### Back Page Top:

*Bendigo No. 35 has been rebuilt to a cross seat configuration in the dropcentre to cater for visiting coach tours. The car is wearing the livery of the Royal Automobile Club of Victoria, which sponsored the rebuilding and restoration of the car.*

Howard Clark

### Back Page Bottom:

*Melbourne Z class 185, the first of M>Tram's refurbished trams, carries a representation under the driver's side window of football jersey No. 31 that was worn by Ron Barassi. The car is seen at St Kilda Beach on 5 April 2001.*

Ray Marsh



# THE TRAMS THAT NEVER CAME

## Plans for the use of PCCs, and trials of Melbourne and Brisbane trams, in Sydney

by Dale Budd

During the Second World War and the decade that followed, the Sydney tramways went through a lengthy period of policy confusion, which regrettably concluded in 1953 with confirmation of the pre-war decision that trams would be replaced by buses. During this period of confusion, consideration was given to a number of proposals which would have seen improved tramcar designs adopted. These proposals included adoption of PCC cars or some of their features, and trials of trams from Melbourne and Brisbane.

Virtually all of these proposals came to nothing. Neither PCCs nor cars embodying their features were ever built, the visiting trams never came, and the post-war R1s were all but identical to those built in the 1930s. Apart from the conversion of four footboard cars to a saloon layout, experiments with two sets of resilient-wheeled bogies were almost the only effort at innovation.

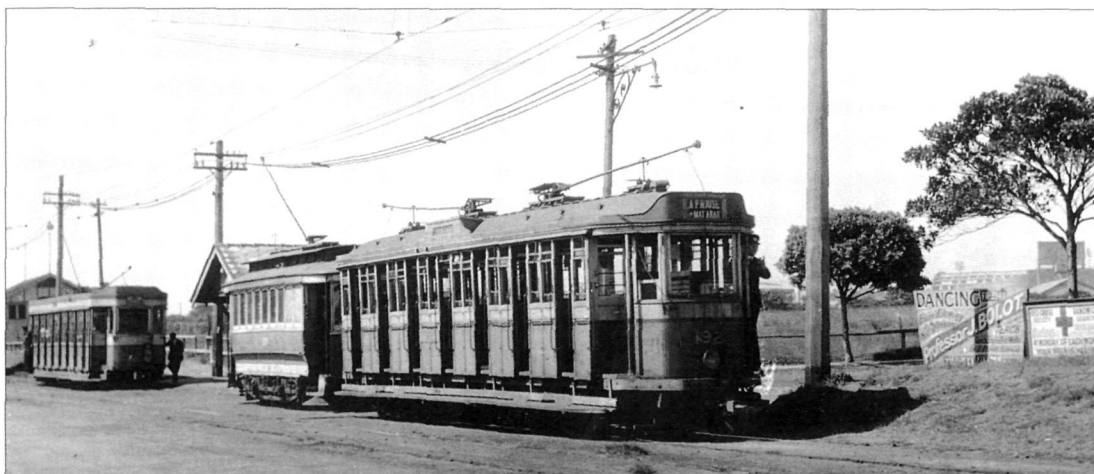
### 1945 – 1952: PCCs considered and rejected

As early as 1945 the Australian Tramway and Motor Bus Employees' Association, in the issue of its journal

of 10 June that year, urged the introduction of PCC cars in Sydney. In the late 1940s the acquisition of new trams was a topic of frequent newspaper reports, with many references to 'noiseless' trams. On 14 April 1947 the Sydney Morning Herald reported that Premier McGirr was expected to announce in his policy speech the following day, the intention to spend £3 million on 500 modern trams. "The new trams would be of the corridor type. They would be rubber-sprung and are therefore described as noiseless."

The subsequent report of the speech confirmed the undertaking that new noiseless trams would be built. Around this period the number of new trams to be ordered was variously referred to as 200, 250, 350 or 500, but the policy speech did not mention a specific quantity. The McGirr Government was re-elected at the election which followed.

The issue of what type of trams would be ordered was discussed in a lengthy internal paper prepared by the Chief Engineer of the Department of Road Transport and Tramways (DRT&T), dated 8 May 1947. This discursive document first dealt with cars of the 'noiseless' type, and briefly examined the



*The need for new trams for Sydney following the Second World War was exemplified by the condition of the L/P cars, many of which were very run down. Further, because their body sides overhung the footboards, union bans were briefly applied to these and the E, K and N class cars, to pressure the Government to order new trams. No. 192 is seen at Kensington Junction on 28 February 1948, being propelled towards Randwick Workshops by breakdown car 117s. The disabled car has one axle supported by pony wheels. (Note the trackside billboard offering dancing lessons with Professor Bolot!)*

Noel Reed



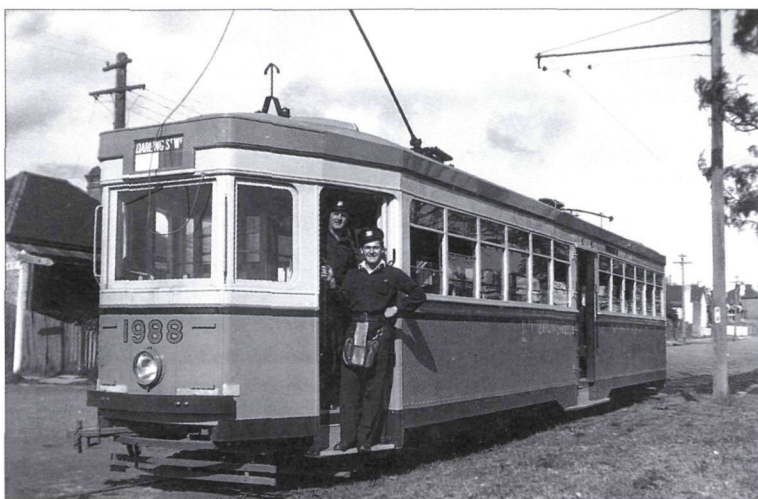
*What might have been: a San Francisco 1948-built double-ended PCC, running on the F-Market service in April 1998. Sister car 1014 is at the Sydney Tramway Museum. It is likely that these were the San Francisco cars referred to in the 1947 paper discussing new trams for Sydney.* Dale Budd

possibility of importing complete PCC trams from the USA. It reported that correspondence on file indicated that the St Louis Car Company had quoted the M&MTB in 1945 for a full double-ended PCC car complete for US\$45,000, approximately A£14,000 FOB St Louis. (FOB, or Free On Board means loaded for transport from the factory). The price from St Louis to the San Francisco transport undertaking was \$30,000 (A£10,000). There was no comment or explanation for the difference in prices applying to the two cities, although it perhaps reflected the extra cost of a one-off vehicle arranged for left hand running. The paper reached the judgement that "in the circumstances it is taken that any idea of improving the fleet by the importation of complete cars could not be entertained owing to prohibitive costs".

It is a strange coincidence that the cars for San

Francisco referred to in this paper were almost certainly the Municipal Railway's Type D 'Torpedoes', of which No. 1014 is now at the Sydney Tramway Museum. These cars were ordered in 1946 and delivered in 1948.

In relation to manufacture in Australia, the paper referred to the fact that the M&MTB had reached an agreement with the Transit Research Corporation of the USA, and thereby had acquired rights to make and sell cars or trucks embodying some or all of the inventions owned or controlled by the TRC, and to grant sub-licences of the same character as the Board's licence. The M&MTB had told the NSW Department that it would be prepared to grant sub-licences to other undertakings in Australia at no profit to the Board. In passing, this seems to have been a remarkably generous position for the M&MTB to adopt.



*Sydney's first post-war R1 at Canterbury, soon after its entry into service in 1950 - an attractive car, but lacking any of the advanced features of a PCC.* N. Boxall



The paper gave consideration to another type of 'noiseless' tram. This would have been a hybrid incorporating PCC trucks. The approach was apparently to be similar to car 980 in Melbourne, except that the structural design of the cars for Sydney was to be more akin to a PCC. "The cars envisaged are those with trucks of the Presidents' Conference Car type, with bodies to suit the local conditions, similar to those of the R or R1 type, but designed structurally more on the lines of the PCC car to give greater resistance against, and to localise damage by, collision, and to facilitate collision repair work".

An option not considered in the paper was the manufacture of complete PCC cars in Australia, using drawings from the USA. While the importation of complete cars was rejected for cost reasons rather than because of design objections, local manufacture to the American design appears not to have been considered. Instead the paper went on to discuss the resources required to prepare plans and specifications for a hybrid design. It noted that the Department's design organisation had been completely disbanded and that there would be extreme difficulty in obtaining efficient design staff.

The second part of the paper dealt with "cars similar to the type last purchased but providing for any modifications considered necessary or desirable". It stated that any modifications should only be minor, otherwise they would "disorganise the existing design".

This section concluded with the following statement: "Again having in mind the present day costs in general it is expected that the cost of new cars would be in the vicinity of £5,000 per car and thus probably not much less than the corresponding figure of the Presidents' Conference type".

The paper commented on the greater power consumption of PCC cars, and drew attention to the need to consider substation capacity.

Having thus traversed the landscape of possibilities, including dismissing the importation of complete PCCs and emphasising the difficulties of preparing a hybrid design, the paper came to the following remarkable conclusion: "However in view of the quantity, 200, of new cars contemplated, and as the evidence of officers both of this Department and of the M&MTB, who have travelled abroad, is that the introduction of cars of the PCC type has been largely responsible for the restoration of tramcars to public favour, it is felt that the design of a new type of car is

advisable".

As is well known, the decision which followed was for the purchase of R1s with negligible changes from the pre-war specification. An internal DRT&T paper of 2 November 1950 stated that "the corridor cars under construction will embody improvements on corridor cars now in service, by the incorporation of noise reducing features, particularly in regard to trolley gear, air compressors and the mounting of the bodies on the bogies". This statement does not appear to have been reflected in actual differences from the earlier R1s.

It is possible that the Government intended to purchase 250 PCCs following the 250 (as originally ordered) R1s, but nothing was said publicly of any such plans. In a Parliamentary speech on 28 October 1948, Transport Minister O'Sullivan defended the decision to buy more R1s, saying that PCC cars would cost £10,000 each.

In 1951 Transport Commissioner Reg Winsor and Transport Minister Billy Sheahan visited Preston Workshops. It appears the visitors examined Melbourne car 980, as a personal letter between Melbourne and Sydney executives reported that "they were favourably impressed with its [PCC car] characteristics but not its price. It was about all they were interested in when they came to Preston..."

To complete this account of proposals for PCCs which came to nought, it should be recorded that Mr Windsor Davis, secretary of the Transit Research Corporation which held the PCC patents, announced in 1952 that Sydney was considering the purchase of 10 prototype PCCs. His optimism was ill-founded, but it is perhaps not a coincidence that 1952 was the last year in which there was any vestige of enthusiasm for trams in the DRT&T.

It should be remembered that at the same time as new trams were being considered and ordered in 1947 and 1948, and were the subject of frequent media reports and statements by politicians, action was being taken by the Government and the DRT&T, with the backing of a series of 'expert' reports, to resume the pre-war policy of replacing trams with buses. The Suspension Bridge line closed in January 1948, while the period to the end of 1949 was to see a number of further closures in both Sydney and Newcastle. Such internal inconsistencies were to continue until very late in Sydney's tramway history, as evidenced for example by the overhauls of R class cars in 1958 followed within months by their withdrawal and scrapping.

## 1947: the proposed trial of a Melbourne SW6 tramcar

Recent research by Vic Solomons at State Records, NSW, has revealed details of a 1947 proposal for a trial of a Melbourne SW6 car in Sydney. While initially supported at Ministerial level, the proposal was quickly buried by Sydney's tramway bureaucrats.

In January 1947 NSW Transport Minister O'Sullivan visited Melbourne and met Mr H H Bell, Chairman of the M&MTB. Following this meeting Mr Bell sent, on 27 May, a drawing of an SW6 tramcar to the NSW Commissioner for Road Transport and Tramways, Mr Neale, so that "officers of his department could determine clearances for this type of car on the Sydney Tramway System".

On 2 June 1947 a letter was sent to Mr Bell from Sydney, setting out a list of ten questions relating to curves, gauges, clearances etc. The M&MTB Chairman replied to this on 12 June, setting out answers to the questions and forwarding a further ten drawings "to assist in determining the suitability of our tramcars" for Sydney.

On 19 July 1947 the Melbourne *Herald* carried the following report:

Sydney, Saturday – The NSW Government has offered to buy some of Melbourne's SW6 trams providing changes in structure are made to suit Sydney conditions.

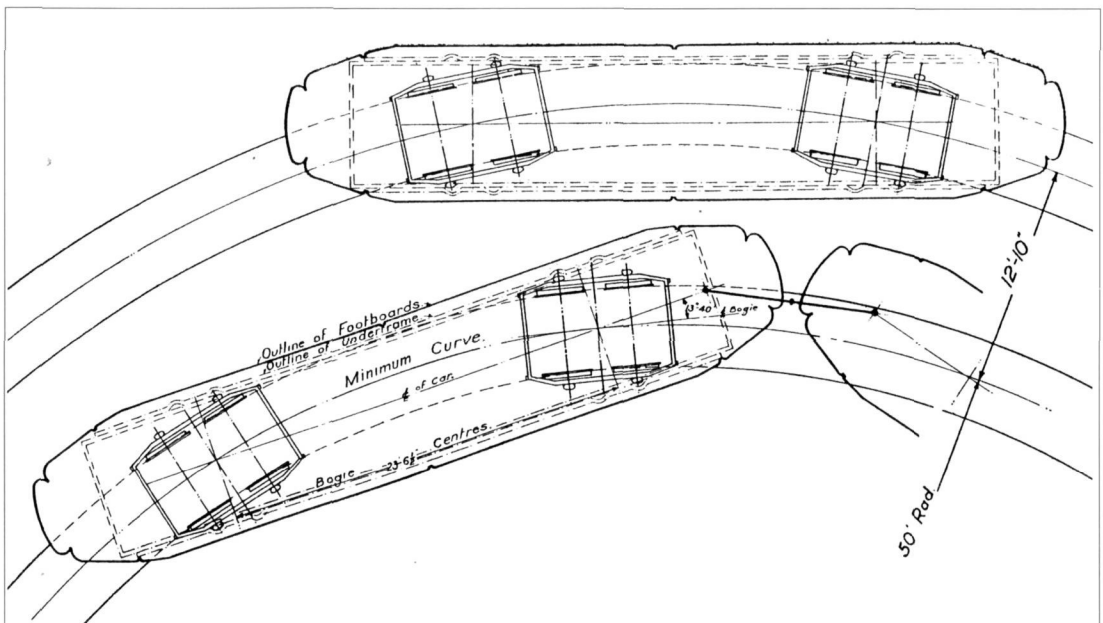
The Minister for Transport (Mr O'Sullivan) said today the fronts of the Melbourne trams were square, whereas those in Sydney were triangular.

When he was in Melbourne in January he agreed to give an SW6 a trial in Sydney if the front was changed, but so far he had heard nothing more from Melbourne.

The curious statement about the fronts of Melbourne trams being 'square', while those in Sydney were 'triangular', was apparently a simplistic reference to the greater taper applied to the ends of Sydney trams, particularly the corridor cars.

Evidently disconcerted at the statement in the article about a lack of action, Mr Bell wrote to the NSW Minister on 24 July, referring to the exchanges of correspondence and the provision of drawings and information which had occurred over the previous two months.

It is not known what reply was eventually sent to Melbourne, but the proposal for a trial of an SW6 in



*Clearance issues are illustrated by this drawing of Sydney O or P type cars passing on a sharp curve. It will readily be appreciated that a change in the distance between bogie centres will have a marked effect on the overhang at both the ends and the centre of a tram. This would affect the clearance between trams passing on curves, and the clearance to fixed objects close to the track.*



*This picture of a Melbourne SW6 shows the appearance of these cars at the time the trial in Sydney was proposed. No. 909 was less than four years old when it was photographed in Melville Road, West Brunswick, en route to West Coburg in January 1949.*

Noel Reed



Sydney was effectively dismissed in a letter sent by the NSW Commissioner to the acting Minister for Transport on 19 August 1947.

This letter referred to the information which had been received from Melbourne, and then said that in the opinion of the Commissioner, the SW6 could not be operated with safety over the majority of the tracks in Sydney for the following reasons:

The Melbourne system is designed with a track centre of 11ft with a minimum radius curve of 60ft.

The Sydney system with 10ft track centres, and 50ft minimum radius curve (*sic*).

In Melbourne the minimum clearance between cars on curve transitions is 15ins, whilst in Sydney, with standard stock, it is 12ins. Operating the SW6 on the Sydney system, this clearance would be reduced to 8ins, which would not permit of a sufficient margin of safety.

The SW6 car is designed with bogie centres of 28ft whilst in Sydney the bogie centres are 23ft 8ins. To satisfactorily operate a car with the longer bogie centres, the minimum vertical curves both concave and convex in Melbourne are designed with a radius of 1,250ft whilst in Sydney, the minimum concave curve is 1,200ft and the minimum convex curve 650ft radius. In view of the above, it is probable that under some conditions of operation, the undergear would foul the roadway.

To make the necessary modifications would be a very costly matter and would involve not only this Department but other road constructing authorities in a very serious roadway regrading scheme.

In addition, owing to the restricted clearances that would be brought about by the operation of a car of

this type should the vertical easements be satisfactorily modified, the Department would still be involved in serious difficulty in providing for satisfactory clearances.

In view of the difficulties mentioned above it would be inadvisable for an SW6 type car to be obtained for operation on the Sydney system.

Prior to the designing of the present R type tramcar competent officers of this Department made a very thorough examination of the Melbourne tramcar and I am definitely of the opinion that the R type car is the superior vehicle.

This report led to a public statement by Minister O'Sullivan that the Melbourne SW6 car was unsuited to Sydney traffic conditions.

The discussion of engineering difficulties in the Commissioner's review is curious, and suggests the NSW officers were casting around for reasons not to go ahead with the proposed trial. From the sweeping statement in the last paragraph of the review, it is clear that the NSW Department had no enthusiasm for seeing whether anything could be learned from a trial of the Melbourne design. Worse, the statement is misleading and unfair, since the M&MTB had assisted with the design of the R cars. In 1932 the M&MTB's chief draftsman, Mr H. H. Stevenson, had been transferred on loan to Sydney for this purpose.

The overall dimensions of the SW6 and R classes are very similar, as shown in the accompanying drawings. On straight and level track there would have been no problems. The lack of taper at the ends of the Melbourne car, and more particularly its longer distance between bogie centres, would have raised

*Continued on page 10*

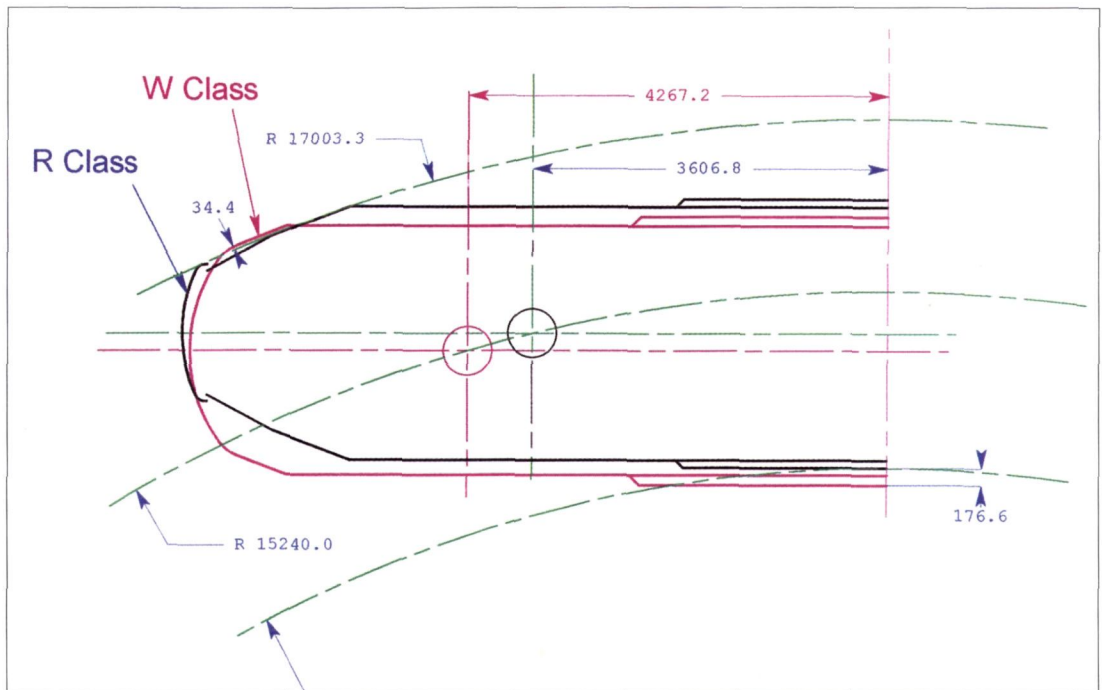


Diagram showing the outlines of Sydney R and Melbourne SW6 tramcars on a 50ft radius curve, with the swept area of the R class also shown. The additional overhang of the Melbourne car on the outside (34.4mm) and inside (176.6mm) of the curve are indicated.

Diagram by John Dunn, Transit Design

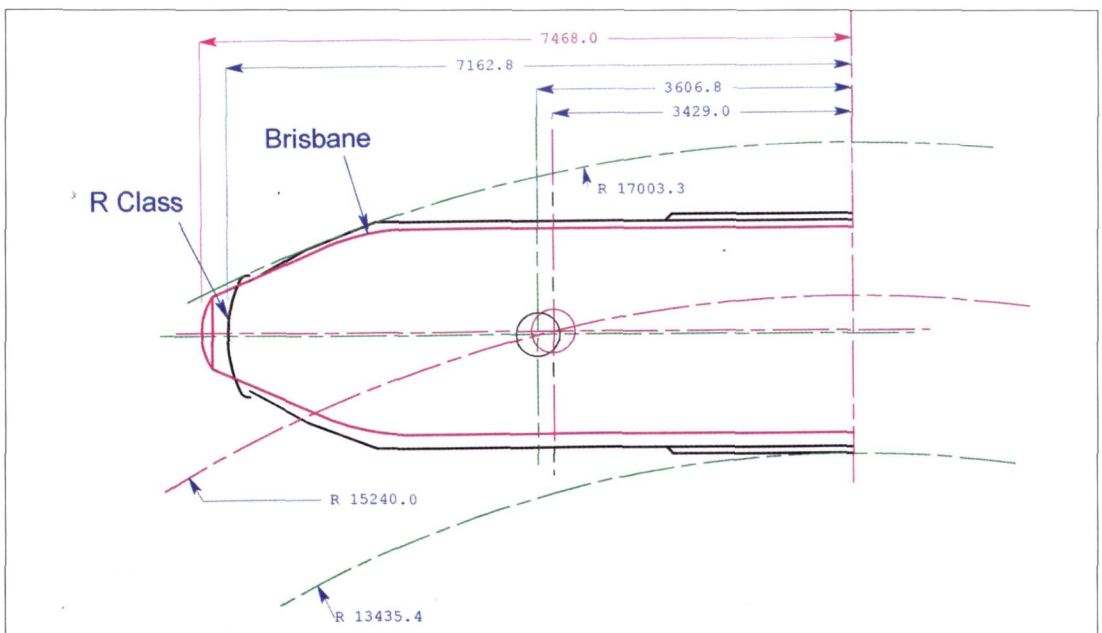


Diagram showing the outlines of Sydney R and Brisbane FM tramcars on a 50ft radius curve, with the swept area of the R class also shown. It is evident that the Brisbane car is entirely within the swept area of the Sydney tram, and thus that there would have been no clearance issues in operating the Brisbane car in Sydney.

Diagram by John Dunn, Transit Design





*If an SW6 had been trialled in Sydney, clearance problems on curves such as these at Hunter Street could have been solved by a simple rule prohibiting the SW6 from passing another car on a curve.*

Dale Budd

*The Brisbane tramway system had a number of locations where trams could not pass on curves, marked by prominent warning signs. One such place was the corner of Racecourse and Lancaster Roads, Ascot, where car 472 is seen turning towards Oriel Park, its destination indicator already set for the return journey.*

Howard Clark



issues in relation to clearances between trams passing on curves. John Dunn of Transit Design has reviewed the swept areas of the two types of tram on a 50ft radius curve, the nominal sharpest curve on the Sydney system. As shown on the accompanying drawings, the front corner of the SW6 would have been outside the swept area of an R or R1 by 34mm – about one and a half inches. On the inside of the curve the running board of the SW6 would have overhung by an extra 177mm, or about 7ins, compared with an R or R1. (Incidentally the minimum radius was subsequently reduced to 46ft for the Queens Square loop, the tightest tramway curve in Sydney, opened in 1950.)

The fact that the SW6 would have been 'out of gauge' on curves would have been more significant than the supposed problem of clearance of under-floor equipment on vertical curves, referred to in the Commissioner's letter. On a convex vertical curve – i.e. a hump in the track – of 650ft radius, the difference in clearance beneath the centre of the trams would have been half an inch, an insignificant figure compared with variations resulting from tyre wear. It is a wonder that differing wheel standards were not raised as a problem!

There seems to be no reason why an SW6 could not have been trialled in Sydney, possibly with some route restrictions and subject to a prohibition on passing other trams on curves – a limitation routinely applied on many curves in Brisbane without adversely affecting operations.

The motive for the trial was presumably to evaluate the SW6 in terms of its body design – totally enclosed, without end entrances and with driver-controlled sliding doors – and its value for money. If the SW6 had been adopted by Sydney, the car could have been redesigned with reduced distance between bogie

centres and, as stated in the newspaper report, the design of the ends could have been changed to include more taper. With these changes in prospect, there was no validity in using clearance issues to preclude a trial.

The lengthy paper of 8 May 1947, discussed earlier, made no mention of the trial of a Melbourne car, and preliminary quotations (described as 'advance tenders') for new R1 cars were invited on 31 May 1947. Both dates were within the period when the trial was being considered. It can be surmised that the departmental bureaucrats regarded the idea of a trial as an unwanted distraction. Firm tenders for supply of the R1s were invited, following the completion of plans and specifications, on 10 January 1948, and the contract was let to Commonwealth Engineering in August 1948.

It is possible that the idea of an SW6 trial was revived in 1948, as a reaction to the unexpectedly high price quoted by Commonwealth Engineering for manufacture of the R1s. Several sources refer to an SW6 being prepared for loan to Sydney in that year. But documentary evidence of a follow-up proposal has not been found. It is possible that these reports in fact relate to the events of 1947.

### **1950 and 1953: resilient-wheeled bogies from Brisbane, and the proposed trial of a Brisbane FM tramcar**

The only example of an interstate transfer of equipment which actually happened was the use of a set of Brisbane FM bogies, equipped with resilient wheels, under R1 class car 1958 for a short period in 1950. Brisbane had become the first city in Australia to apply resilient wheels to its trams when No. 497 entered service with this equipment in June 1949. It was the bogies from this car which were lent to Sydney.

## **Research turned to reality**

Preparation of this article had an unusual result. John Dunn generously agreed to provide a professional assessment of the clearance issues relating to the proposed 1947 and 1953 trials – but this was suddenly overtaken by a request for a similar assessment of a current proposal, for the operation of Sydney R car 1808 in Melbourne for Moomba.

John compared the swept areas of the R and SW6 classes on Melbourne's minimum radius curve of 17.53 metres (57ft 6ins, for those comparing Melbourne and Sydney radii.) The finding was that the Sydney R or R1 class occupies a slightly smaller swept area than a Melbourne SW6 car – consistent with the assessment reported in this article, which compares the two types of tram on a sharper curve. This indicated that the Sydney R class car could operate in Melbourne without restrictions due to clearances.





*Car 1958 at Circular Quay in 1950, during its brief period of operation with Brisbane resilient-wheeled bogies.*

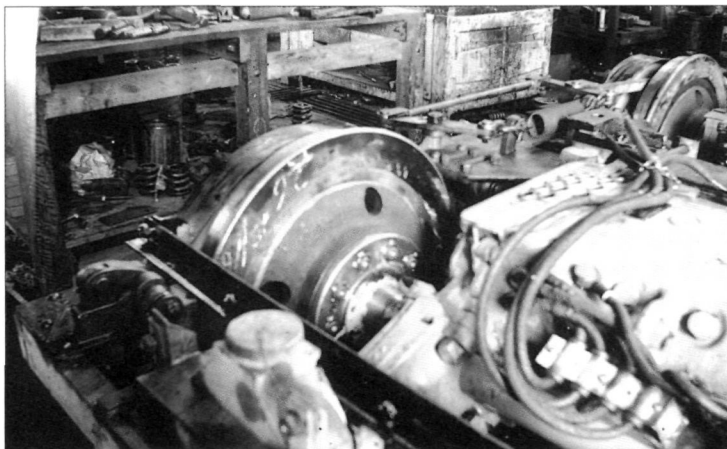
Ken McCarthy

This trial, which was fully described in an article by Ross Willson in the June 1973 issue of *Electric Traction*, was cut short because the thickness of the wheels caused them to foul check rails, and because the steel in the tyres was too soft, leading to rapid deformation. No. 1958 ran with resilient wheels for only four months, from April to August 1950.

The DRT&T paper of 2 November 1950 said that "the tests in Sydney of resilient wheels loaned by the Brisbane Tramways gave doubtful results, and clearly indicated that it would be unwise to embark on a programme of use of wheels of this type without extensive running experience under Sydney conditions. For this purpose, negotiations are already in hand with the view to the obtaining from the manufacturers, several car sets of resilient wheels better adapted for Sydney service than those already

tested". Identical words were used by Transport Minister Sheahan in a statement to Parliament on 15 November. This statement is interesting for what it did not say. No mention was made of the advantages of resilient wheels, nor was it said that the problems experienced were straightforward issues of mechanical engineering. Instead, the DRT&T preferred to use subjective terms such as "doubtful results" and "unwise to embark on a programme".

To conclude the story of resilient wheels, it should be mentioned that English Electric 'Silentbloc' wheels were used on R1 class 1974 between January 1954 and February 1957. Apart from the hybrid car 980 in Melbourne, the widespread adoption of resilient wheels in that city and in Brisbane represented the only use in Australia of any of the advanced features of the PCC design.



*Resilient wheels on a No. 13 bogie at Randwick Workshops, about to be placed under R1 car 1974. The photo was taken on 13 January 1954.*

Keith Kings

In May 1953, the then NSW Minister for Transport, Clarrie Martin, proposed to borrow an FM car from Brisbane. His son Kevin, a young teenager at the time,

recalls that on a family visit to Brisbane, he joined his father on a demonstration run of a Four Motor car from Milton Workshops. (Kevin's interest in trams led to his

### Earlier trams that never came

History is full of plans and proposals that did not go ahead. Examples from the 1920s in relation to the Sydney tramways provide an interesting complement to the events which occurred some 20 to 30 years later.

In the 1920s, the golden years of trams in Sydney, the peak period for construction had long passed but there were still many proposals for new lines, and interest in the use of one-man cars. Tramway Traffic Manager E J Doran had seen Birney cars on a visit to the USA in 1919-20. The use of these cars was considered for a number of existing lightly-trafficked lines, and for proposed new lines including those from Haberfield to Dobroyd Point, Five Dock to Drummoyne, Enfield to Bankstown, Narrabeen to Mona Vale and Queenscliff to Harbord. Of these proposed lines only the last-mentioned became a reality, and the Birneys did not come for this or any other route. Sydney's first Birney, like its first PCC, did not arrive until many years after the system closed. Car 30, on loan from the Bendigo Tramways, now runs at the Sydney Tramway Museum.

In the late 1920s the NSW Government Railways and Tramways prepared outline drawings of at least two radically different (from the then current P type) tramcar designs, intended for use on the Cronulla line and perhaps the Narrabeen line. These are outside the scope of this article, but together with other plans that did not eventuate, could be the subject of a later review.



*Two tramcar types that eventually came to Sydney, many decades after their use was first considered: Birney 30 and PCC 1014, together at Loftus in August 2000.*

Dale Budd



*The outswing of a Brisbane Four Motor car on a sharp curve is shown in this view of Phoenix car 554 turning from Wharf Street into Queen Street, on a tour in October 1968. No. 554 is preserved at the Brisbane Tramway Museum.*

Dale Budd



membership of the Sydney Tramway Museum and to his purchase for preservation of breakdown car 60s, since restored as C class 29, and of breakdown car 141s.)

On 5 June 1953 the *Sydney Morning Herald* reported:

The Minister for Transport, Mr C E Martin, said yesterday that he would see whether he could borrow one of the latest type of Brisbane trams to be run in Sydney as an experiment.

"I am impressed by the type of tram the Brisbane Transport Department is building in its workshops," he said.

"It is a corridor type with rubber in the wheels to help make it nearly noiseless.

"It costs £9,700. Our latest corridor trams cost about £13,000.

"I will send engineers to Brisbane to try to arrange to borrow one. They will also study Brisbane's tram workshop management.

"The Brisbane and Sydney tram lines have the same 4foot 8½inch gauge, but our engineers will have to see whether the Brisbane tram can negotiate our corners and use our overhead wires without adjustment.

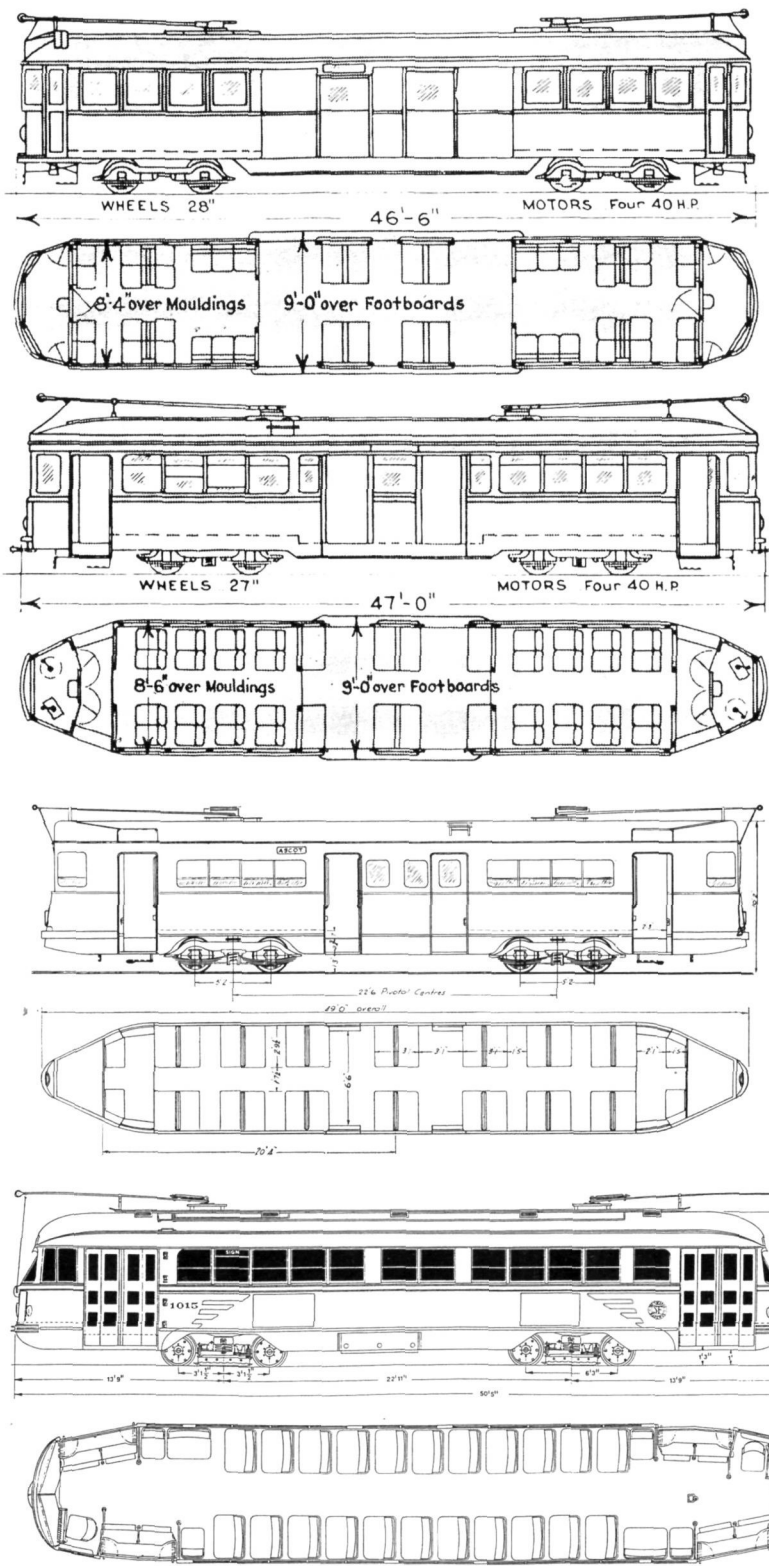
"There may be some danger of the Brisbane tram colliding with another tram on a sharp corner."

Internal papers on this proposal, equivalent to those relating to the planned Melbourne trial, have not yet been discovered. However if clearance issues were raised as a reason not to proceed with the Brisbane trial, they were even less well-founded than in the previous case. An analysis by John Dunn has shown that a Brisbane FM car on a 50ft radius curve occupies

*Minister Clarrie Martin's demonstration run on a Brisbane FM car in 1953 started from Milton Workshops, where car 511 of this type was photographed in October 1965.*

Dale Budd





The main dimensions of Melbourne W5, Sydney R, Brisbane FM and San Francisco type 'D' PCC cars are shown in these drawings, which also illustrate the marked taper at the ends of the Sydney and Brisbane designs. Later cars up to the W7s have the same dimensions as those of the W5. Not shown on the Melbourne and Sydney drawings is the distance between bogie centres: 28ft for the Melbourne car and 23ft 8ins for the Sydney vehicle.

a *smaller* swept area than an R or R1 car, as shown in the accompanying diagram. There was absolutely no risk of a collision on a curve. Any alleged clearance problem was an absolute furphy.

In the absence of official records, uncertainty surrounds the proposals for trials of Brisbane equipment. It has been suggested that either the trial of a pair of resilient-wheel bogies in 1950, or the planned trial of an FM car in 1953, or both, were all that came of more elaborate proposals for the trial of several sets of bogies, or several complete trams. It is believed that there was an intention to trial six complete trams on the Quay to Railway loop, but that it was found that the Brisbane cars would not have been able to negotiate the curve off the bridge at the top of the ramp to the colonnade at Central. As indicated above, such an objection would have had no substantive basis. Another suggestion is that bogies for five or six cars were received at Randwick, only to be sent back to Brisbane without being unpacked. It is hoped that further research can clarify this information.

Kevin Martin recalls that clearance issues were the reason for the trial of the Brisbane car not proceeding. Clarrie Martin's sudden death on 5 September 1953 was almost certainly another factor in this plan being forgotten. Two months later, on 9 November 1953, the new Minister for Transport, Mr E Wetherell\*, announced the Government's intention to replace all Sydney's trams with buses, reaffirming a decision which had first been made in 1937.

An interesting element of this story is the fact that comparisons between the costs of trams being purchased for Sydney, Brisbane and Melbourne were regularly referred to in Parliament and in the media. Today, there is little interest on the part of Parliamentarians or the media in the cost of Sydney's latest buses or commuter trains, and no attention is paid to the comparative cost of similar equipment in other cities.

Thus Sydney's trams remained free of any embarrassing side-by-side comparisons with those of other states. Who would have dreamed in 1947 that 53 years later, a Melbourne SW6 tram converted to a mobile restaurant would run alongside a Sydney R class car in a Victorian provincial city; or that the same Sydney car would run in Melbourne for the Moomba festival.

\*NSW had a succession of Transport Ministers in the early post-war years. The sequence was: M O'Sullivan 1941 to June 1950; W F Sheahan to February 1953; C E Martin to September 1953; E Wetherell to March 1956.

## Acknowledgements:

This article was made possible by the substantial contributions of several people. Thanks are expressed to Vic Solomons for unearthing the material relating to the 1947 proposal; to John Dunn for his assessment of clearance issues; to Kevin Martin and Ross Willson for their input; and to Norm Chinn, Graham Jones, Keith Kings and Robert Lilburn for additional information or comments.

The drawing of the O or P type trams on curves appeared in the Transactions of the Institution of Engineers, Australia, Volume I, 1920, accompanying a paper by Mr W A G Douglas entitled 'Notes on the Development of Tramway Rolling Stock, Sydney Metropolitan Electric Service'.

The drawings of the W5 and R1 cars appeared in the September 1935 issue of the Journal of the Institution of Engineers, Australia, accompanying a paper by Mr F N Maclean entitled 'Tramcar Design'.

The drawings of a Brisbane FM appeared in 'Brisbane "Four Motor" Type Cars', one of a series of tramcar guides published by the South Pacific Electric Railway.

The drawings of a San Francisco Type D were drawn by Bill Leider for Model Transport, and appeared in 'Inside Muni' by John McKane and Anthony Perls, Interurban Press, Glendale, California, 1982.

## References:

Correspondence in State Records, NSW

*Tram Tracks*, August 1947 and October 1947

'Brisbane Trams for Sydney?', *Electric Traction*, May 1953

Stephen P Carlson and Fred W. Schneider III: 'PCC – The Car That Fought Back', Interurban Press, Glendale, California, 1980

David Keenan: 'The Rockdale and Enfield Lines of the Sydney Tramway System', Transit Press, 1994

Ken McCarthy: 'The Demise of the NSW Tramway Department', *Trolley Wire*, February 1971

Ken McCarthy: 'The Destruction of An Asset', Part 3, *Trolley Wire*, February 1978

Ross Willson: 'Metropolitan Tramway Proposals', *Electric Traction*, December 1965

Ross Willson: 'The Sydney Corridor Tramcars', *Electric Traction*, May and June 1973 (parts of a series published between December 1972 and August 1973)

## GLENELG TRAM REFURBISHMENT PROJECT

By Kym Smith

The first of five Glenelg trams to be refurbished by private enterprise is rapidly nearing completion at the All Transport Industries - Tram Division Workshop at Regency Park. TransAdelaide and its predecessors, the State Transport Authority, the Municipal Tramways Trust, and the South Australian Railways have carried out previous refurbishments of the H class cars.

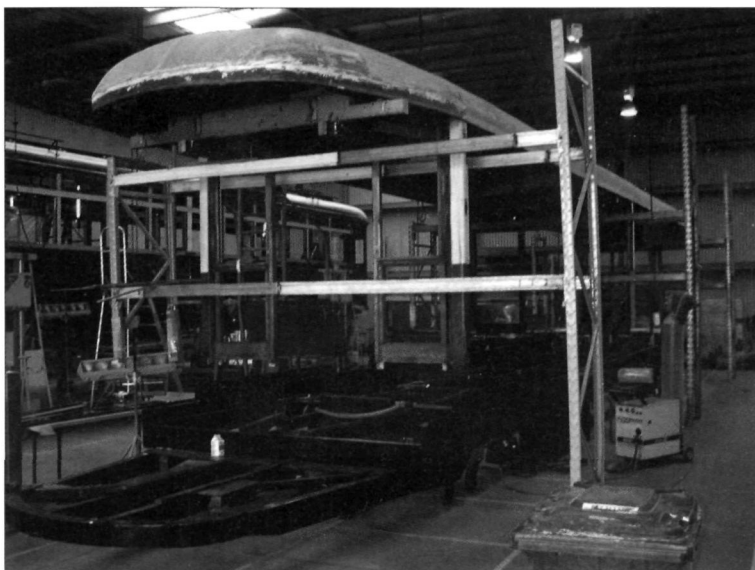
Contracts for the refurbishment of the tramcars were let primarily to All Transport Industries for the bodywork and Electronic Engineering Enterprises Australia Pty Ltd for the chopper control unit and all electrical work. Allied Engineering Pty Ltd received the contract for the refurbishment of the trucks and other heavy engineering work including parking brake assemblies. The project to refurbish the cars will cost approximately \$5 million.

Much emphasis is being placed on maintaining the heritage image and character of the cars, whilst enhancing safety features, adding low maintenance materials, and other improvements. A distinguishing feature of the cars, although not the most visible, is the conversion from General Electric PC5L2 controls to a locally designed chopper control unit. The unit was developed by Electronic Engineering Enterprises to meet TransAdelaide requirements, and has been designed to reduce brake block wear, improve braking performance, and to reduce strain and damage to

motors from notching up too quickly, and from emergency electrical braking.

The underfloor unit is contained in a specially provided sealed enclosure which is air conditioned to keep the unit cool and to reduce the intake of dust and other contaminants. The cab controls use the existing PC5 controller casing which has been stripped of its previous fingers and fitted with circuitry for the chopper unit. The chopper unit will allow a controlled acceleration to occur and once the controller is notched off, will activate dynamic braking after about 15 seconds. This can be overridden by pushing a button in the cab. Another button will activate the dynamic braking for an emergency stop. All components of the chopper unit have been constructed in modular form to allow for easy maintenance and servicing. Included in the underfloor enclosure are panels controlling the air conditioning.

In terms of the bodywork, All Transport Industries has been coordinating and performing most of the work on the cars, with many parts being outsourced to other firms for supply or repair. All Transport Industries has also refurbished over 250 buses for the Passenger Transport Board at its Truck and Bus Division. The first two cars, numbers 380 (the original 359) and 374, have been stripped down with portions of the three saloon bulkheads and the roof being

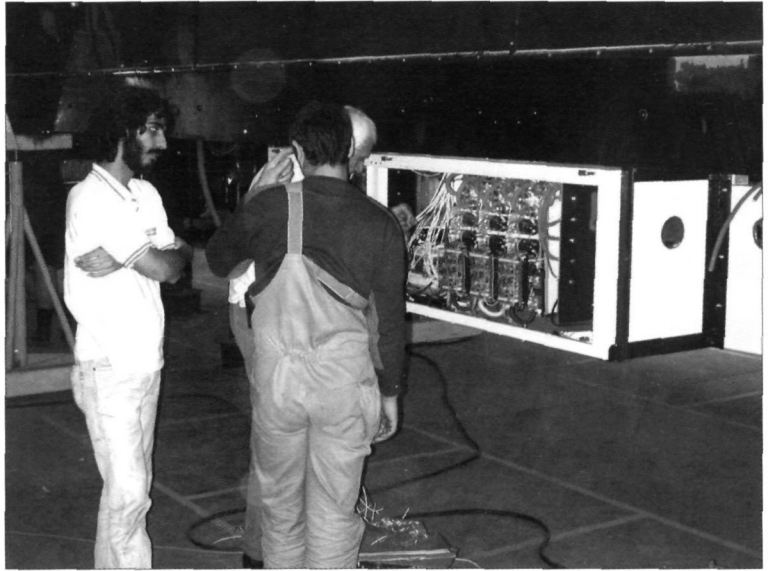


*The roof of H car 274 is supported above its strengthened and refinished frame awaiting rebuilding of the bodywork.*

John Radcliffe



*The control box for the new chopper control system is being fitted out under the centre of the car.*  
John Radcliffe



supported while the chassis was removed for straightening, cleaning, strengthening and repainting. The chassis is then replaced under the tram roof and new timber pillars installed along the length of the car. The corner pillars of the saloons, previously made of blackwood, have been replaced with steel pillars. This forms part of a steel framework which has been incorporated into the fibreglass fronts and above the doors to provide added protection for the driver. Other improvements for crews include improved air conditioning to the drivers cabs, a new adjustable style of drivers seat, which has its origins in armoured personnel carriers, and lockers in both end-platform

bulkheads for storing ticket machines, change, and personal belongings. These result in a timber box covering the locker and extending slightly into the saloon, and a slightly smaller longitudinal seat being provided. The upper glass panels in the doors have been made deeper to allow for a greater view from the driving position. The doors engines are being replaced by a 'smart door' system, supplied by SMC Pneumatics, which reopens the doors when it detects any interference or obstruction on closing.

Improvements to the passenger section of the cars include a dark maroon vinyl on the seats, yellow



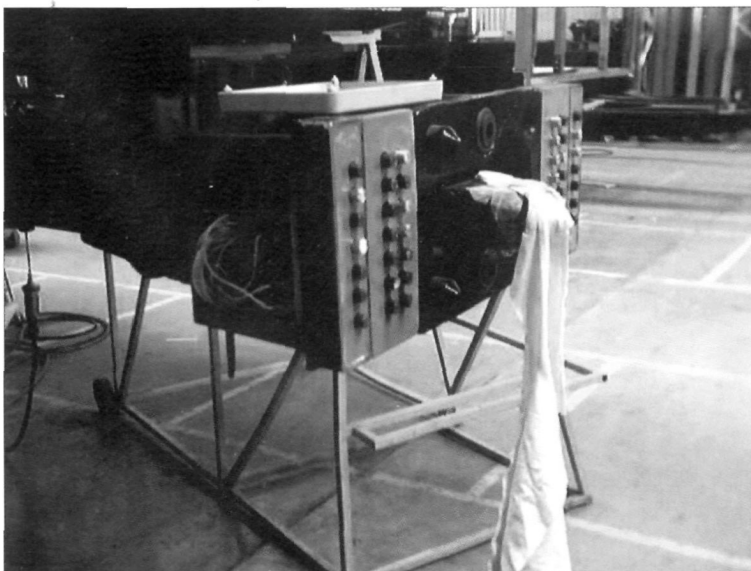
*The interior of car 380, with its new ceiling and refinished timber, is nearing completion.*  
Barry Pearson



*Car 380, which will be the first car completed, is being discussed by Jenny Palmer (National Trust of SA), Sue Filby (TransAdelaide General Manager), Joe Palkovics (Project Manager) and Rainer Jozeps (National Trust Director).  
John Radcliffe*

powder coated stanchions for the visually impaired, new flooring vinyl, a new ceiling with fluorescent lighting installed along the centre, and new buzzer buttons and stopping signals. The timber interior of the car, including the cab ceilings, has been revarnished. The hopper windows have been replaced with flush fitting windows fitted with tinted glass rather than patterned frosted glass, to facilitate cleaning. Modifications to the window sashes incorporate gas lifters to assist in lifting the windows. The maximum opening will be 250mm. Stitched leather hand straps and window lifting straps are also provided.

Externally, the use of fibreglass has been extended to include the roof, the entire cab front, the doors, the saloon sashes, the side panels, and the exterior window guides. The couplers have had extra pins fitted to each side as part of the chopper unit upgrade, and to eliminate the tram interconnecting lead for ticket machines. Underneath the car, all the air piping has been replaced with copper pipes, with flexible hoses to the couplers, and from the compressor to the tanks. A water trap with automatic drainer has been fitted between the compressor and the tanks, and drain traps fitted to the air tanks. New air tanks have also been



*The coupler on No. 380 showing the extra pins fitted.*

Barry Pearson

fitted. The compressor governor is now located near the compressor in a new box under the floor. Most of the traction and control wiring now runs under the car in flexible conduit rather than in the trunking under the windows. Improved sanding gear has also been fitted.

Other improvements from the previous refurbishment program have also been incorporated including the fitting of a spring activated parking brake, tail lights and indicators, and a drivers console which puts all switches and warning lights within easy reach, in the position previously occupied by the hand brake.

Several other companies have contributed to the project through parts and work that have been outsourced. These include Canuck Fibreglass, Richard Basset – Woodgraining, Protector Autoglass for the glazing, and Annmarie and Ros's Leather for the hand straps and window lifts. Staff from All Transport Industries Crash Repair Division have also assisted with painting, welding and metal fabrication.

Three Australian Electric Transport Museum members, John Pennack, Peter Keynes and Kym Smith, have been employed by All Transport Industries to assist with refurbishing the cars. The Managing Director of All Transport Industries, Mr Rocc Giglio, visited the Museum during January 2001 to inspect work performed by the AETM and to discuss the

techniques used by the AETM in the restoration of its cars. Some timber refinishing is being carried out for the project at St Kilda and the AETM is also contracting for some mechanical work, and is providing historical and technical advice as required. Ian Seymour and Peter Letheby have assisted with work carried out at St Kilda.

To facilitate the coordination of the project, TransAdelaide and All Transport Industries meet weekly to review the work in progress and to approve changes to plans as required.

It is planned that the first car, 380, will leave All Transport Industries for Glengowrie Depot after Easter, to be operating in early May, with 374 and the further three cars to follow at around three month intervals.

*The team refurbishing 380. On the platform are Rocc Giglio, Managing Director of All Transport Industries, Ata Ahmad, Design Engineer from Electronic Engineering Enterprises, and Gary Boysen, Project Manager-Trams-ATI. The employees holding the banner are Matt, Joe, Chad, Hue, Kym, Peter, John, and Chris.*

Barry Pearson



# HERE AND THERE

## NEWS ITEMS OF INTEREST FROM ALL OVER

### Adelaide

On 3 April 2001, the National Trust of South Australia announced a new program, sponsored by Bank SA, to begin listing 'Heritage Icons of South Australia'. The eight items listed for 2001 include 'The Glenelg tram'.

— John Radcliffe

### Gold Coast

The Prime Minister, the Hon John Howard, MP, announced on 3 April 2001 that the Commonwealth would fund a feasibility study into a light rail system to service the Gold Coast. The feasibility study will be conducted jointly with the Queensland Government.

The Government's decision follows strong representation by the Member for McPherson, Mrs Margaret May, MP, and the Member for Moncrieff, the Hon Kathy Sullivan, MP, on the importance of the project to the future development of the Gold Coast. The Mayor of the Gold Coast, Councillor Gary Baidon, also made representations, highlighting the growth prospects of the Gold Coast and its future needs.

The Prime Minister said the feasibility study would examine issues including population growth rates, public transport usage and the integration of a light rail system with the existing public transport and road transport systems. While the Gold Coast Light Rail would normally be the responsibility of State and Local Government, he acknowledged that the scale of this project and its potential impact on the region warranted Commonwealth support for the feasibility study.

### Hobart

Former Hobart Lord Mayor, Alderman John Freeman, wants a special levy to be considered to get the city tramway project up and running in time for Hobart's bicentenary in 2004.

Alderman Freeman, who chairs Hobart City Council's finance committee, said that with less than

three years to the bicentenary, it is important that a suitable plan be developed to commemorate the founding of the city. As the Council's budget for new asset purchases was limited, introduction of a levy would assist in raising money for the project.

Alderman Freeman suggested that the tram line should run from CSIRO in Sullivans Cove to the University art school in Hunter Street. This route would create a significant tourist attraction in the most historic part of Hobart.

Alderman Freeman said he originally had doubts about the tramway proposal. However he was now a strong supporter and recognised that the project has strong public support. He estimated the tramway would cost between \$2.2 and \$2.5 million. The Council has already had one tram restored (see *Trolley Wire*, November 2000) and plans to restore another, double-decker 17, later this year.

— Charles Waterhouse, *The Mercury*

### Melbourne

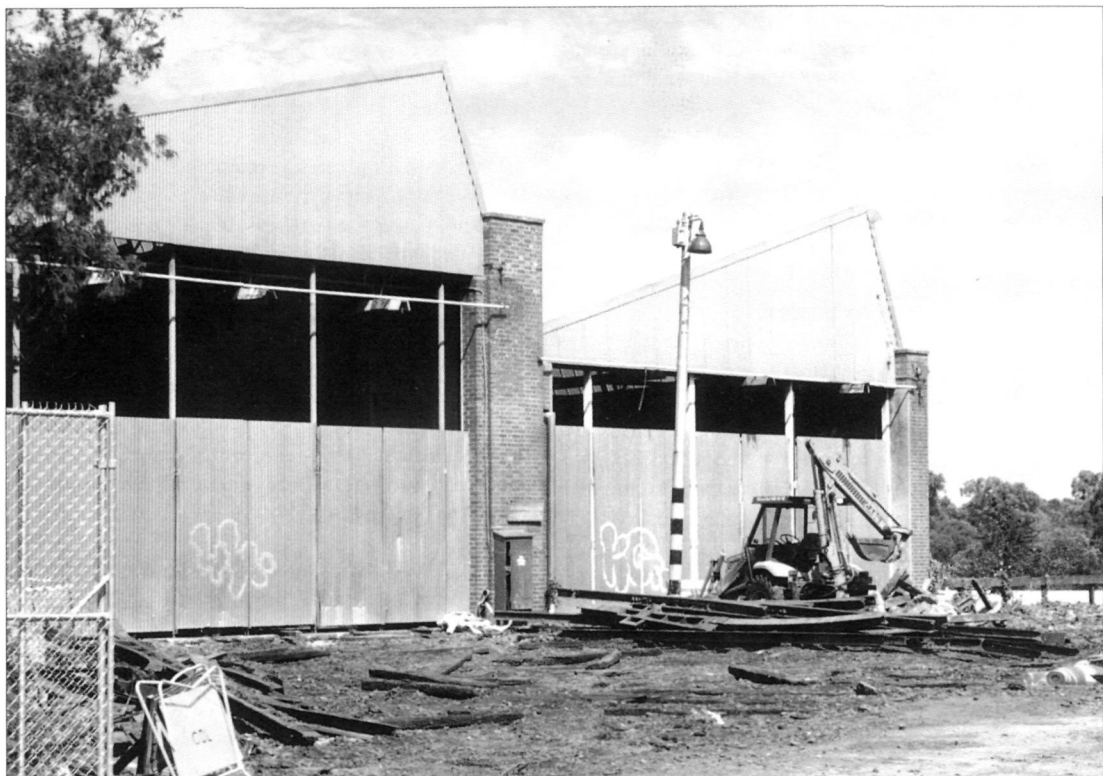
#### Refurbished Trams Honour Football Stars

From a *Herald Sun* report by Genevieve Lally

Australian Rules football's legendary premiership player, captain and coach, Ron Barassi, has lent his name to the first car refurbished by M>Tram, (formerly Swanston Trams), Z3 class 185. The car was unveiled on 28 March 2001 by Transport Minister, Peter Batchelor. The first of 169 trams to undergo refurbishing, it features new seats, grab rails, blinds, non-slip floors and graffiti-resistant finishes. A football jumper with the player's number will be painted near the driver's window on the refurbished Z and B series trams, and a newly named tram is to be rolled out each month.

Barassi is the first of 12 football heroes to be honoured in the National Express initiative. Other trams will be named after Essendon stalwart Kevin Sheedy and Western Bulldogs star Doug Hawkins. Goal-kicking great Tony Lockett has also agreed to be





*A view taken in February 2001 of Melbourne's former Hawthorn Tram Depot, site of a major redevelopment, which will retain only the four tracks closest to Wallen Road. The depot yard track is being dug out and removed.*

Hugh Ballment

*ElecRail's swing-door electric motor 137M, built in 1907 and withdrawn in 1974, teams with 107M (restored in 1987) for trials at the Newport Heritage Transport centre on 10 March 2001. After replacing a faulty axle, overheating problems occurred during two main line test runs between Newport and Williamstown on 24 March, resulting in the bogie being disassembled for further investigation.*

Scott Bray



part of the plan, which aims to link two Melbourne institutions – football and trams. Geelong champion Bob Davis and Hawthorn hero Peter Hudson will also be featured in the scheme.

National Express chief Craig Wallace said the company planned to recognise other Melbourne identities, from politics to arts and entertainment.

## Melbourne Conductors Return to Trams

The first of 15 conductors, now called Tram Attendants, completed their training with Yarra Trams on Wednesday, 14 March 2001. The company plans to employ 45 attendants – complete with new uniforms – by the end of the year. M>Tram is planning to hire 55 in a similar move.

Although the attendants will sell daily tickets at a premium price, their primary job is to crack down on fare evasion and provide information and a friendly face to passengers. They have also been trained to respond quickly to emergencies and accidents.

The youngest of the new recruits is 18-year-old Alastair Reither, a member of the Ballarat Tramway Museum who moved to Melbourne to take up employment with Yarra Trams earlier this year.

## Melbourne Cars Give Way to Trams

From a *Herald Sun* report by Sally Finlay

A plan to reduce car parking in city streets to make

way for tram 'super stops' is likely to be backed by the Melbourne City Council even though a Council report has estimated it will cost it \$460,000 a year in lost parking fees.

The Council's planning committee will consider the plan by Yarra Trams to introduce 50-metre-by-three-metre tram stops on routes 109, 86 and 96. Traffic would be reduced to one lane alongside the stops. Work on the first stop would begin in Collins Street during April. Other stops are planned in Bourke Street.

The tram stops would replace 71 metered car-parking spaces in Collins Street. A Council report has estimated this means \$375,000 a year in lost parking revenue. Bourke Street will lose 20 metered spaces, at a cost of \$85,000 a year when the new stops are introduced on routes 86 and 96.

The Council will discuss compensation for lost parking revenue with Yarra Trams and the State Government.

The super stops will include ticket vending machines, timetable information and seats. Advertising space will be sold on the sides of shelters. Revenue from the advertisements will go to Yarra Trams.

The plans have been welcomed by the Collins Street Precinct Association, which sees them as an opportunity for the Council to better promote its City Square car park. Association President, Don Parsons, said the City Square car park, which has been open for 12 months, was under utilised. He said parking stations were safer, with comparable rates to on-street parking,



*Z3 class 185, the first refurbished M Tram, was given a special launching for staff at Malvern Depot on 27 March 2001. An official launch by Transport Minister Peter Batchelor and footballer Ron Barassi was held the following day. Ron Marsh*



*M>Tram Z3 class 185 negotiates the grand union at Balaclava Junction on 5 April 2001 whilst operating a route 69 service to Kew-Cotham Road. The car carries the slogan 'Moving Melbourne' on its side. It has spent a week running from each of M>Tram's depots.*

Ray Marsh

and could encourage people to shop for longer without fear of parking fines.

"We do not see the plans for the new stops as a great negative for the city as these new trams and a better tram service will bring in more people on foot", Mr Parsons said.

The first of six new stops in Collins Street – three less than now – will be near the corner of Spencer and Collins Streets.

## **Melbourne Trip Planners to be introduced**

M>Tram announced plans to introduce a hi-tech trip planner at tram stops in April. The electronic touch-screen unit will allow passengers to choose their destination and find the quickest way to get there. The machine will display to passengers the exact time a tram will arrive, how to connect with other tram or train services and the walking distance between stops.

It will be tested in a pilot program with Yarra Trams for six months. Prototypes will be set up at the corner of Swanston and Flinders Streets, Commercial Road and Chapel Street, Swanston and Latrobe Streets, Glenferrie Road and High Street, outside South Yarra railway station on Toorak Road, and the Domain interchange on St Kilda Road.

The plan is subject to council approval.

## **Norm Boxall**

One of Sydney's most well known and longest serving tramway enthusiasts, Norm Boxall, died on 15 November 2000 at the age of 77, after several years of failing health. Canon Lewis Nyman conducted a memorial service arranged by Sydney Tramway Museum members Martin Pinches and John Burgess, at Rookwood Cemetery on 30 March 2001.

Although not a member of the Museum, Norm was a visitor to Loftus on a few occasions in his later years. With support from Wayne Dempsey and David Wilson, in 1996 he arranged a bequest to the Museum of Sydney C car 12 and K car 1295, along with a varied collection of tramway artefacts.

Norm Boxall will be long remembered, and his contribution to the tramway enthusiast movement will be permanently marked by the preservation of these items.

**Melbourne****Plan to Scrap Transport Fines**

From a *Herald Sun* report by Genevieve Lally

Public transport fines could be scrapped in Melbourne in a radical attempt to curb fare evasion and violence on trams and trains.

Transport companies want to offer fare dodgers the option of buying \$80 of tickets instead of paying a \$100 fine. The unprecedented move comes as companies admit fare evasion is out of control, with up to 15 per cent of tram passengers and 12 per cent of train passengers travelling without tickets. But the sweetener faces stiff opposition from a State Government determined to continue raking in millions of dollars a year in fines.

Melbourne's transport operators have had private talks with the State Government about the plan. Transport Minister, Peter Batchelor, confirmed he expected to receive a formal proposal from the transport heads.

Mr Batchelor said the Government collected up to \$4 million a year in fines from fare evaders. But

sources say increased patronage since privatisation would put the true cost of fare evasion well beyond the \$30 million a year estimated by former Auditor-General Ches Baragwanath in 1998.

Yarra Trams and M>Tram are not satisfied with the system because they reap no financial rewards. They want the Government to agree to the ticket plan, claiming it will encourage more people to buy Metcards and reduce fare evasion.

The two companies agree fare evasion is more widespread on trams than trains. Connex commercial services general manager Arthur Bruce said it was harder to ride a train without a ticket. "We prefer not to fine passengers," Mr Bruce said. "Our policy is 'educate to validate' rather than a heavy-handed approach. We'd prefer people paid for the trip so that we could spend that money on other services."

National Express customer service manager, Margot Dickie, said "It really is time for a bit more of a creative solution," when asked about the \$80 ticket plan. "It is a cheaper option for the punter and it may encourage people to do the right thing."

# COTMA

**Council of Tramway Museums of Australasia**

Executive Officer, 158 Lorne Street, Fawkner, Victoria 3060

From Bill Kingsley

New Chairman of COTMA

**COTMA – The Beginning**

Over 100 delegates attended the 25th Anniversary COTMA Conference in Ballarat last year. They were and are the happy, vital, living endorsement of actions that I took 25 years ago in response to an inner vision. It was a vision that demanded attention, a vision that came twofold – a compelling need and a very relevant opportunity, and led to my convening of our first conference in 1975. That vision has never dimmed.

But how did it all really happen? From whence did the vision develop? This is an intriguing story that has never previously been recorded.

In the closing years of the vast and exciting Sydney tramway system I was an occasional visitor to that fair city for the fundamental purpose of riding the trams. I enjoyed the curvaceous route to North Bondi via Bellevue Hill before its truncation. I treated as my own the ride to Watsons Bay. Through Kings Cross, around Rose Bay, fantastic harbour views from what we know today as Heartbreak Hill, waiting for the up tram to come off the single track at the Lighthouse, and that magnificent descent through The Glen into Watsons Bay. A favourite tour was to catch the ferry from Circular Quay to Neutral Bay, interchange into the waiting K class tram, grind up the hill to Military



Road, and return to Sydney on a corridor tram over that great bridge in the sky and through the tunnel to Wynyard.

But then, someone stole my trams from Sydney. No longer did trams glide through the city streets. No longer did they wait for me at a beachside terminus. No longer did the conductor scramble along the footboard of the toastrack. The formation in The Glen became the scene of ghostly memories. Sydney had totally and irretrievably lost a great asset. Or so I thought.

In January 1967, I was enjoying a camping holiday to Sydney in 'Jenny', the first of my four Volkswagen minibuses. One fateful day as I drove towards Sutherland from the south along the Princes Highway something nostalgically familiar moved in the trees to my right. It couldn't be. Were they not all scrapped? But it was indeed a real Sydney tram. I turned right from the Highway. It was pure joy. I had discovered the South Pacific Electric Railway. I arrived as a total stranger. The staff were friendly. I was made to feel very welcome in a relaxed atmosphere surrounded by real, live Sydney trams. Thank you SPER. The foundations for COTMA were laid that day in the Royal National Park.

I returned again in January 1973, this time by train. It must have been those visits to the SPER's Royal National Park site, plus a need for some hands-on experience at trackwork, that encouraged me to become active with the Ballarat Tramway Preservation Society later that same January in 1973. There, at Ballarat, on weekends and in our gumboots, we would wallow in the mud at our South Gardens site, three woolly jumpers on in winter, building a tramway. On Saturday nights we would sleep in the trams in the depot (with none of the comforts enjoyed by PETS at Whiteman Park). The evenings were often spent with an old time slide show, usually trams, trams, and more trams.

One such evening, one of our wandering participants showed slides of his recent visit to Adelaide and of magnificent Glenelg trams back in their original colour scheme. For me, two dimensions were not enough. I had to go to Adelaide. That is when a most extraordinary and incredible sequence of events started to fall into place.

My normal travel agent could not book me into my usual Grosvenor as all the en-suite rooms were taken. He recommended a little historic hotel called The Earl

of Zetland at the corner of Gawler Place and Flinders Street, which I accepted happily due to its proximity to the Victoria Square tram terminus.

So, in May 1973, I travelled by rail on 'The Overland' to Adelaide and took up residence at The Earl. Arriving Saturday morning I decided to pay my first ever visit to St. Kilda and the AETM the following day. How will I get there? There is no public transport so I'll order a taxi.

So on Sunday morning, I trod down the stairs to await my taxi. As I passed through the foyer I could not but notice a fine young man in clean working clothes waiting near the reception desk. He was also aware of me and there was a strange sense of friendship between two strangers as we said hello and I walked past.

Taxi to St. Kilda. The taxi driver actually knew where it was! Wandering around the site for a while, I was befriended by AETM members Iain Jamieson and Greg King who adopted me for the day when I told them that I was from BTPS. As they showed me around there appeared from the depths of the shed that same fine young man who had been at The Earl that morning. I was introduced to Ron Jenkins. Soon it all made sense. Incredibly, Iain was the son of the owner of The Earl of Zetland, the Jamieson family lived on the premises, Iain and Ron were both AETM members, and Ron and his car were Iain's means of transport to and from St. Kilda that day.

Early in the afternoon a car with Victorian registration plates pulled in. Mr and Mrs Maurie Hall of Ballarat had arrived with young son Andrew. Recognising me, the former deposited the latter in my tender care and sallied off for more relevant pursuits.

As Ron, Iain and Greg showed Andrew and me the route of the new track to St. Kilda Beach, it became very obvious that we were sharing not only a new friendship but also a dedication to tramway preservation that transcended museum and state boundaries. The first bricks in COTMA's stage were being placed on that foundation from SPER. Ron had two extra passengers back to Adelaide that evening.

Well, Iain had all these beaut tram slides stored at The Earl of Zetland. More bricks for COTMA's stage were set in place in a little room at The Earl over several evenings of the ensuing week as Iain and I enjoyed our own old fashioned slide shows. Unfortunately, The Earl of Zetland is no more, for that relevant part of COTMA's prehistory has since been demolished.

Duly I returned to Ballarat. During the months that followed I became very aware of the frequent visits to Ballarat by members of other tramway museums. Often they were not satisfied just to be spectators and would grab a spade or a pick, lend a hand lifting rails, and always join us for coffee and chatter around the table. Well do I remember the same Ron Jenkins bogged to the ankles digging a trench around our depot. At the same time, we BTPS members were also making frequent forays, particularly to Bendigo, and interstate. It was most evident that we all shared the same zeal, the same joys, the same problems, the same hopes.

The message was coming home to me loud and clear. If we were all informally responding to a need to get to know each other and to extend our friendships, why not do something formal about it?

The answer was a conference to share ideas, problems and solutions, and to get to know each other even better. Anzac Day 1975 created a long weekend. Here was the opportunity.

I was a member of the BTPS Board at that time and early 1975 put to the Board that the BTPS should host such a conference in Ballarat over that Anzac Day long weekend. It was a big ask. Financially it involved a considerable investment from a young volunteer community, a financial gamble. To its everlasting credit, the Board accepted the proposition (warmly but with some hesitancy) and gave to me the honour of forming a committee and convening a conference.

Supporting me in that committee were Geoff Cargeeg (as a most dedicated co-organiser), Allan Harnwell (to control the finances), and Clyde Croft (as BTPS Secretary). We co-opted Bill Jessup, Richard Gilbert and Barry McCandlish to help. We decided to call the event CATM – Conference of Australian Tramway Museums. We invited all our known fellow museums to come.

I well remember the reprimand from down south along the lines of typical mainlanders forgetting about their island counterparts. Sorry Hobart. The committee did not know about you. We quickly sought forgiveness and invited the TTMS along. Somehow the news carried across the Tasman. The Kiwis wanted to be part of it too. They also were welcomed and their intending participation added even more vitality to our task. How relevant! It was the Anzac weekend, and as we remembered the sharing between Australians and New Zealanders in time of war, we were coming together again to share in a quite different pursuit.

Since it was the State Electricity Commission of Victoria that abandoned its Ballarat tramways, would its Social Club allow us to use its Electra Hall? No worries. Since HA Davis Motor Service replaced the tramways, could they supply us some buses? No worries. Geoff organised for the oldest buses in the fleet and so started a tradition that seems to remain to this day. The Convenor's VW Microbus (now 'Esmeralda', the second of its line) was also commandeered creating yet another local tradition.

What about accommodation? Panic! It was to be Anzac Weekend. Ballarat was host to a huge variety of social and sporting events, and numbers of returned servicemen and women coming home for remembrance. Every motel was booked out. Well, every motel in the guidebook. The Arch Motel was still under construction when we booked the whole motel. Not enough rooms? No worries. The use of lots of 'low boys' nearly doubled the accommodation, a real crowded house! The overflow was to enjoy the nights and the trains at Bungaree House. The stage on which COTMA could be built was ready.

Lon Wymond, Chairman of the Puffing Billy Preservation Society, was our first guest speaker. David Rawlings from SPER presented a case for 'the formation of an Association of Australasian Tramway Museums'. Bill Denham also from SPER offered Trolley Wire as the voice of such an association. Graeme Breydon (then representing the TMSV) and Dr John Radcliffe (AETM) were also speakers and were again speakers at Ballarat 25 years later, although both in different roles.

But that first conference was mainly of workshops, 24 workshops, up to 5 in parallel. We discussed matters of management, finance, engineering, and trams. We shared, we gave, and we learnt.

What had really happened was that BTPS had reached out to all its fellow museums in Australia and New Zealand. We had created an extended friendship. We had taken a major step forward. We had found that to be part of an Australasian wide movement enlarged the compass of enjoyment of our dedicated hobby far beyond the limitations of our own individual museums. We were all so much better for our sharing. We now all were one, in a huge and rewarding way. This remains the basis of COTMA to this day.

On the last day of the Conference, on Sunday, 27 April 1975, the Presidents and Chairmen of all the museums present called their own special workshop.

I was not there, but I well remember the late Bill Jessup of BTPS emerging from that workshop to tell me that they were officially forming a 'Council of Tramway Museums of Australasia', that Dr John Radcliffe would be the inaugural Chairman, and would I be his Executive Officer? Yes.

COTMA had been built upon the stage. The vision was complete.

Thanks to all who have supported COTMA through those 25 years. Please help us to continue to serve you as we march from strength to strength together.

## ST KILDA

### Australian Electric Transport Museum

GPO Box 2012, Adelaide, South Australia 5001

From Colin Seymour

#### Tram 118

Trolley pole bases for E 118 have been stripped and cleaned, new trolley planks installed and repairs to the roof clerestory completed. Timber panels and columns are being repaired and replaced. New kingpins have been manufactured and new side bearers are being drilled and riveted into holders. The truck strip down is finished and the trucks are ready for wheel turning. Two B23 controllers have been obtained from Bendigo. Copper has been purchased for new controller segments. The brake cylinder has been selected, stripped, cleaned and painted.

A GE 201 motor which was delivered from Ballarat with cars 21 and 34 in 1971, is being worked on for possible use in tram 118. It arrived at the Museum in pieces but appears to be useable, having possibly had an overhaul, but never having been reassembled. The field and inter poles have been removed. Two inter poles needed attention to their coverings – they were both retaped, and along with the rest, have had numerous layers of isonel paint applied. The armature has no visible signs of damage and the shafts have no signs of wear. The pinion end bearings will need pressing back into the housing. The ex-Hackney/Regency Park motor tester may be used to test the motor when it is reassembled.

#### Northern Depot

Work has commenced on the erection of the new Northern Depot and Administration Building. The site was cleared of trees and shrubs and Salisbury Council officers assisted with the site survey. A contractor

installed the footings and erected the rather large frame in late March and early April 2001.



*Much of the interior veneers and timber of car 118 have been varnished.*

Ian Seymour





*The external panels and western bulkhead of E 118 have been primed.*  
Ian Seymour



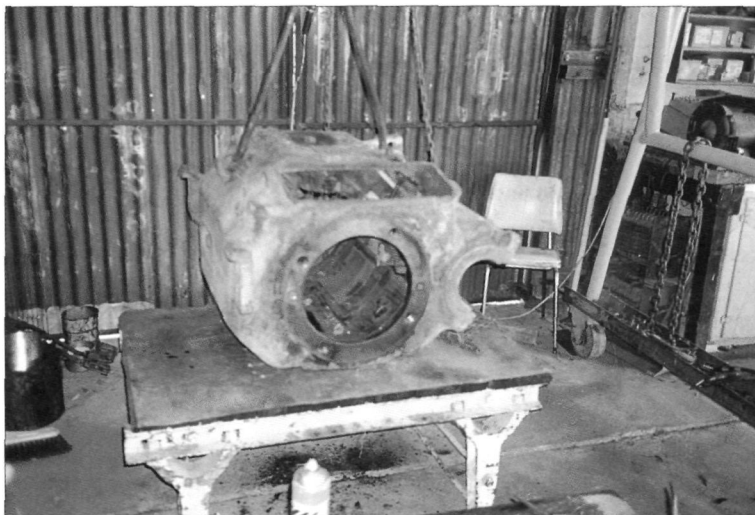
*The B23 controllers for 118 obtained from Bendigo are checked prior to installation.*  
Ian Seymour



*The 22E maximum traction trucks for 118 have been stripped down prior to wheel turning.*  
Ian Seymour

*The armature has been removed from the ex-Ballarat motor casing as part of the overhaul of the motor for possible use in 118.*

Ian Seymour



## ARCHER PARK

**Archer Park Station and Steam Tram Museum**  
Rockhampton, Qld 4700

From Dennis Sheehan

The award winning Archer Park Station & Steam Tram Museum at Rockhampton is now open!

Seeing is believing. You have read about it, you have heard about it. Now it's time to visit it. The Archer Park Station & Steam Tram Museum is not just an old restored railway station but a unique and exciting insight into an integral part of Rockhampton's rail history, showcasing the social side of Archer Park through staff photographs and their individual stories.

The museum has a lot more to offer the visitor, with extraordinary state of the art soundscapes linked to life size mannequins plus rail memorabilia, operational refreshment rooms where our friendly volunteers serve morning and afternoon teas, tram history display room and railway merchandise. The refreshment room's 137-year-old restored piano, through the soundscape, will have you tapping and singing along to tunes of the war years. Our ghost steam engine and wooden carriages entering and leaving the station has everyone talking, you will have to hear it yourself to believe it.

No visit to Archer Park is complete unless you have ridden on 'Pierre', the world's only remaining Purrey steam tram. The tram operates on Sunday mornings

between 10:00am and 1:00pm. The museum is open on Tuesdays to Sundays between 10:00am and 4:00pm. Admission charges apply, and on Sundays include a ride on the tram. School, coach and group tours are also welcome.

Admission charges are:

Adults	\$5.50
Concession	\$3.30
Student	\$2.20
Six & under	Free

The Museum is operated by the Rockhampton City Council with one full-time employee and volunteers from the Friends of Archer Park. It is equipped for disabled access.

For further information and to confirm opening times and charges, please contact:

Dennis Sheehan

Arts and Cultural Services – Archer Park Station  
Rockhampton City Council

Phone: (07) 4922 2774

Fax: (07) 4927 0120

Website: <http://steamtram.rockhampton.qld.gov.au/>

Email: [Sheehand@rcc.qld.gov.au](mailto:Sheehand@rcc.qld.gov.au)

# BYLANDS

**Tramway Museum Society of Victoria**  
PO Box 27, Malvern, Victoria 3144

---

## From Running Journal

### Safety Audit

The Society underwent its annual audit by the Technical Services Branch of the Department of Infrastructure on Sunday, 14 January 2001.

The outcome was that there were no non-compliance notices and a total of nine observations, three of which were resolved the following day. In audit parlance, an observation is effectively an area of concern that an auditor would like to see addressed prior to the next audit. These observations are used as input to further refinement of our procedures.

The Society was congratulated on its approach to the safety accreditation regime in Victoria, both in its policies and procedures and the effort our members take in complying with them.

### Ministerial Visit

The Victorian Minister of Transport, the Hon Peter Batchelor, accompanied by our local member, Ben Hardman, visited the Museum at Bylands on Thursday, 8 February. The Minister was impressed with the museum and its valuable collection of trams, and showed great interest in the Exhibition Goods Shed. Rod Atkins and Russell Jones guided the visiting party around the site and took them for a tram ride down the line.

### Vehicle Maintenance Shed

Our local building contractor, Greg Clancy of Danesbury Constructions, has been engaged to install the external cladding, skylights and spouting to the completed frame. When originally obtained, this building was minus cladding to one side and one end wall. In its re-erection, we have extended the building by one further bay from its original length. We have been fortunate that when the Exhibition Goods Shed was dismantled at Spencer Street, a large quantity of good near-new cladding was retrieved. This will be used to make up the shortfall for the maintenance building.

It is expected that the end doors will be fitted to this

building at a later time, using surplus components from both the Exhibition Goods Shed and the former (SEC) Ballarat tram depot.

Work has commenced on fabricating the pointwork to connect this facility with the main line. The point castings have been cleaned and aligned for spiking to the sleepers. The crossing piece, the intermediate connecting rails and the sleepers have been positioned for spiking. When this is complete, the main line will be broken, the points slewed into position and the joints welded or fishplated.

### Exhibition Goods Shed

The contractor has sealed the concrete floor with a protective and resistant coating which will protect it from marks and stains. However, we are still waiting for the contractor to attend to several minor outstanding items which need attention before we can use the building. Once this is done we can start to relocate items into the building for display in readiness for the official opening later this year.

### Museum Work

Repairs and servicing of the tram fleet have continued at a rapid pace. As a result of detailed inspections of some underfloor electrical equipment, several trams only required minor repairs or adjustments to components in order to make them operational again. They will progressively be returned to traffic following the necessary inspections and servicing. A system for ongoing servicing and preventative maintenance is being devised so that all operational vehicles are attended to in rotation. This will then allow time to commence a new project on other currently unserviceable trams.

With the long hot dry summer, special care was needed around the site. Due to our location, we needed to be prepared for any emergency that may occur, especially grass fires. Late spring rains assisted the vegetation to grow at an alarming rate, so much so that



*Above and below: The restoration of cable trailer 256 by BEST Community Services at Malvern Depot is progressing well. External and internal views of the restoration work carried out on the trailer to 31 January 2001 are shown here.*

Ray Marsh





the livestock could not keep it in check. A local contractor was engaged to slash around the site and boundaries. In addition, several members used the Society's brush cutter and newly acquired manually propelled lawn mower to trim around several other areas, including the depot fan, tram loading points and toilet block. The result was a much safer and visually pleasing appearance.

During February, a local contractor was engaged to reconstruct the eastern roadway, which passes the residence, on a new alignment passed the Exhibition Goods Shed. The original roadway in this location was removed as part of the fill required for the foundations for the Exhibition Shed. The new roadway has been constructed slightly closer to the tramline. As an all weather road it is capable of taking heavy vehicles such as trucks and buses.

### Cable Tram Restoration

To assist with the excellent work being undertaken at Malvern on this project, the roof from trailer car No. 410 at Bylands has been removed and transported to Malvern. This will enable a plentiful supply of the necessary and hard-to-get material, to accurately restore or replace damaged or unserviceable roofing from the cars being restored.

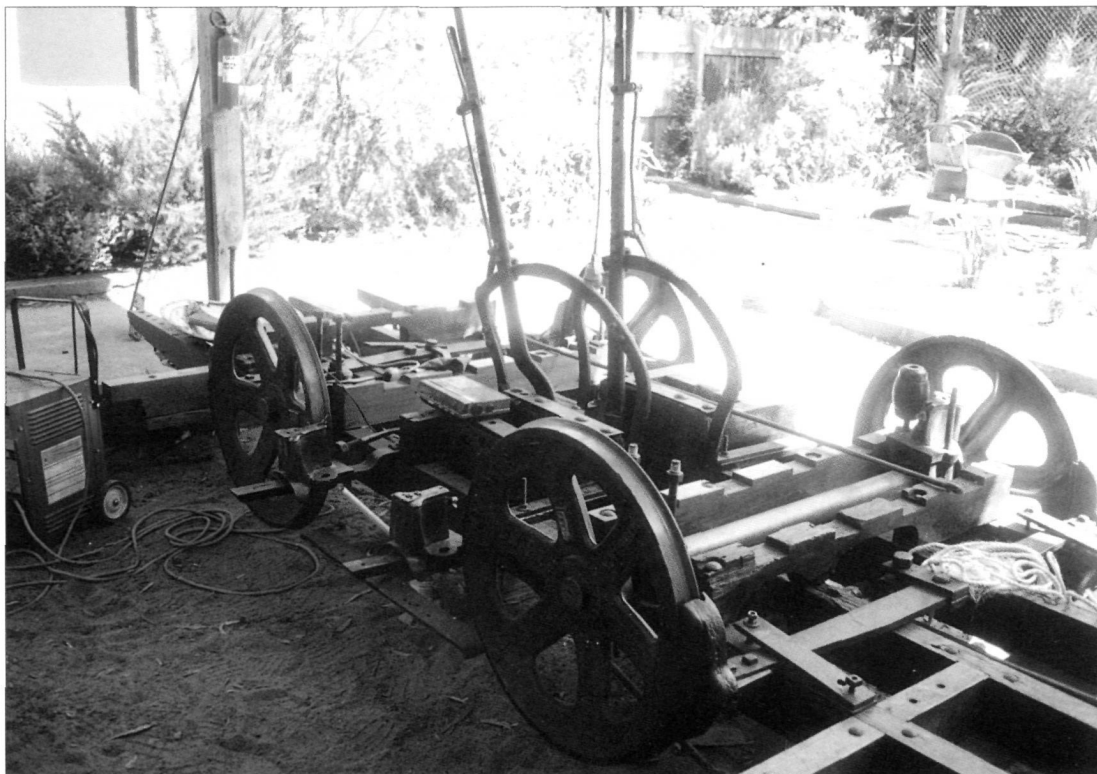


*The detail cast into one of the grip car's wheels indicate that 'Davies & Baird, Steel & Iron Founders, Brunswick', manufactured it for the Melbourne and Metropolitan Tramways Board. It carries the date 'Oct 5 1923'.*

Ray Marsh

*The grip car's running gear is also receiving attention. The harps, grip and brake levers are clearly seen in this view.*

Ray Marsh



# BENDIGO

## The Bendigo Trust

1 Tramways Avenue, Bendigo, Victoria 3550

From Len Millar

### Car No. 18 departs for Ballarat

Some hectic activity recently saw saloon car No. 18 in the depot workshop for repainting in gold for a special and surprising customer. Our colleagues at the Ballarat Tramway Museum decided to celebrate the 150th Anniversary of the discovery of gold in Victoria by emulating the State Electricity Commission's 1951 centenary celebrations when two single truck trams were similarly painted. A lease agreement for two years and some helpful sponsorship and grant funding paved the way for our workshop to apply a striking gold livery to the body of No. 18. Our signwriter, Greg Forsberg, decorated the tram, as photos in this issue show.

A busload of our volunteers accompanied No.18 to Ballarat where, after the tram was made operable, our hosts turned on a wonderful barbecue for our workers.

*Our signwriter, Greg Forsberg, is finishing off destination boxes and rolls for car 18 in its new role as Ballarat 45, the gold tram.*

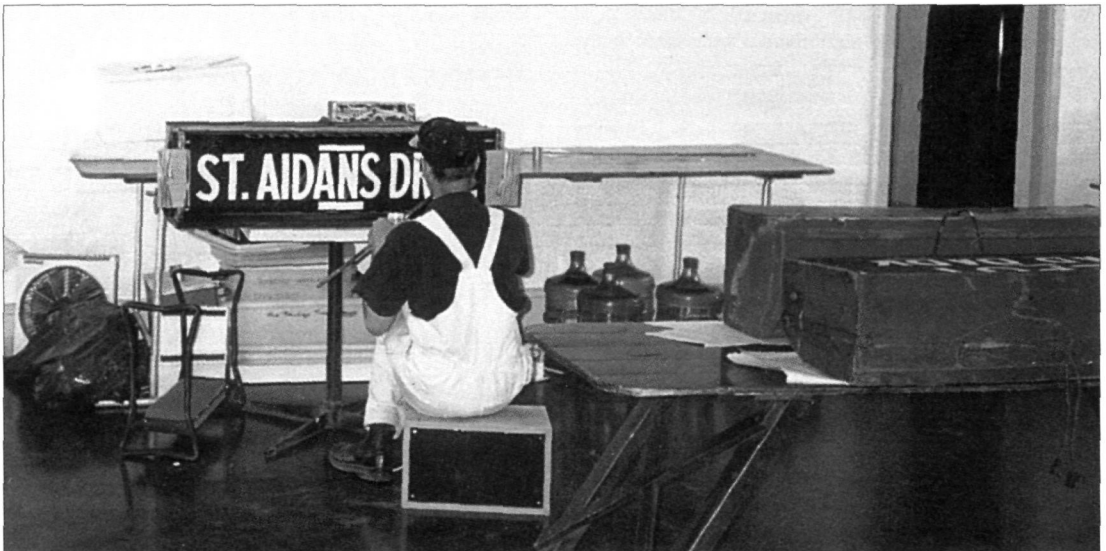
Darren Hutchesson

### Two new arrivals

Two further trams have arrived recently, for attention in our workshop for the Sydney Tramway Museum. Following transportation of No. 18 to Ballarat, Melbourne W2 class No. 249 was transported from Clarendon, near Ballarat, to Bendigo. After preliminary testing, we found that 249 performed remarkably well after years of inactivity. Our workshop will effect some repairs to the tram and paint it. Bendigo is pleased to have the opportunity to contribute to 249's restoration.

On 19 April, Sydney R1 car 2001 arrived at our depot for restoration and painting to the 1950s RAAF recruiting livery of two-tone blue. Some parts delivered to us for use on sister R1 class car 1951 will be used for this project.

When 2001 is completed, attention will turn to 1951. Restoration of No. 1951 to operating condition will include the 1954 Royal Tour livery of ivory body with royal blue and gold lining. When finished, the appearance of the two trams will be quite striking!





## Our new workshop

With funding, and planning and building permits now in hand, construction will start on our new workshop at the rear of the depot building. Recently, the site was cleared of miscellaneous tramway items and a small number of sheds belonging to community organisations. The new workshop will contain the former Preston Workshops wheel press, and several other heavy items of equipment. We won't know ourselves!

In a separate exercise, the enclosure built following the SEC era of the old rotary generators and the mezzanine deck above it have been removed, yielding valuable extra shed space for our fleet at the rear of 4, 5 and 6 Roads. We can now house three W series trams on 4 Road. The rotary generators have been moved to covered storage at the Gasworks Depot.

## Cultural change at the Bendigo Tramways

As a new Museum Attendant and Tram Driver, Sari Williams, 18, joins Shannon Barker, Anita Hutchesson, Linda Storey and Jill Moorhead as a versatile group of young women who are playing a key role in keeping Bendigo's trams operational. The age

*W2 class 249 ran a demonstration trip to North Bendigo on 28 March. It was used for driver training the same evening. Despite its long stay in the country, it runs very well.*

Dale Budd

and gender mix is certainly changing at Bendigo. It is refreshing to see young, enthusiastic newcomers joining our organisation and assuming responsibility for its current activities and future well being.

## Scrubber 9W gets set for Autumn

Former Melbourne track cleaning tram, 9W, has had its tank leaks, defective water jets and scrubbing problems rectified in time for autumn. Given the intricacies and choices available from the plumbing, the Tramways Manager can now request the driver to give our streets a half flush or full flush!

## Bendigo's Birneys ready for Winter

Birney 15 has been through the workshop recently to receive some minor timber repairs and a major repaint. It has emerged resplendent in its Electricity Supply Co. livery of red and white, and it will serve with Birney No. 11 on the cooler days that are just around the corner.

# BALLARAT

**Ballarat Tramway Museum**  
PO Box 632, Ballarat, Victoria 3353

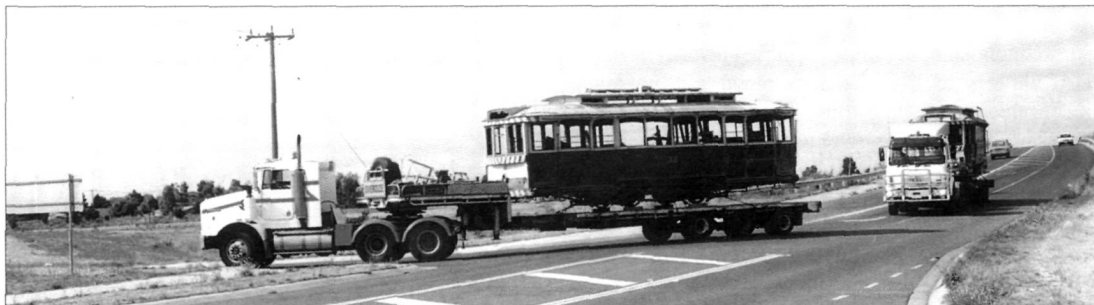
<http://www.btm.org.au>

From Dave Macartney

The long awaited transfer of cars 11 and 32 to the storage sheds at Bungaree finally took place on 16 February. While the crane was at Bungaree the frame of No. 35 was moved to a more suitable location. The two cars fitted into the new sheds with little room to spare, and will stay out there until the time comes for them to be restored, which is probably decades away.

The newly created working space at the Wendouree Parade depot did not last long, as on 1 March Bendigo

No.18 arrived for an extended stay. This car, a P & MTT bogie dropcentre converted to an open saloon with 52 Birney-type seats, has been painted in a gold livery and suitably lettered to celebrate the 150th anniversary of the discovery of gold in Victoria. Truly a weird and wonderful machine (more weird than wonderful), it is expected to stay in Ballarat for some two years. It has been renumbered 45, its original Trust number, as Ballarat already has a number 18. It is expected to do the lion's share of the work during its stay, and has proved to be popular with the public. As



*Ballarat tramcars 32 and 11 have been transferred to Bungaree for off-site storage. This view was taken at the Gillies Street entrance to the Melbourne Freeway on 16 February 2001.*

Carolyn Dean

*The gold tram, No. 18 in Bendigo, No. 45 whilst in Ballarat, is being off-loaded at the rear of the Ballarat Tramway Museum depot on 1 March 2001.*

Warren Doubleday





well as having a stereo system, making it popular with the cleaning staff, 45 boasts sophisticated electro-pneumatic door operating mechanisms, which take a bit of getting used to. The car was proceeding along during the Begonia Festival when all the doors suddenly shot open for no apparent reason. It turned out that a lady passenger had plonked a begonia plant she had just bought on top of the control console at the rear end of the car.

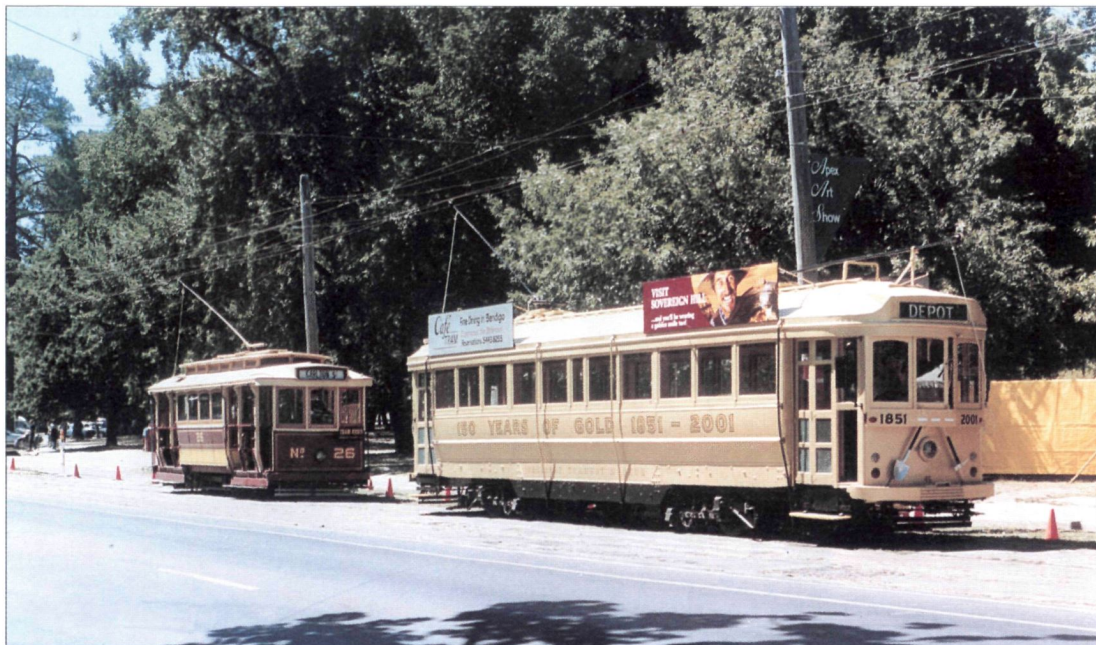
The other ongoing job involving a new acquisition is the refurbishment of ex-Melbourne track cleaner No. 8. This car arrived on 10 September 2000 in an incomplete and non-operational state, and has been steadily worked on over the past eighteen months. It finally made its first appearance in Wendouree Parade on 17 March, just after the end of the prolonged dry summer, which had been plagued by dust. It certainly is effective at dust control and track cleaning when everything is working. Another machine that could be described as more weird than wonderful, it is surprisingly complex in its plumbing arrangements. It also appears to have been designed for maximum inconvenience when getting in or out, with narrow doors which open the wrong way (inwards) leaving the operator to squeeze past as best he can, remembering not to hit his head on the excessively low doorways. Once inside there is a particularly violent first notch and an equally hair-trigger brake. The car is overpowered for its size, but is excellent for towing other cars around.

With the two single truckers transferred to Bungaree and the arrival of the bogie car from Bendigo, there was just enough extra room for the truck of No. 27 to be removed from under the car and towed over to 5 road for dismantling. The truck is mechanically very worn, and is in need of some fairly extensive refurbishment. Wheels will need reprofiling and the motors will receive some preventative work while they are out. Nos. 14 and 18 are also coming due for similar work, so this should keep the workshop busy for the next couple of years.

The Begonia Festival in early March was blessed with mainly fine and warm weather this year, and over the eleven days more than 4400 passengers were carried, slightly up on last year. A highlight for the Museum was a visit by the Victorian Premier, Steve Bracks, who drove himself to the opening of the festival in our gold tram, No.45. The newly acquired No. 45 ran on seven of the eleven days. No. 671 and No. 40 also put in yeoman service, while No. 33 ran the shuttle service over the middle section of the line, but ended the week with a suspected motor fault, and is now out of service awaiting an assessment.

*Trams 45 and 26 at Gardens Loop on the first day of the Begonia Festival, 2 March 2001.*

Warren Doubleday





*The Victorian Premier, Steve Bracks, is at the controls of 45. The Premier drove the tram from St Aidans Drive around to the Gardens prior to the opening of the Begonia Festival on 2 March 2001.*

Warren Doubleday

In his latter days, foundation member George Netherway had expressed a desire to have a seat placed as a memorial in the Gardens close to the tramline. The City Council agreed to this, and it has now appeared near the pedestrian crossing south of the loop. It is one of the traditional Ballarat style all metal slat seats – sitting on one in the depths of winter is an interesting experience. The commemorative plaque reads ‘In memory of George and Noelene Netherway, always enquiring, always advocating Ballarat, its heritage and its tramways’. George was heavily involved in many aspects of local history and Ballarat life in general.

## HADDON

Melbourne Tramway Preservation Association  
PO Box 324, Prahran, Victoria 3181

<http://www.railpage.org.au/mtpa>

From Grand Union

### We're Open!

The highlight of the recent 25th Anniversary COTMA Conference for our Association was the official opening of our Museum for public operation during the visit by delegates on Wednesday, 22 November 2000. All trams were in operation on the day.

The opening was low-key. Following an introduction by Craig Tooke, Lindsay Richardson, the retiring COTMA chairman and a member of the MTPA, officially declared the museum open for public operation. It is a milestone we can be proud of. The opening was followed by afternoon tea.

Details of our opening dates and times will appear in a later issue of *Trolley Wire*.

### Overhead Work

During June and August 2000, the north-west curve was realigned to conform to the new track layout and

additional pull-offs were added for better wire centring. The overhead is now complete except for road 2, in the lower terminus and dropper adjustment on the main line straight.

### L class 103

The removal of old paint from around the cabin areas continues. The floor has been primed and awaits its top coat. Three motor suspension beams for the MV101A motors have been machined by the Bendigo Tramways workshop and are ready to be fitted. We conducted an equipment exchange with Bendigo and obtained a DH16 air compressor for this car.

### W3 class 663 and W2 class 357

The trolley bases on these two cars were replaced after inspections showed they were badly worn. The worn bases are being overhauled and will return to stock in our store.

## Other Work

John Withers has designed and constructed a telephone actuated substation shutdown unit. The unit functions when a specific number is dialled from any phone connected to the Museum's PABX phone exchange, and drops out both the Car barn and mainline circuit breakers. This feature makes it easy to disconnect supply in an emergency by using the trackside phones.

After conducting tests, checkrails are to be fitted to the north-west, south-west and south-east curves. Quotes are being obtained from various suppliers.

We recently underwent a routine inspection from officers of the Public Transport Safety Directorate, which we passed. Further work has gone into the development and refinement of our management system and accompanying documentation. This includes the completion of the Signalling System Operation Manual.

# LOFTUS

**South Pacific Electric Railway Co-op Society**  
PO Box 103, Sutherland, NSW 2232

<http://www.railpage.org.au/tram/loftus>

From Greg Sutherland, Col Gilbertson and Frank McQuade

## Institution of Engineers Plaquing Ceremony

On 31 March 2001 the Institution of Engineers, Australia's Engineering Heritage Committee recognised the significant contribution that the Sydney tramway system made to the development of Sydney in a Plaquing Ceremony held at the Museum. The Ceremony recognised the significance of the Sydney Tramway System and highlighted the Golden Anniversary of the Sydney Tramway Museum.

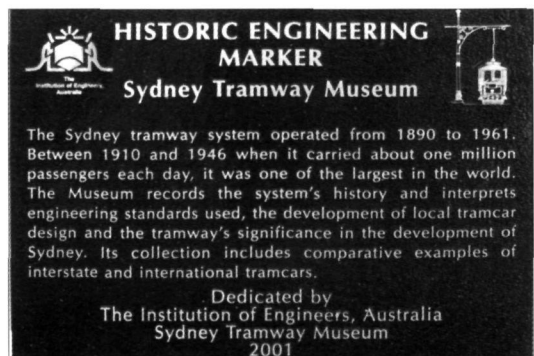
Over 100 invited guests and a large contingent of Museum members gathered near the historic Railway Square Waiting Shed to take part in this historic occasion.

Councillor George Hurley, representing the Mayor of Sutherland Shire, welcomed the Official Guests and outlined the relationship between Sutherland Shire and the Sydney Tramway Museum. He stressed that the Shire was pleased to host the Museum with its impressive collection and operation of Sydney's tramway heritage and was working closely with the Museum in its current expansion program. On behalf of the Shire he looked to a great future for the Museum.

Federal Member for Hughes, Danna Vale MP, spoke of her pleasure in seeing that the activities of the Sydney Tramway Museum were now occurring not

only within Sydney but also on a national level. She ranked the operation of the Museum's R class 1808 in this year's Moomba Parade in Melbourne on 12 March 2001, when it was on display before a crowd of 200,000 people, as a highlight in the progress of the Museum.

Mrs Vale noted that the Federal Government's overseas trade facilitator, Austrade, has been proud to assist the Museum in the complex negotiations involved in ensuring the safe delivery of the international component of the Museum's collection. The Federal Government had been pleased to provide Federation funding to assist in the restoration of





*The plaque has been unveiled. Left to right are Councillor George Hurley, Museum Director and MC Greg Sutherland, Federal Member for Hughes Danna Vale, Institution of Engineers Australia Chairman Andrew Leventhal, State Member for Heathcote Ian McManus, State Member for Miranda Barry Collier, and Museum Chairman and Financial Director Howard Clark.*

Frank McQuade

C class car 29 to fully operational status. She was looking forward to its official launch as a regular passenger carrying tramcar later in 2001.

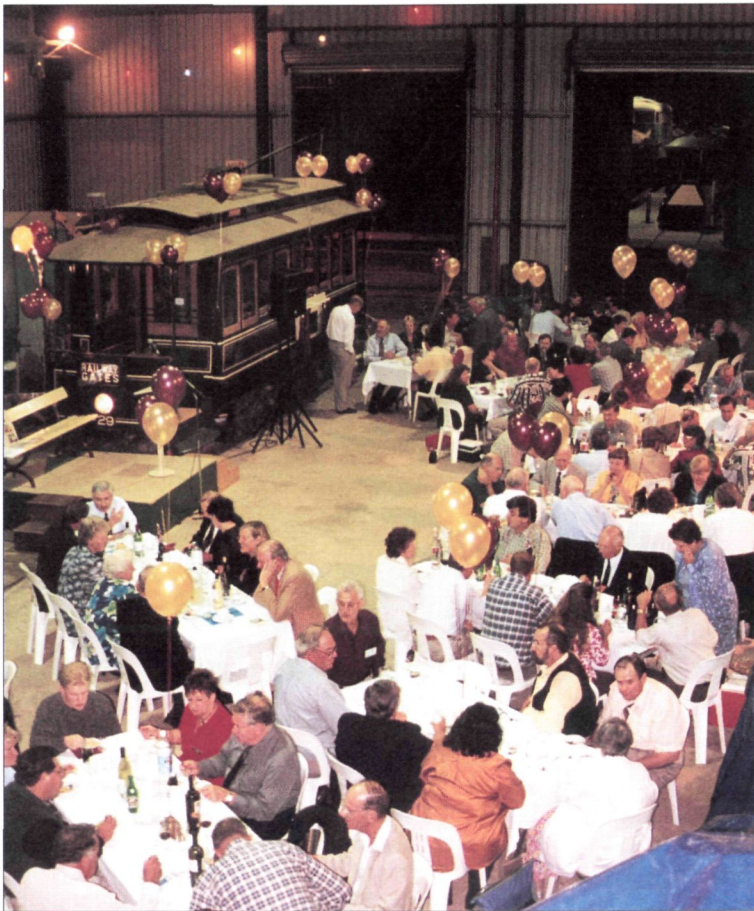
Howard Clark responded on behalf of the Museum, outlining the various facets of the contribution of the tramway system to the growth and development of Sydney and touching on the major milestones in the growth of the Museum.

In response, the State Member for Heathcote, Ian McManus MP, observed that every time he visited the Sydney Tramway Museum he was impressed with the progress being made in extending this wonderful facility. He noted that the Museum was opened in 1950 by the Deputy Premier, Pat Hills MP, and from small beginnings has grown to become the largest in the southern hemisphere, an extraordinary achievement

for an entirely voluntary organisation operating as a non profit co-operative society. The NSW Government had been a significant contributor to the development of the heritage transport complex. Past grants have been instrumental in helping the Museum to construct its Restoration Building and the erection of the third major building on the north west corner of this site. The safety of the Museum's valuable and unique collection has been further safeguarded by the fire sprinkler system which has also been assisted with funding support from the NSW Government. He was particularly pleased to see former Transport Minister, Brian Langton, and former Lord Mayor of Sydney, Doug Sutherland, present on this occasion.

The Chairman of the Sydney Division of the Institution of Engineers, Andrew Leventhal, then addressed the gathering on the engineering and social significance of the NSW Tramways and outlined the reasons for plaquing. In his address, he noted the contribution of engineers of the calibre of Dr John Bradfield to the development of the tramways and the way in which state of the art technology was introduced and developed by the engineers of the NSW Tramways. He also was at pains to point out to the audience that the passenger carrying performance of the tramways in the first half of the twentieth century far eclipsed the current passenger loadings of Sydney Buses and CityRail combined.





*The scene in the restoration workshop on the evening of 31 March, when 117 members and friends enjoyed our 50th Anniversary Dinner and service awards presentation. C class car 29 of 1898 provides a suitable backdrop to the scene.*

David Critchley

The official party then unveiled the plaque and afternoon tea and the customary tram rides were provided.

Overall it was a most successful day for the Museum and special thanks are due to all those who assisted in the smooth functioning of this important event.

### **50th Anniversary and Presentation Dinner**

The Society's 50th Anniversary and Presentation Dinner was held on Saturday, 31 March 2001 in the Restoration Workshop. C class 29 provided the backdrop for the evening and L/P 154 was floodlit on the traverser for the occasion.

Councillor George Hurley and his wife Valerie, Alderman for the Council ward in which the Museum is located and representing the Mayor of Sutherland Shire Council, and Mrs Danna Vale, MP, Federal Member for Hughes, and her husband Bob were our official guests.

Representatives from the Tramway Museum Society of Victoria (Rod Atkins and Keith Kings), Ballarat Tramway Museum (Richard Gilbert and Alastair Reither), Brisbane Tramway Museum Society (Peter Hyde and Robert Thompson), the Tramway Division of the Museum of Transport and Technology in Auckland (Bruce Gamble), the NSW Rail Transport Museum (Robert Dickey) and 3801 Ltd (John Glastonbury) joined us in our celebration.

David Critchley and Col Gilbertson were joint masters of ceremonies for the evening. In the toast to the Museum and the friendships that it has fostered, Col mentioned that the Society was the sixth enthusiast group in the world to preserve electric trams and that we were the first in Australia, pioneering the 'live museum' concept. Col then provided a chronology of the first 50 years of the history of the Museum.

Col recalled how the SPER had been involved in the operation of steam-hauled rail tours in the late 1960s,

*Our Federal MP, Danna Vale, Member No. 1, Norm Chinn and longest standing Board member, David Rawlings enjoy the moment during the awarding of Norm's '40 plus' years service award. Norm has completed 50 years voluntary service to the Museum, an outstanding achievement for any volunteer-run organisation.*

David Critchley



including the famous speed run to Newcastle with 3801. We also ran rail motor and electric train tours before the advent of specialist societies and ran tours interstate by train and tram. Film and television events that the Museum and its trams featured in were also mentioned.

Col highlighted the friendship and camaraderie for which the SPER is well known, thanking all present for their friendship over the years.

David Critchley proposed the second toast, to the memory of deceased members, and touched on the support provided by wives and partners.

Service awards were made to 55 members present and consisted of a Certificate of Appreciation with badge, the service years being represented by different background colours.

The 10 to 24 year awards were introduced by Bob Cowing, Chairman of the 25th Anniversary Dinner Committee, and presented by our founding member Norm Chinn. Norm gave a brief insight into how, before the National Park site was finally selected, eleven different sites were evaluated as possible museum locations. He also paid tribute to all those who had 'travelled with him' on the 50-year journey being celebrated.

The 25 to 39 year awards were introduced by our Chairman, Howard Clark, and presented by Councillor George Hurley. Councillor Hurley spoke on the vital part that the Museum plays in tourism within the Shire. He also highlighted the outstanding dedication of the

Museum's volunteer workforce, congratulating and thanking all those for their contribution to the organisation. Bob Cowing, on being handed his award, received a well-deserved standing ovation from all present in recognition of the work he carries out for the Museum.

Before presentation of the 40 years plus awards by Mrs Danna Vale, MP, Federal Member for Hughes, David Rawlings, the longest serving member of the Board of Directors, spoke of the outstanding contributions that each of this special group had made to the Museum. Mrs Vale then presented the awards (in reverse alphabetical order) to Bill Tuffnell (member 22), Barry Tooker (11), Vic Solomons (28), Peter Kahn (27), Richard Hall (36), Ted Davies (10), Richard Clarke (42) and Norm Chinn (1).

Our Chairman of Directors, Howard Clark gave a brief speech in which he thanked all for being part of the Museum's 50 years proud history. He spoke of Norm Chinn's vision and those who had pioneered the Museum, in securing the historic collection, building the old site and getting the Society firmly established.

Howard then made a presentation to Norm Chinn of a framed photograph of L/P 154 flanked by O class 1111 and with R 1740 in the background taken at the recommissioning of the L/P on 19 August 2000.

Mrs Vale presented Norm with Life Membership of the Society and spoke, with great pride, on the outstanding contribution of the Museum's volunteer workforce in this Year of the Volunteer. She thanked Norm for his vision and Howard, as Chairman of the



*R1 class 1971, L/P 154 and R 1740 stand at the Royal National Park terminus as visitors take photographs and inspect the trams on Sunday, 25 February 2001.*

Ross Langford-Brown

Board, for all the good work that the Museum has done and continues to achieve. She also congratulated the 50th Anniversary Dinner Committee for a well-planned and well-run function.

Finally, in recognition of the Society's 50th Anniversary, Mrs Vale symbolically presented the Museum a new Australian flag, which was accepted by Norm Chinn and the Museum's newest member present, Peter McCallum (650).

Despite a few teething problems with the catering on the night, all those attending voted the evening an outstanding success. We also pay tribute to Bob Cowing, whose idea it was to hold a dinner and for the vast physical effort he put in at the Museum in the week leading up to the night.

#### **40th Anniversary of the Last Tram in Sydney**

The Museum commemorated the closure on 25 February 1961 of the Sydney Tramway System, with a re-enactment of the final journeys made, using R car 1740, R1 car 1971, and L/P car 154. A large number of visitors and members enjoyed a nostalgic 'Sydney trams only' day at the Museum with all available Sydney trams in operation on the day.

C car 290 made several runs to the great bouncy enjoyment of the passengers, reviving memories of the 'Jumping Jack' trams that ran on the infant system in Sydney at the turn of the century. A coupled set of O class cars (1111 and 141s) provided the now rare sight of multiple-unit trams, which were once a common Sydney occurrence, to the delight of many of our passengers, particularly the young, who had never



*This line-up of Sydney trams is standing in Tramway Avenue preparing for a run to the northern terminus. Coupled O cars 141s and 1111, R 1740 and L/P 154 will follow R1 class 1971 on the journey towards Sutherland as part of the Museum's commemoration of the 40th anniversary of the closure of the Sydney tramway system on Sunday, 25 February 2001.*

Ross Langford-Brown



*Melbourne W2 class 249 being loaded at Clarendon, a township about 18km from Ballarat on the Geelong to Ballarat road on Wednesday, 28 February 2001.*

Warren Doubleday

witnessed this normal feature of Sydney trams in their heyday.

Particularly pleasing to note is that many old tramway employees made it a day out to visit Loftus and bring their grandchildren to ride the trams on which they once earned their living.

Thanks should be recorded to radio stations 2CH, 2UE, and 2SM, the *Sydney Morning Herald* and the *St George & Sutherland Shire Leader* for publicity.

At the end of the day a special tour organised by the Historic Commercial Vehicle Association finished its journey at Loftus for their passengers to partake in some early evening tram rides with our Sydney tramcars. Mercedes Mark 2 single-decker 1995 (recently placed in storage) driven by our member Ray Boddenberg, and double-decker bus 1995 had completed a tour over the last two tram routes in Sydney, to La Perouse and Maroubra, and finished a perfect day.

## **Two new acquisitions go to Bendigo**

Two additions to the Museum's fleet have recently gone to our colleagues at Bendigo for restoration.

Melbourne W2 class No. 249 was sold complete in 1986 to Mr Garnet Pearce of Clarendon, near Ballarat, who had a sentimental interest in the tram from his schooldays in the 1930s. With the passage of time he decided to dispose of the car for preservation. A few years ago it was acquired on behalf of the Museum, and was then covered by a protective tarpaulin. Its bodywork had suffered slight deterioration during its years at Clarendon.

In March this year the car was moved to Bendigo and was found to be in extremely sound mechanical and electrical condition. It first operated at Bendigo on 23 March and runs so well that it has been used for driver training.

Car 249 was the first W car built by James Moore and Company, in 1924. It is to be painted to promote the planned Federation Line in Canberra. Its livery will represent how trams might have looked if they had operated in Canberra, as envisaged by Walter Burley Griffin, in the 1920s. Buses in Canberra at that time carried a livery of maroon and stone, and these will be the predominant colours carried by 249. The colours will be similar to those used on Launceston 29 in its recent restoration. After initial operation in Bendigo, 249 is expected to go to Canberra for display.

The bodies of many Sydney corridor cars found their way to the Southern Highlands when the system closed in 1961. Many remain on farms or in backyards, often in a badly deteriorated condition.

The Museum had been aware for some time that the body of R1 class car 2001 was located on a property at Balmoral Village, on the former Picton-Mittagong loop line. The car's number, and the fact of the forthcoming Centenary of Federation year, prompted an inspection on 12 November 2000.

The car was found to be in exceptionally good condition, protected by a well-fitted metal roof. Many mechanical parts remained in place beneath it, including its brake rigging and brake cylinder. Negotiations with the car's owners followed and they agreed to release it for restoration, with the primary



requirement that a replacement corridor car body be supplied.

Following the removal of many trees which had grown since the car was placed at Balmoral almost 40 years ago, 2001 was loaded onto a road transporter on 18 April. It arrived in Bendigo late the following day.

Early on Saturday, 21 April, the body of R car 1749 was moved from Wentworth Park to Loftus and placed in the workshop, where it will be refurbished before being transferred to Balmoral Village and placed in the location previously occupied by 2001. It will be fitted with the metal roof previously used on 2001.

Car 2001 will be restored to operational condition at Bendigo, and because of the significance of its number will be dealt with ahead of car 1951. It is to be painted in Royal Australian Air Force colours, predominantly two shades of blue, as carried by Sydney tramcar 1974 between March 1952 and July 1953. (Melbourne car 923 was painted in a very similar colour scheme.) Car 2001 will also be used to promote the Federation Line and is expected to go to Canberra, but it is planned that it will first be used in a range of Centenary of Federation activities.

More details of the restoration of 249 and 2001 will be given in future editions of *Trolley Wire*.

## Loftus Restoration Notes

Following some extensive negotiations between Dennis O'Brien and kindred tramway museums around Australia, a trolleybus compressor suitable for installation in our C car 29, was located by our friends at the Tasmanian Transport Museum Society in Hobart. It is from a former Leyland 'Canton' trolleybus.

Thanks are extended to David Jones and Don Lang from the Tasmanian Transport Museum for their efforts on our behalf. After an overhaul, Bill Parkinson will be able to install the compressor in the tram, and in a short time, number 29 will join our operational fleet.

P class car 1497 is at present in shops to receive general restoration work and a new coat of paint. It is now awaiting the availability of 1 road and its pit so that essential underbody work can be completed, after which its refurbished trucks will be installed. This tram will be ready to re-enter service in a couple of months.

## Works

The final concrete has been laid in the back of the display hall. Some 32 cubic metres were delivered and poured on Saturday, 24 March. A more detailed works report will appear in the August issue of this magazine.

# WHITEMAN PARK

**Perth Electric Tramway Society**

PO Box 257, Mount Lawley, Western Australia 6050

---

From Michael Stukely

## Special Events

The annual Marlow's Classic Car Show was held at the Village in Whiteman Park on Sunday, 18 March. Trams were hired for the day by Park Management and ran between the Village and Mussel Pool/Bennett Brook only. The Society again placed Fremantle 29 on static display in the Village just beyond the tram stop, with a manned display tent alongside. A new addition was a display of photographs featuring the recent acquisition of Perth Leyland 3-axle trolleybus 22, prepared by John Stone.

The show was very well attended – numbers were slightly below 11,000 – with parking in the Village area quickly filling. It had been expected that three trams (SW2 class 426, W2 class 393 and 329) would suffice for the day. However, as visitors began parking at Bennett Brook and Mussel Pool, and catching the trams to the Village, it was necessary to also bring FMT 29 into service. Two trams only were needed for a brief period in the middle of the day, then four were again required for several hours. The four-car



*Newlyweds Roy and Tina Winslow on the step of Fremantle 29 following their wedding ceremony at Whiteman Park on 24 March.* Brett Cummings

operation involved a pair of trams running in each direction, with crossings taking place at Stockmans Loop. This was a very successful day for the Society and for the organisers, the Combined Car Clubs of WA.

On the evening of Saturday, 24 March a memorable event took place with the wedding of Roy Winslow and Tina Bullock (our Traffic Crew Rosters Officers) in the Whiteman Village Junction precinct. Trams 393 and 329 conveyed the groom's party and guests from the Park Entrance to the Junction following their arrival aboard a 1962 Leyland Worldmaster bus driven by Bob Pearce. The bridal party then also arrived at Village Junction on the bus. After the ceremony,

photos were taken aboard Fremantle 29, which had been specially decorated, in the Mussel Pool area. The newlyweds finally departed Village Junction after the reception aboard FMT 29.

## General

Park Management conducted a trial of later opening hours during January, with trams running between 3 and 7pm instead of the usual closedown at around 4:30pm. There is no doubt that the evening is the best time of day to be in the Park in hot weather, but low patronage soon led us to revert to an earlier starting time. February is normally a very quiet month, but a few cooler days produced good returns. Bush dances were again held in the Park on Saturday nights from January through to early April, with the Society's trams (usually FMT 29) and the Bennett Brook Railway providing services on alternate weeks under a special hire arrangement with Park Management.

A small fare increase was introduced from 1 January, to offset a very steep rise in public liability insurance premiums. A new family ticket (for two adults plus two children) was also introduced at this time and has been well received by passengers.

A major team effort on Wednesdays and also weekend workdays succeeded in returning SW2 class 426 to service in time for Classic Car Show. It was decided to exchange the spare motor and wheel set to this car, and this has allowed work to continue on the motor suspension-bearing refit on the set removed. Those involved were Noel Blackmore, Eddie Vagg, Geoff Morrison, Gareth Watt, Duncan McVicar, Ray Firth, Vic Sweetlove, Trevor Dennhardt, Tony Kelly, Lindsay Richardson, Martin Grant and Allan Murray. A special effort was also made by Roy Winslow, Tina Bullock, Matt Blight and helpers to wash the service trams (roofs included) for the day.

Advertising signs promoting several Village operators (the Village Cafe, Print Shop and Motor Museum), as well as the Society, have been placed in the trams, following the common tramway tradition of advertising local businesses.

Track work over the summer months has been relatively low-key, but good progress has been made. A total of 15 steel sleepers were installed at sites where work was needed, mostly on the Bennett Brook-Stockmans Crossing section. Lifting and packing where other sleepers have been replaced was also carried out, in particular at the old Bennett Brook stop and along Swamp Straight.



*Fremantle 29 on static display in the Village on Classic car Show day, 18 March. The Society's display tent is visible behind.*  
Michael Stukely

Over the years, the Park's resident cattle have periodically grazed the area around Stockmans Crossing. While crossing the track at the Red Dam culvert they have gradually caused erosion of the roadbase from the ends of the sleepers, which has recently led to some concern. In February, a retaining

*On Classic Car Show day, 18 March, Fremantle 29 has been pressed into service and leads W2 class 393 carefully through the crowds as they enter the Village from Mussel Pool.*  
Michael Stukely



*Fishplates are tightened on the removable rail sections, supported on sleeper styes where steel pillars will later be installed over the wide central portion of the maintenance pit, on 7 January. Noel Blackmore is at far left in the pit with Matt Blight, Trevor Dennhardt and Lindsay Richardson, while John Stone is near the door.*

Michael Stukely



wall was built with sleepers and old timber poles along the affected section.

Increased aboveground termite activity has been noted in the park recently, with our timber poles and sleepers showing the effects. This may be related to the exceptionally dry spring-summer-early autumn conditions we have experienced.

Setting of gauge, and securing of the grooved rails on the maintenance pit walls has been done in preparation for the concreting of the surrounds.

The cherry-picker has returned to full operation following the rebuilding and replacement of the slewing reduction gear box.

David Secker has completed a full tramway layout drawing showing all overhead span poles on the system (he recently completed the numbering of these). This will enable a copy to be mounted on the notice board for easy reference, and will be most useful.

Following the removal of the stored wheel lathe from near the doors of the Pennebush Workshop, the area (formerly sand) has been paved with limestone and surfaced with roadbase. At long last, reports Museum Site Supervisor Lindsay Richardson, this now completes the paving of the whole of the rear yard area, giving a very tidy appearance.

Internal safety audits of all operational areas were carried out during February-March as required under the Safety Management Plan. Thanks are due to lead

auditor, David Brown, and the audit teams, as well as to section supervisors for their assistance and patience as this new system was developed.

Restoration of Perth E class tram 66 has progressed, albeit very slowly due to members' other commitments. Tony Kelly has continued work to reinforce the saloon end beams and stress bar attachments. Samples of paint for the 1950s WAGT livery have been matched correctly and paint obtained. Good progress was being made on painting the wooden slatted seats by late March.

A very successful New Year barbecue was held in the PETS Garden on 13 January with a record 61 members and friends in attendance. Catering Officer Martin Grant had a major job on his hands, and the evening was enjoyed by all. Trams made several trips with members and visitors being offered the opportunity to drive, under the watchful eye of the Instructor or senior motormen.

## Perth Trams

The street artwork commemorating Perth's electric trams, which was commissioned by Perth City Council and installed in the Hay Street Mall by artist Adrian Jones several years ago, was removed for safety reasons late in March. It consisted of two good 7m lengths of grooved rail (supplied by the Society) with metallic 'footprints' set in concrete alongside (as if left by ghostly passengers boarding a tram), and two inscribed brass plates. It has been given to the Society by the Council and may be reconstructed at a suitable location in the Park.





a sper magazine