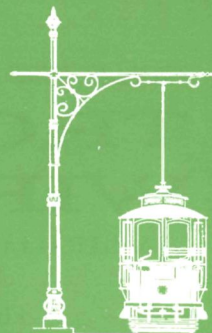


# TROLLEY WIRE



**No.300**

**FEBRUARY 2005**

**\$8.80\***

Print Post Approved PP245358/00021



## SOURCES FOR J CAR RESTORATION

# TROLLEY WIRE

AUSTRALIA'S TRAMWAY MUSEUM  
MAGAZINE

FEBRUARY 2005

No. 300 Vol. 46 No. 1 - ISSN 0155-1264

## CONTENTS

SOURCES FOR J CAR RESTORATION.....	3
SHOOTING THROUGH LIKE A BONDI TRAM.....	9
HERE AND THERE.....	12
MUSEUM NEWS.....	16

Published by the South Pacific Electric Railway  
Co-operative Society Limited,  
PO Box 103, Sutherland, NSW 1499  
Phone: (02) 9542 3646 Fax: (02) 9545 3390

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

\*Cover price \$8.80 (incl. GST)

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

Australia .....	\$A32.00
New Zealand/Asia.....	\$A38.00
Elsewhere.....	\$A42.00

All correspondence in relation to *TROLLEY WIRE* and  
other publishing and sales matters should be forwarded to  
PO Box 103, Sutherland, NSW 1499

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) 6231 2565  
email: pritch4711@velocitynet.com.au

Printed by National Capital Printing - Canberra



*Lift-off! Sydney Tramway Museum junior member Mitchell Skillcorn receives a sudden surprise when raising the pole on Melbourne Z2 car 111.*

Howard Clark

## Front Cover:

*The Sydney Tramway Museum's F class combination car 393, built by the Clyde Engineering Company in 1902, seen at dusk in Tramway Avenue.*

Martin Pinches

## Back Page Top:

*Melbourne SW6 class No. 992 in Docklands Drive, New Quay, on 4 January 2005, opening day of the line from La Trobe Street to Sudholz Street. The tram is operating route 30, a shuttle service to St Vincent's Plaza.*

Steve Altham

## Back Page Bottom:

*Five-section D2 class Combino 5004 climbs the grade in Spencer Street from Flinders Street to Collins Street. The roof of the new Spencer Street Station, still under construction, dominates the background of this photo taken on 19 January.*

Bob Merchant



## SOURCES (OR SAUCES!) FOR J CAR RESTORATION

### Another Quest

By Howard R. Clark

This account has its origins in early 1986 when the writer first inspected Sydney J car 675, where it had resided on brick piers in a suburban backyard for fifty years. To the outside observer the car was not distinguishable from any other suburban garage or shed in the area.

Thanks to the unique protection provided by its owner, the late Mr Herb Woodroff, the body remained until 1996 carefully cocooned in fibro sheeting with a pitched ridge-capped roof for at least forty of its overall sixty years in this location.

Mr Woodroff was a builder and donor to the Powerhouse Museum of model sailing ships, and we can be grateful for his craftsmanship in attaching a protective roof to 'his workshop'. I appreciated his hospitality, with his wife Jean, to me and my children on that day long ago. He loved his space in the tram which was "cool in summer and warm in winter," yet he knew its uniqueness and wanted it moved and preserved eventually, but not in his lifetime. What was not learned until 2004 was just how Herb Woodroff had protected the roof of his tram. The pitched roof support trusses were fixed only by nails and wires, attached to the gutter rails and end downpipes respectively. Thus the roof of the car was spared intact without any penetration of fixing materials. The vertical centre frame support timbers merely sat on floating timbers lying on the car roof. Perhaps he was a closet enthusiast before his time, and anticipated one

day the car returning to its original use. See the May 1997 issue of *Trolley Wire* for the full account of J 675 leaving its home of sixty years and being transferred to Loftus.

From the moment 675 arrived at Loftus on 29 November 1996 and was placed on Victorian Railways Brill 5ft 3in gauge bogies it had potential as a storage shed for equipment, pending plans for its restoration. This quickly occurred as space at the Museum remains at a premium and thus the car was soon filled to capacity with all manner of historical artefacts awaiting opportunities for restoration.

Restoration of the car was important. However the opportunity to obtain NSW Heritage assistance for a major 'movable heritage' conservation project was not possible until applications for funding under the 2004/2006 Heritage Initiatives Programme were called for, closing in February 2004. Fortunately we succeeded in obtaining \$50,000, the maximum for any one project, of the \$58,000 sought. This is part of an overall programme of \$150,000 including applicable GST and some \$30,000 of volunteer input. The project is required to be completed by 30 May 2006 and funding assistance / gifts from members and friends will be needed during this period.

Reminiscent of the saga of obtaining equipment for trolleybus 19 reported by Dennis O'Brien in the August 2004 issue of *Trolley Wire*, and also by Chris

*Greg Sutherland removes the framing timbers for the protective roof on J car 675. The car has been temporarily fitted with doors from N class cars, the best of which will be used in the restoration.* Howard Clark



O'Sullivan in relation to R car 1808 in *Trolley Wire* for February-March 2001, we were faced with a sheltered body, devoid of most body components and equipment, which no one with a memory earlier than 1934 would have experienced riding upon. My father, born in 1920, refers to 'Jumping Jacks' he rode upon. However, he cannot be specific about King Street and it is more likely he rode on the K class cars later in the 1930s and 1940s.

Steps were taken soon after the arrival of No. 675 at Loftus to secure parts required to assist in its restoration. Parts thus secured at minimal cost are in my view akin to "adding sauce to enhance the flavour," freeing up resources needed to purchase other materials. 'Sauce for 675' is thus a key to its preservation!

The first major opportunity to source parts arose in 1997 when our weekday workshop team visited Helensburgh to strip components from the remains of N car 641 (see *Trolley Wire*, February 1998). It was with some initial glee that we noted three internal bulkheads which appeared intact in that car, sufficient to re-equip 675 with panelling from the canoe panels in the ceiling to seat level. Alas, the glee was momentary as it was soon discovered that white ants (termites) had enjoyed eating their way through the inside of the Blackwood timber leaving only the outer casing intact and a muddy coloured remnant within. Glass held the roof up! Fortunately Australian Cedar was obviously not to the ants' liking, as only a short access trail was exposed on one of the two remaining seat back mouldings. Nevertheless, it was a start as we had only eight more mouldings to go.

The side doors on 641 and their mechanisms were largely intact. The doors themselves were unsuitable for restoration, being badly affected by weather and dry rot although largely ignored by the white ants. Of course at this stage we had no assurance that N car doors were compatible with J car doors as the equipment already stored inside the car prevented a test and many doubts existed in some quarters, particularly as earlier N cars had wider side panels and narrower doorways. The writer remained confident, as N and J cars were built in the same Meadowbank factory at the same time and it seemed inconceivable, particularly as the doorway openings were the same as our N class car 728, that a smaller version of essentially the same car would have a different lower body curvature than its bigger sister. This proved correct in November 2004 when we were able to slot N car doors exactly into place.

The second major opportunity to source parts arose in 2003 (see *Trolley Wire*, May 2003) when our workshop team paid several visits to Woy Woy to strip

N car 709 and bring its underframe and bogies to Loftus.

Again, due to the poor condition of the car there seemed little to salvage at first. However, it yielded a number of valuable components including the following:

- All 20 vertical handrails needed for 675;
- all but one of the 10 horizontal handrails;
- under-seat wooden sandboxes virtually intact for all four wheel positions;
- some bulkhead and canoe panel components usable as patterns, and some seat panel bases.

The good news confirming up to \$50,000 in pro-rata grant funding was received on 16 July 2004, and we received formal clearance from NSW Heritage to proceed with the project on 9 October 2004. The task of clearing all stored items out of J 675, and locating other useful components, thus began. Bendigo Tramways were advised to complete restoration works and overhaul of the Brill 21E truck which had arrived from Brussels in early 2004. NSW Heritage had in 2003 generously approved \$5,000 towards the total cost of \$17,000 for purchase and transport of the truck, with the balance coming mainly from two museum members.

By early December 2004 all of the cladding had been removed from the tram and appropriately disposed of. Greg Sutherland removed the timber roof framing from the car roof, clearly exposing a malthoid cover tacked carefully over the canvas roof thus affording further weather protection. Brief inspection revealed a heavy coating of navy dressing on the canvas. The malthoid will be carefully removed in Bendigo to enable an assessment to be made.

During the course of cleaning out J 675, more than 40 N type doors, mostly with their top steel guide tracks and attachment castings, were located. All were in only fair condition (unlike the excellent quality of many O car doors also stored in the car). The doors mainly came from the two N cars, Nos 623 and 634, broken up at Beecroft about 40 years ago. The best eight pairs (plus two spares) were selected for restoration. All will need replacement of the bottom rails and repairs to other timber including panel frames, some panel pieces, glass and beading. Other doors were dismantled to provide timber for much of this process. A healthy stock of doors nevertheless remains! The door track castings fitted the holding brackets which remained in place complete with nuts on one side of the car and the doors fitted clipped over the step treads perfectly. In fact, four of these doors



*Drivers' windscreens from K car 1295 were installed to see if they fitted 675. They did so perfectly and were used as templates for new windscreens.*

Howard Clark



were bolted into place and closed for the trip to Bendigo.

It was clear once the outside cladding was removed that the car body was little more than a roof supported from the underframe by its side pillars and little else. Official photos of E class cars scrapped in the 1930s illustrate the bare nature of the bodies before disposal, with most components being removed for recycling. Externally 675 was missing all 20 of its upper body panels. These were solid Australian Cedar (295 x 980 x 20mm), in demand for other uses. Sadly we discovered they had been hastily removed and additional restoration work is now required to rectify splintered side frame timbers.

Six original panels from N 709 were retrieved and although in poor condition are suitable for repair and fitting to the car. Specialist timber suppliers were unable to supply replacement cedar of the same dimensions, and instead offered a Malaysian timber substitute for the remaining panels. This option was accepted. However, it transpired the suppliers deemed

the overall wastage too great and so supplied us with double the number of cedar panels at half the size, suggesting we could laminate them to the full size. Back to the drawing board! Fortunately I recalled that back in 2002 we collected from a widow in Five Dock a supply of shortened O car side panels which her late husband had obtained when employed at Randwick Workshops. These were oversize and double the thickness required for the J car. As they had no other use, Terry Thomas cut them to similar dimensions for re-use and planing to thickness, for fitting in Bendigo. The new timber obtained will be reused for mouldings with a small amount of additional wastage, whilst the restoration will end up with full size single panels of authentic tramway origin.

The lower side panels are of thinner dimensions and in almost all instances will need replacement as they are badly weathered.

The driver's end aprons and flooring will need replacement. Windows from K 1295 were found to be a perfect fit and were used as a template for new

*The cleaned-out body, still faintly displaying its black-edged gold leaf number on the centre panel, is nearly ready for its trip to Bendigo.*

Howard Clark



frames made for the number one end by Traeger Joinery. It is intended that the coupling end will be an open end for which an apron from a 75x numbered K car was located for its components, along with the original straight downpipes. It was found that the original holes in the floor at both ends still existed and were simply partly plugged to allow for repositioning of the replacement downpipes when the closed ends were fitted. The headlight casting for the open end was retrieved from O car 824 at Cessnock while the other casting of different style for the closed end came from N 709. The jumper sockets and one cover were noted as coming from K car 1303 whilst the other cover plate was found amongst artefacts recovered with C 12 and K 1295 obtained from the late Norm Boxall. Bob Cowing retrieved a pair of air hose sockets to complete the parts for the apron.

Internally, new Blackwood timber has been purchased for rebuilding of the bulkheads and seat frames. The remains of a partially complete bulkhead found in N 718 at Cessnock will provide an authentic template, whilst a profile of a seat top and seat slats was obtained from N 715 at Moss Vale, along with a seat base and pedestal from N 709. Terry Thomas is turning the replacement pedestals in the workshop, fashioned from recycled furniture mahogany. Seat tie rods and shackles from N cars 641 and 709 were restored and fitted in their original sockets on 675 to provide some additional body strength for the trip to Bendigo. Interestingly, the lower parallel tie rods in the seats are of a thinner dimension, without a centre shackle, and tightened using nuts countersunk into the car sides. (This contrasts with O class cars where tie rods are fitted within the seat frame in the form of a diagonal cross.)

As noted above, two moulded seat backs were retrieved from N 641. It was important to locate originals if possible, as timber of these dimensions was

unobtainable and alternatives were not deemed appropriate. An original from 623 was located in the display hall. Opportunity arose when N 710 was purchased from its owner, Bill Bradley at Moss Vale. Whilst that car was missing almost all of its seat backs, sister car N 715 contained seven which completed our needs. For a small additional amount these were purchased and recently removed from the car. It was found that one came from 710 and that all had been repainted after chemical removal of the original varnish, giving them a furry finish. In addition, due to the ingress of vines, evidence of borer activity and some dry rot on the inside was noted. This is not major and has been rectified as the panels have been restored.

Another interesting mystery emerged. All seat backs were stamped on the reverse with the car number and another number, some bearing roman numerals or both. Three of the panels (from 641, 710 and 715) carry the number '1' whilst two (from 623 and 715) carry the number '14'. These were marginally shorter than the others with a tapered end. The larger panels had flat ends. Two carried the number '7' (from 641 and 715, which also carries the roman 'VII') whilst the remaining three from 715 were stamped with roman numerals (incorrectly) 'IIII' as well as '4', 'V' and 'XII'. It was concluded that the shorter panels were the bulkhead panels behind the driver. What remains a mystery is why number '7' was on the reverse of the bulkhead carrying number '1' on 641 and not the number '2'. Another interesting piece of trivia are the initials 'WK' pencilled on the reverse of the panels from 641 and a signature which looks like 'PJ Wertheim' or 'Wellham' on 623. This practice is consistent with initials found on the reverse of panels on Melbourne W cars, obviously placed there by tradesmen in the workshops.

Advertising racks for the car appear to be originally from E class cars 523-524. It was noted each rack carries either odd or even numbers stamped on the



*The crane moves the body of J 675 through the top gate towards Mario's truck on 14 January.*

Howard Clark



*J car 675 rolls out of Pitt Street at 10:20am on 14 January bound for Bendigo. The façade of the former YMCA building dominates the background.* Howard Clark



*This was the scene at 7:15am in Tramways Avenue, Bendigo on 16 January. The body of J 675 has been lifted from Mario's trailer and is about to be lowered onto a workshop dolly for moving into the depot.* Bob Merchant



*J car 675 sits on the workshop dolly and provides a glimpse of what the scene will be like after its restoration. It last sat on rails 69 years ago!* Bob Merchant



outside indicating the position in the compartment for the advertisement to be placed. The holding brackets for the panels were obtained from N 715.

Other smaller items include spare step treads, door mechanism fixings and wheels from 641 or 709, roof steps from 709, a trolley hook and handbrake equipment from O cars, and a brake cylinder restored by our Wednesday workshop group.

Mario Mencigar from Australian Train Movers, who has delivered a number of trams for us in the past, inspected the car in late December 2004. He agreed that we could load all the components with the car for the trip to Bendigo, and requested we clean up the loose equipment around the car to enable it to be moved more easily by crane. Tom Tramby cheerfully undertook this task using our forklifts with help from

*This view shows the remaining canoe panels in 675, part of the bulkhead between the driver and the first passengers' compartment. Further back the other canoe panels can be seen.*

Howard Clark



Vic Solomons. The appointed day of 7 January was delayed by a week due to crane operators being on leave. Mario arrived five minutes before the appointed time of 6:00am and positioned his truck over a number of car park spaces used by commuters before they were due to arrive. Before the crane arrived Mario had surveyed the spare parts and timber stacked in the car and reorganised it within, after inserting some old metal roof panels as a barrier within the car. He was also concerned with potential roof movement so Terry placed diagonal timber bracing in both drivers cabins. The car was duly loaded and Mario strategically placed nylon strap bracing through and over the roof. He departed Loftus at 10:20am.

Mario arrived in Bendigo on Sunday afternoon with tram and contents safely intact. The car was unloaded by 7:30am in Tramways Avenue on Monday morning 17 January on a workshop dolly ready for towing into the Bendigo Tramways depot building. The only casualty of the trip was Mario's truck tray which required a sweep, as much of the 70 year old road grime under the tram body had vibrated loose during the journey to Bendigo.

The next step in the restoration programme for 675 will be to complete a revised task assessment for the car body, and no doubt a further list of needed parts will be required. The roof malthoid will be removed and one of the driver's ends will be the first area of attention. Overall the floor bearers and timbers appear in remarkably good condition including original floor slats, except at the driver's ends where the ends of the main floor bearers have advanced rot through weather and ground contact in places. One of the side panels also requires replacement timbers where rot and white ant penetration occurred due to vines growing in the cavity.

The restoration of 675 promises to be an exciting project and readers are encouraged to lend their support in any way they can as the task progresses and update reports are published in these pages. We are indebted to a number of members and friends who have shown enthusiastic support for the project, including Ben Barnes, Christopher Flynn, Alex Foot, Peter Kahn, Greg Sutherland, Terry Thomas, Tom Tramby, Vic Solomons, David Wilson, Ross Willson and Bruce Worthington.



*The depot road has been cleared and 675 is pushed by hand into the depot until its turn to be transferred to the workshop.*

Bob Merchant



# SHOOTING THROUGH LIKE A BONDI TRAM

## Setting the record straight ...

By Richard Peck

The notorious criminal D'Arcy Dugan escaped from the special prison tram, number 948 one day in 1946 (the year I was born), leaving the scrawled chalk message 'Gone to Gowings' in his cell. Years later when I was a pupil at Bellevue Hill Primary School any mention of Dugan in the newspaper (this was before television) would send chills down our spines. It was only much later in life (when I was putting together my social philately collection *Shopping and the Mail*) that I learnt that the family-owned retail firm of Gowings on the corner of George and Market Streets in the city had coined this phrase as a clever advertising ploy. Gowings in 2005 is no longer family owned (but thankfully still Australian owned).

There is another curious phrase that has entered the Australian language – *Shooting through like a Bondi tram*. Davies, Wickman & Wilson<sup>1</sup>, as part of their explanation of the MacRobertson advertising poster 'Heard on a Bondi tram' state:

"Bondi, one of Australia's most famous landmarks, has been part of Australia's folklore for many generations. A feature of its popularity was the Bondi tram. This tram entered our popular culture through the expression 'Shoot through like a Bondi Tram'. Its origin dates from the 1890s and is the subject of some debate. One argument is that it was the result of competition between horse-bus operators who attempted to maintain business in the face of steam trams which operated along Oxford Street to Bondi. Both forms of transport endeavoured to maintain the utmost speed in arriving at their destination first. The

other argument suggests that the term derives from the use of express services, known as 'through trams', in peak hours."

During this period, however, express services did not operate on the Bondi run.

D. Audley, "*The Sydney Bus Scene - 100 years ago*"<sup>2</sup> lists two horse buses plying to Bondi in 1875, three in 1880, none in 1884 and 1885 and further states:

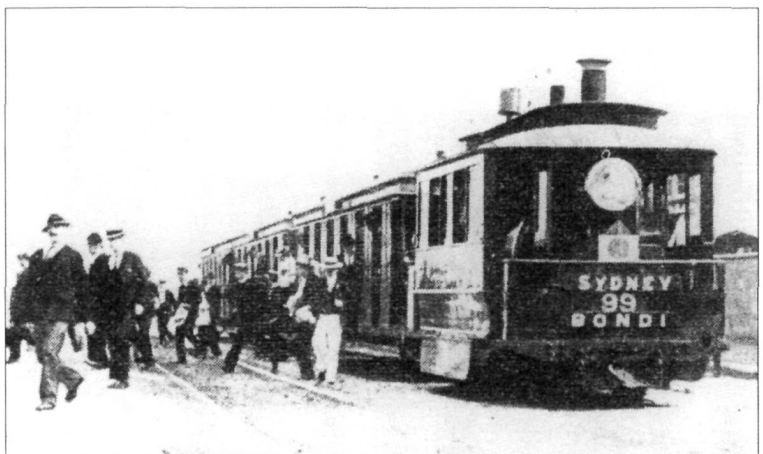
"While the shift in the number of vehicles running in the various areas may reflect the change in population centres of Sydney in the late 1880s (especially the development of outer suburbs such as Newport and Kogarah) it is interesting to compare these figures with the growth of the Tramway system:

"The first half of the 1880s saw considerable expansion of the trams, and by the end of 1882 the lines had reached Woollahra (by a rather indirect route from Oxford Street, however), Waverley (Charing Cross), Randwick (Short Street), Botany, Marrickville (Illawarra Road), Forest Lodge and Glebe Point. Coogee was reached in 1883, as was Derwent Street (on the Parramatta Road route to Leichhardt), while Short Street Leichhardt and Denham Street Bondi were reached in 1884...

"In the face of this, it is interesting to compare the number of licences issued to [horse] buses in the various areas....It would seem that traffic along Oxford Street was lost to the trams very early, the

*Steam motor 99 on a Sydney to Bondi run with its passengers alighting on the 'wrong' side of the three-car tram. It is thought to be in Fletcher Street, Bondi. Photos of three-car trams are rare and of four-car trams even rarer.*

Vic Solomons collection



three buses to Bondi and the ten buses to Waverley having all disappeared by 1884.”

David Burke, in *Juggernaut, A Story of Sydney in the Wild Days of the Steam Trams*<sup>3</sup> says:

“Long after the line itself is a lost memory, the Bondi tram will retain a place in the Australian language. In some future age, maybe, a space dweller will say to a companion: “What’s the new rocket ship like. Is it fast?” To which the other will doubtlessly reply: “Fast? I’ll say! Shoots through like a Bondi tram...”

“People may have forgotten the origin of the phrase and whether, in fact, it started with steam or the electrics is an argument rather irrelevant to the story. To find the beginnings they’ll search dusty files for the story of Australia’s most famous tramway that began when Queen Victoria sat on the throne of England, when ‘Tea Gardens’ was the name for Bondi Junction and Bondi Beach [was] an expanse of deserted surf and empty sand hills.

“If they look far enough, they’ll find there was once a steam tram that did ‘shoot through’ – reputedly at speeds of up to 50mph (80kph). Every morning it sped from Bondi with its load of commuters bound for the city – a plume of steam drifting in the breeze, [tram]cars rolling like ships on an ocean swell, starch-collared businessmen solemnly consulting their watches and having a quiet wager on whether or not they’d beat the Ocean Street tram to Mark Foy’s corner. In the late afternoon the process was reversed...”

“Historian Gil Hayman recalled the introduction of the ‘Fishing Specials’ “... taking fishermen by express

trams to the old Bondi terminus, near the top of Bellview Street, Tamarama. The fish tram left the city at 10am. Fishermen would board with their gear and spend a day on the rocks with rod and line...

“Steam was in its final golden era then. Express ‘mail’ trams were in operation to Bondi, Waverley Cemetery, Coogee Beach, Botany, St Peters, Dulwich Hill, Abbotsford, Leichhardt, Balmain and Glebe Point. The Bondi expresses of up to four cars ran from the Aquarium at Upper Tamarama pausing only at Bondi Junction, Paddington Post Office (for mail) and Ocean Street until reaching the city. They had first and second class accommodation and the road was kept clear by timetabling the all-stops trams to be refuged into loop sidings to let them pass. When the crowded holiday trams left Bondi Beach at dusk, they went belching fire as they chugged up the grade, giving watchers a foretaste of hell, a regular prelude to Dante’s inferno.”

This account has distorted some of the factual detail. There is mention of first and second class accommodation and whether the express reached Mark Foy’s before the Ocean Street tram. In fact the only first class service was a short-lived trial of a service from Woollahra in 1884. And this was not an express tram. The correct order of the place names on the way is Bondi Junction, Ocean Street and Paddington. And Burke only hints at another possibility of the origin of the ‘Shooting Through’ phrase – the fact that trams on the Bondi (and other beach suburbs) line ran on their own right of way where they could run at fast speeds. That is what I always believed was the origin of the phrase.

The Macquarie Dictionary notes the first use of the



*A three-car tram hauled by steam motor No. 40 heads for Bridge Street. The street is decorated, so the occasion may be Federation in 1901. No photos of a tram carrying a ‘Through Tram’ board have been seen.*

Vic Solomons collection



An extract from the 1898 tramway working timetable.

Run No. ...	2	8	64	11	9
No. of Cars ...	3	4	3	2	...
Bridge-street ...	a.m. 7 14	a.m. ...	a.m. ...	a.m. 7 36	a.m. ...
Queen-street Junc.	7 37	...	...	7 59	...
Bondi Junction	7 41	8 4	8 28	8 6	...
Waverley Junction	...	8 8	...	8 11	...
Waverley .....	...	8 13	...	8 16	...
Bondi Aquarium ...	7 54	...	...	...	...
Bondi Beach ...	7 57	...	...	...	8 20
Standing Time	(8)	(5)	(5)	(12)	(5)
No. of Cars ...	3	4	3	4	2**
Bondi Beach ...	8 0	...	...	...	8 25
Bondi Aquarium ...	8 3	...	...	...	8 28
Waverley .....	...	8 18	...	8 28	...
Waverley Junction	...	8 23	...	8 33	...
Bondi Junction	8 13	8 28	8 33	8 38	8 40
Queen-street Junc.	8 20	8 35	8 40	8 45	8 47
Bridge-street ...	8 42	8 54	9 3	9 4	9 10
Standing Time ...	(8)	(3)	Off.	(8)	(3)

phrase in literature was in 1945 in *Pop's Blonde*, and is recorded another nine times until 1979, usually used allusively to designate a hasty departure (much like 'Gone to Gowing' in fact).

A check of the public timetable W7 in operation from 5 October 1947 reveals no mention of through or express electric trams, but states that:

"Minimum fares will be charged on trams displaying 'Minimum Fares' signs during pm business hours."

This is a survival of earlier times. The public steam tram timetable of 1899, in fact, shed some light:

"The usual stoppages between Liverpool Street and Darlinghurst and thence to Queen Street will not be made by Trams marked t Mondays to Thursdays; k Mondays to Saturdays; c Saturdays only."

Note that there was a six day working week at this time, a separate timetable only being run on Sundays.

C.C. Singleton, in an article in the August 1961 issue of the Australian Railway Historical Society *Bulletin*, recorded that these services were denoted by 'Through Tram' signs with red boards.

Singleton, who was born in 1888, states that the through trams ran non-stop Queen Street-Ormond Street-Liverpool Street. He further stated that:

Run No. ...	1	6	9	9	8	8	2	2	5	5	10	10	2	2	9
No. of Cars ...	3†	3†	2	3	3†	3	3†	3	3	3	2	3	2	3	2
Bridge-street ...	p.m. 4 31	p.m. 4 38	p.m. 4 44	p.m. 4 46	p.m. 4 53	p.m. 5 2	p.m. 5 2	p.m. 5 7	p.m. 5 10	p.m. 5 12	p.m. 6 0	p.m. 6 6	p.m. 6 8	p.m. 6 10	p.m. 6 16
Queen-street Junc.	4 54	5 1	5 7	5 12	5 16	5 25	5 25	5 30	5 33	5 31	6 23	6 29	6 31	6 29	6 39
Bondi Junction	5 1	5 8	5 14	5 12	5 22	5 31	5 32	5 36	5 40	5 38	6 30	6 36	6 38	6 36	6 46
Waverley Junction	...	...	5 19	5 17	...	...	...	...	5 43	5 43	...	...	6 43	6 41	...
Waverley .....	...	...	5 24	5 22	...	...	...	...	5 50	5 49	...	...	6 48	6 46	...
Bondi Aquarium ...	...	...	...	...	5 32	...	...	...	...	...	6 40	6 46	...	...	6 56
Bondi Beach ...	...	...	...	...	5 35	...	...	...	...	...	6 43	6 49	...	...	6 59
Standing Time	(3)	(5)	(6)	(8)	(4)	(3)	(3)	(2)	(2)	(4)	(18)	(7)	(7)	(9)	(12)
No. of Cars ...	3†	3†	2	3	2*	3	3†	3	3	2	2	2	3	2	2*
Bondi Beach ...	...	...	...	...	5 38	...	...	...	...	...	6 56	6 56	...	...	7 11
Bondi Aquarium ...	...	...	...	...	5 42	...	...	...	...	...	7 0	7 0	...	...	7 15
Waverley .....	...	...	5 30	5 30	...	...	...	...	5 52	5 52	...	...	6 55	6 55	...
Waverley Junction	...	...	5 35	5 33	...	...	...	...	5 57	5 57	...	...	7 0	7 0	...
Bondi Junction	5 4	5 13	5 40	5 40	5 52	5 33	5 35	5 39	6 2	6 2	7 10	7 10	7 5	7 5	7 25
Queen-street Junc.	5 11	5 20	5 47	5 47	5 58	5 33	5 42	5 44	6 9	6 9	7 17	7 17	7 12	7 12	7 32
Bridge-street ...	5 34	5 43	5 10	6 10	6 21	5 56	6 5	6 7	6 32	6 32	7 40	7 40	7 35	7 35	7 55
Standing Time ...	(8)	(6)	(5)	(5)	(4)	(4)	(5)	(3)	(4)	(4)	(9)	(9)	(5)	(5)	(15)

"This rather debunks the fanciful tale, which crops up at intervals, of the 'fast' Bondi tram, as the only through trams in that district ran from Waverley and the nearest the Bondi people got to one was a single connection off a stopping tram from Bondi, which connected with a through tram from Waverley each morning."

The working timetable for 1898 is more particular. In the morning the first through tram (run number 8) left Waverley at 8.18am, reaching Bridge Street at 8.54 and consisted of four cars. The second four car through tram (run number 1) left at 8.28am and connected with the two car (three on wet days) 8.25am from Bondi Beach at Bondi Junction (and with the extension tram from Randwick and Coogee) where passengers could change, the express arriving at Bent Street six minutes earlier than the normal Bondi tram.

In the evening through trams only ran Mondays-Fridays. Run 9 left Bridge Street with three cars at 4:46pm reaching Waverley at 5:24pm (Saturdays 5:22). The second, run 5 with three cars, left Bridge Street at 5:12, reaching Waverley at 5:48. The third,

run 1, left Bridge Street at 5:42 and reached Waverley at 6:18. The fourth, run 7, a three car tram left Bridge Street at 5:55pm and arrived at Waverley at 6:31pm. The final through journey, run 2 with three cars, left Bridge Street at 6:10pm, arriving at Waverley at 6:46. None of these made direct connections to Bondi trams (which often left Bondi Junction just before the through tram arrived!) and in no cases were ordinary trams overtaken by the through trams.

It is also interesting to note that on Sundays only, trams when reaching the city often next operated on a different line and the working timetable shows the letters of the next line on which the tram would take up running as well as the standing time.

It seems that Bondi trams, for whatever reason, had a reputation for speed, but timetables reveal only a tenuous basis for this reputation, not least because the through services ran to and from Waverley rather than Bondi. All of which points to the fact that the origins of things do get very mixed over time, as we can also see when dealing with private omnibuses.

Author Richard Peck recently retired from his position as Curator of Philately, Postal and Printing Technology at Sydney's Powerhouse Museum. Richard is presently working on a series of self-published spiral-bound monographs on horse bus services in NSW and on a series of books on NSW tram, bus, ferry and toll tickets with *Trolley Wire* editor Robert Merchant.

1 Ian Davies, Warren Wickman, Andrew Wilson: *Going Places*, a pictorial history of transport in NSW (Honeysett, 1989) p.84.

2 Fleetline, journal of the Historic Commercial Vehicle Association, September 1977.

3 David Burke, Juggernaut (Kangaroo Press 1997), Ch.9 "Shooting through on the Bondi line".

## HERE AND THERE

### NEWS ITEMS OF INTEREST FROM ALL OVER

#### Three hundred issues

Dave Macartney of Ballarat reminds us that this is the 300th issue of *Trolley Wire* and suggests it might be timely to look at trams in Australia which have carried this number. Dave writes:

No. 300 would have been both a grip car and trailer on the Melbourne cable system. On the electric system, No. 300 was a W class, later a W2 class tram, that was built by Holden of Adelaide in 1924 and the body delivered to Melbourne by rail on a bogie flat wagon. The body was sold in 1967. A second No. 300, in the form of an A2 class, was that city's last non-articulated tram. It was built by Comeng and entered

service in 1987. A series trams introduced the use of pantographs on Melbourne's tramways.

Brisbane's 300 was part of the last batch of air-braked drop centres, built by the Brisbane City Council in 1935-38. It was operating out of Light Street Depot at the time of closure in 1969, and was allocated to the Brisbane Tramway Museum Society at Ferny Grove.

In Sydney, No. 300 was a member of the large F/L/LP class, entering service on 7 September 1901 as an F class car, was converted to an L class from 23 December 1910, and was rebuilt to L/P class from 2

SW6 car 881 stands at the New Quay terminus of Melbourne's new Docklands extension. It may seem a desolate place, but the terminus will soon be surrounded by high-rise apartments. Early provision of tram services aims to discourage car use for journeys to the city.

Bob Merchant



This view looks in the opposite direction to the one above. New high-rise apartments are now appearing at New Quay and will provide patronage for the new tramway.

Steve Altham



March 1928. It worked the main system until its withdrawal on 17 October 1951. No. 300 did not operate at Rockdale or on the Newcastle system as some of the class did. With eight others, the car was purchased by the NSW Department of Education in September 1952 for use as holiday sleepouts for children.

Adelaide had a tram numbered 301, a Birney, but not a 300, whilst Brisbane's 301 was the unique and short-lived, Hedley-Doyle stepless car.

Tram fleets in Perth, Fremantle, Kalgoorlie, Leonora, Hobart, Launceston, Geelong, Ballarat, Bendigo and Rockhampton did not reach 300 cars.

### Trams for Perth?

Western Australia's Minister for Planning and Infrastructure, Alannah MacTiernan, said on

18 December that she wanted to see light rail linking Subiaco, West Perth, the city, the WA Cricket Association (the WACA) ground, Gloucester Park and possibly Burswood.

In the longer term the Minister wants to see light rail running from the CBD to City Beach. Light rail would complement the CAT bus service and the initial service would run along Hay Street.

Tram services started in Perth in 1899 and ceased in 1958.

### Melbourne fare increase

Melbourne's fares increased from 1 January 2005. The tickets most used by visiting enthusiasts are the Two-Hour Metcard now \$3.10, and the Zone 1 Daily Metcard now \$5.90. A booklet of five Daily Metcards is available from retail outlets and the Met Shop for \$25.90. They can also be purchased in advance



through the Metcard website at —  
<http://metlinkmelbourne.com.au/metcard/index.php>.

## Bendigo Council rules against tramway extension

The Bendigo Council has abandoned a plan to extend tourist trams around the city's Lake Weeroona, rejecting consideration of alternative proposals presented by The Bendigo Trust. The decision follows a long community campaign against the \$4.6 million project which was the main issue at last November's council elections.

Mayor Rod Fyffe says the decision shows the council is listening to the people. "I think it's not only a good example of democracy at work but also what we need

to realise is if we're going to be progressive here in Bendigo, we need to be trying ideas," he said. "Some will not work, many will, and this is one where it didn't work and we now move on."

Part of the motion to scrap the project also included a commitment from Council to look at other ways of improving the operations of the Tramways and The Bendigo Trust over the next couple of years, so hopefully some of the essential upgrading of the existing tramway will still occur.

## Dublin's Luas

Luas is the light rail transit system that is now operating in Dublin, Ireland. The name Luas

*Five-section Combino 5013 in Ackland Street, St Kilda on a route 16 service to Melbourne University on 16 October 2004, the last day on which route 16 used the Ackland Street terminus. Route 69 (Kew Cotham Road to St Kilda Beach) and route 16 (Melbourne University to St Kilda Beach) were combined as route 16 University to Kew Cotham Road via St Kilda Beach from 17 October 2004.*

Steve Altham



*Three-section Combino 3528 at the St Kilda terminus of route 69, the last day of this service. However, in January 2005, the Combino cars are still displaying '69 Kew' when running this service, presumably because their displays have not yet been reprogrammed to show '16 Kew'.*

Steve Altham



*A view of Melbourne's new University terminus from the bridge over Swanson Street at Elgin Street on 15 January. Three 'Y' roads have been provided for terminating trams.*

Bob Merchant



*Concreting is under way at the new tram stop at the University terminus in Swanson Street, two days before it opened on 21 January 2005.*

Bob Merchant



(pronounced 'Lou-As') is the Irish word for speed. The new tram system connects suburban parts of Dublin city with the city centre on two separate tramlines.

The Green Line connects Sandyford to St Stephen's Green in the city centre and the journey takes approximately 22 minutes. It opened on 30 June 2004. The Red Line connects Tallaght to Connolly Station. It

opened on 28 September 2004 and takes approximately 43 minutes.

By mid October it was reported that Luas is now carrying 45 percent more passengers than the estimated numbers. Passengers now have difficulty getting on a tram in peak hours.

*Luas tram 4012 passes another in Harcourt Street, Dublin on 12 September 2004.*

Greg Sutherland





*The Sydney Tramway Museum's AEC Matador recovery vehicle was on display at Sydney's NRMA Motorfest on 26 January. This annual event attracts thousands of veteran and vintage vehicles which line each side and the centre of Macquarie and College Streets and St James Road. The Matador was lucky to have a shady spot in St James Road.*

Bob Merchant

## COTMA

### Council of Tramway Museums of Australasia

Executive Officer, 158 Lorne Street, Fawkner, Victoria 3060

From Warren Doubleday

#### COTMA Annual General Meeting

Following discussions at the Auckland 2004 Conference, planning is being undertaken for an extended COTMA Annual General Meeting in Melbourne on the weekend of 25-26 June. It will hopefully involve the AGM, a tram tour, a low-key dinner, an entertainment evening, some informative discussion or workshop sessions and perhaps a tour to a tramway facility in Melbourne. Accommodation

would be on a self-arranged basis. The intention is to keep the cost of participation low and to base the weekend around the Hawthorn Tram Depot facility.

More information will appear in the next *Trolley Wire* and through the COTMA News Updates distributed to all museums.

## BALLARAT

### Ballarat Tramway Museum

PO Box 632, Ballarat, Victoria 3353

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

From Warren Doubleday and Dave Macartney

#### Ballarat Tramway Museum's traction power problem

As reported in the November 2004 issue, the Museum suffered a loss of traction power because of a lightning strike near our electricity substation on 13 October and a small fire in our main AC traction switchgear on 19 October. These occurrences resulted in the Museum not operating a tram service for about two and half months.

Although the power was restored to the depot on 29 October, repairs to the transformer were considered uneconomic. It has since been sold for scrap with only

the specification plates being retained for future reference.

On 9 November, the board decided to commission the manufacture of a new transformer that would be specially designed to meet the Museum's needs. It has been about 30 years since we built the previous unit from a second-hand power transformer. Equipment of a similar design is currently available and is often used in industrial installations for power conditioning. While the cost of a new transformer might be



considered to be expensive at around \$17,000, such a unit would be an excellent investment and would serve our needs for many years. With this mind, a new transformer was ordered from Coast Electrics of Wollongong. The new unit was delivered to Ballarat on 15 December 2004.

While we were waiting for the transformer, our depot crews led by Garry Wood and Paul Mong, and assisted by Alan Snowball and others, reorganised the substation prior to its installation. Because the size, shape and technical specifications of the new unit differ from those of its predecessor, our team has had to rebuild the substation. In fact, some 476 hours were worked on the project over the closure period including several ten to twelve hour days by Garry and Paul. Overall, ten people contributed to the project.

After installation, commissioning and testing of the new transformer, power was restored to the overhead

on 18 December. Tram 27 moved about on the fan, and scrubber tram No. 8 ventured out on Wendouree Parade to clean the track. Further testing was done on 20 December, with Nos. 27, 38 and 661 being started at the same time. No.8 made two round trips on 21 December in readiness for passenger operations after Christmas. During the closure the grooves had filled with grit which had to be cleaned out by hand, while at St Aidans Drive there was grass was flourishing in the groove.

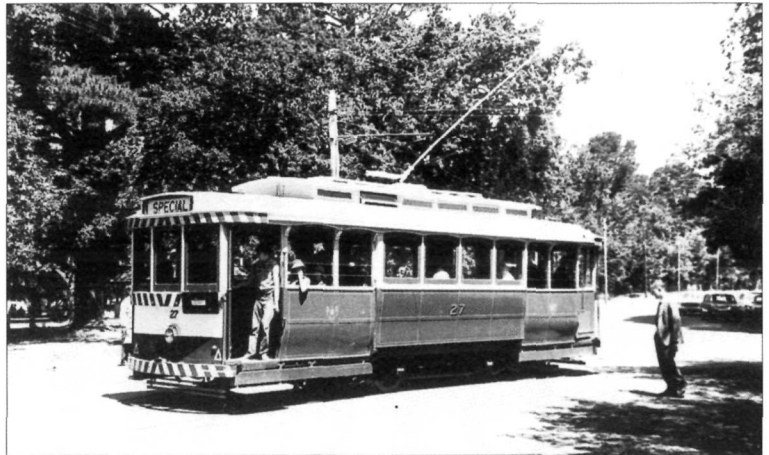
### Funding our new transformer

To help meet the cost of this large and unexpected outlay, which is likely to be between \$25,000 and \$30,000, the Museum opened a funding appeal through its members and the Association of Railway Enthusiasts. The outcome has been most pleasing. So far, over \$15,000 has been received from more than 100 people and organisations. Further donations would

## Thirty Years Ago

*No. 27, on the first BTPS test trip, makes its way across Wendouree Parade on 8 December 1974.*

Richard Gilbert



*No. 40 kicks up the dust on its way back to the depot during an early test trip on 8 December 1974.*

Richard Gilbert



be most welcome, and can be sent to the Museum at PO Box 632 Ballarat Victoria 3353. A formal acknowledgement of all donations to this special appeal will be made by providing a plaque or sign listing of all those who have contributed donations.

### Fare increase

The board decided to increase fares from \$2.00 and \$1.00 to \$3.00 and \$1.50 respectively on resumption of services. Whilst the old fares had absorbed both the introduction of the GST and the increased cost of public liability insurance, the time had now come for an increase. Accordingly, the tram ride signs were sent off for alteration, and new stationery was prepared.

### Boxing Day operations

Tram services resumed on Boxing Day and, to celebrate the event, no fares were charged. Boxing

Day 2004 was the 30th anniversary of the commencement of tram services in Wendouree Parade by the Ballarat Tramway Preservation Society. It was also the day the Ballarat Tramway Company commenced their horse tram service in 1887.

No. 27 ran out of the depot shortly after 11:00am with Ballarat Courier photographing the occasion. Traffic Manager and tram driver Peter Winspur had great pleasure in ripping off the signs that had been placed to advise prospective travellers that trams were not running.

During the day, No. 26 also took part in transporting passengers along Wendouree Parade. Over 530 passengers enjoyed the warm weather and more than \$200 was raised from those who made a gold coin donation. Since then, the tramway has resumed its normal daily running during the December and January school holidays.

### NEXT PAGE

Right top:

*The old main traction switch on 19 October, after the fire and with its the back cover removed.*

Paul Mong

Right bottom:

*Alan Snowball wheels out the old isolation transformer on 21 October for transport to Melbourne.*

Paul Mong

Far right top:

*Garry Wood works on the relocation of the main DC breaker panel on 30 October.*

Warren Doubleday

Far right bottom:

*The covers are being removed from the new isolating transformer soon after its arrival on 15 December.*

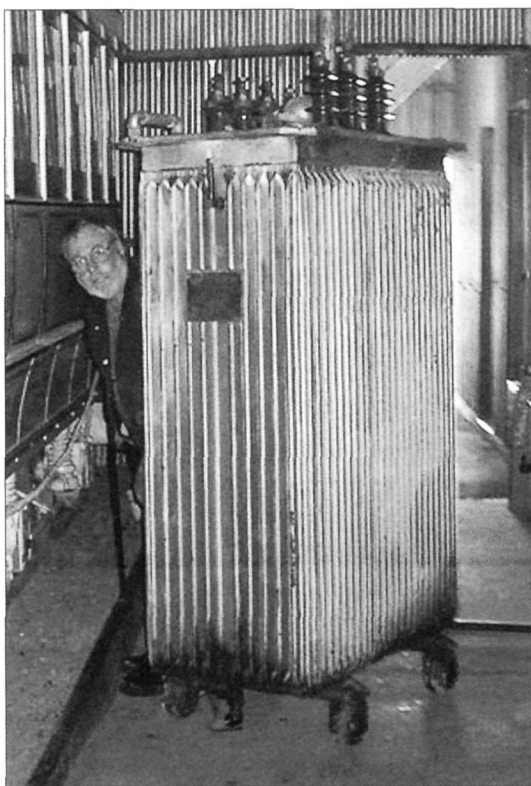
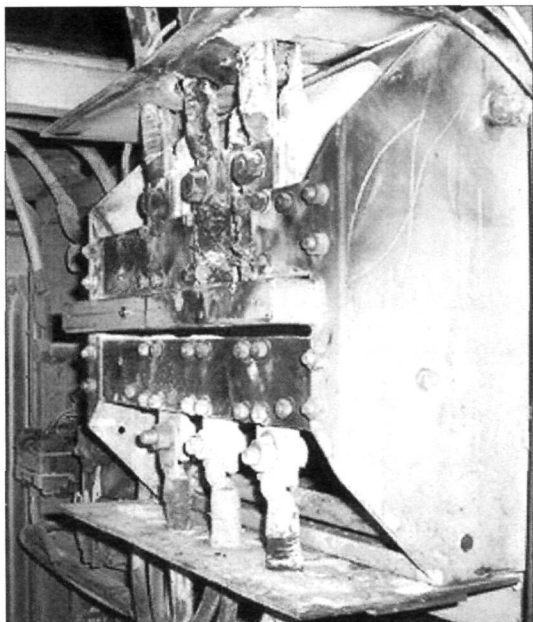
Carolyn Dean



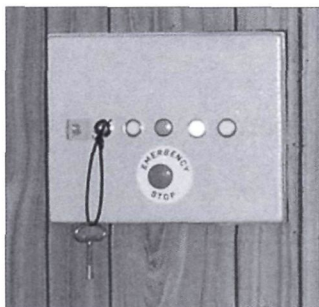
*A hired forklift is used on 15 December to move the transformer to the sub-station door. Paul Mong checks the doorway opening for size.*

Carolyn Dean

## THE POWER PROBLEM IN PICTURES







*Traction power is on. The new control panel in the mess room on 18 December.*

Warren Doubleday

*And the lights are on in No. 27.*

Warren Doubleday



*No. 27 has moved out onto the depot fan on 18 December.*

Warren Doubleday



*No. 8 undertaking track cleaning duties at St Aidans Drive on 18 December.*

Warren Doubleday

*No. 27 makes its way across Wendouree Parade to take up service on Boxing Day.*

Warren Doubleday



*Traffic Manager, Peter Winspur rips off the sign at the Depot Junction stop on 26 December. The sign had advised potential visitors that the tramway was not operating due to a power supply failure.*

Warren Doubleday

*The BTM band, organised by member, Sam Boon, plays at the Gardens Loop during the afternoon of 26 December.*

Warren Doubleday





*No. 26, back in its natural environment on Boxing Day and carrying large numbers of passengers.*

Warren Doubleday

## ST KILDA

Australian Electric Transport Museum (SA) Inc  
GPO Box 2012, Adelaide, South Australia 5001

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

From Colin Seymour

### 75th Anniversary of the Glenelg tram line

The museum celebrated the 75th anniversary of the Glenelg tram line and of the H cars at St. Kilda on 12 December 2004. Every second trip was run by one of our H cars: 360 in circa 1929 livery and 362 in 1950s and 1960s silver livery. Cars 264 and 294, both which have run in recent years on the Glenelg line, were also in service.

A special display was set up in the Northern Depot. The Museum bookshop sold many of the 75th anniversary badges produced by TransAdelaide. The Museum remained open until 7:00pm with many passengers remaining until the last car. The day was successful and raised considerable income.

For the actual anniversary day, TransAdelaide screened a video about the line in a marquee in Victoria Square. Some of the video was filmed at St Kilda in the preceding weeks using our two H cars. The video provided good coverage of the Museum and included interviews with Operations Manager Ron White.

### E 118

The two cab fronts manufactured for 118 by Bendigo Tramways were delivered and installed on the car on 17 December 2004, thereby bringing this project closer to completion.

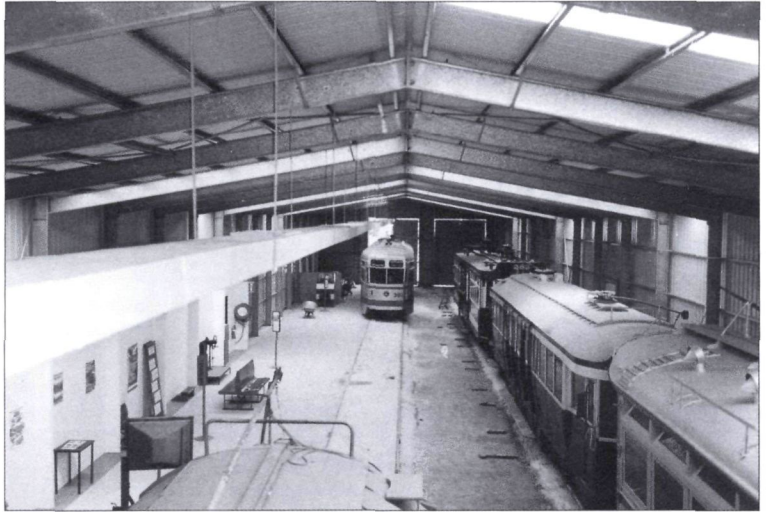
### Collection management and display policy

David Williams has been developing a comprehensive collection management and display policy. This is an accreditation requirement of the History Trust. The document covers:

- museum objects and purpose;
- managing the collection;
- archives management; and
- displays and exhibitions policy.



*The ex-City Depot overhead troughing has been installed over road 10 and is viewed from the roof platform of works car 354.*  
 Ian Seymour



*Cars 362 and 360 in the yard on the Sunday before the Glenelg line's 75th birthday. All four cars have run to Glenelg.*  
 Ian Seymour



*The display set up to mark the 75th anniversary of the Glenelg trams.*  
 Ian Seymour



*Below:*  
Ian Seymour, new member Mike Boswell, John Pennack and Kym Smith make the No. 1 end cabin for car 118 ready for installation.  
Marilyn Collins

*Left:*  
The cabin is well on the way to becoming part of car 118!  
Marilyn Collins



*The installed cabin front at the No. 1 end of E118.*  
Bendigo Trust

*A view of the installed cabin front at the No. 2 end of E118.*  
Bendigo Trust



## Other news

D 192 is back in service after having controller parts overhauled. Both SL1 brake valves had their tops rebuilt with cast iron welding rods and re-profiled to eliminate wear which allowed the handle to be removed in a partial release position.

Trolley troughing has now been installed on road 10 in the Northern Depot. The hanging of the copper wire from the mainline through to the back of the shed is planned for early 2005.

# WHITEMAN PARK

**Perth Electric Tramway Society (Inc)**  
PO Box 257, Mount Lawley, Western Australia 6929

[www.railpage.org.au/pets](http://www.railpage.org.au/pets)

From Michael Stukely

## Tram operations

The long weekend in early October was very busy at Whiteman Park, and with school holidays adding to patronage, this was an outstanding month overall for our traffic operations. Our neighbours the Bennett Brook Railway held the second Friends of Thomas the Tank Engine Day for 2004 on Sunday 3 October. Trams operated from 10.00am, with a second car in service from 1.00 to 4.00pm. On the Monday holiday, one car ran with two conductors who were kept busy all day.

On 5 November a 'Cubilee' was held in the Park, with 1,750 Cub Scouts based at Mussel Pool. Traffic Manager Brent Luscombe arranged a hire agreement whereby all Cubs (and supervising Scouts and adults) were entitled to a free return trip to Village Junction. The service car, W2 No. 329, began running for other Park visitors an hour early at 11:00am while the Cubilee opening ceremony was under way. Two 'Special Hire' cars, SW2 No. 426 and W2 No. 393, were brought into service at 11:30 and 11:42am – with No. 426 running in convoy with the service car. These two trams finished service at 3:40 and 3:50pm in time for the Cubilee closing ceremony, and the service car continued running until about 5:00pm.

Loadings were well spread through the day, and Cubs were also loaded onto the service car No. 329 on some trips. Two Scouts assisted with ticket checking on the Special trams, and their father worked as a marshal at Mussel Pool tram stop. It turned out that they too are tram enthusiasts, and a good time was had by all!

Sundays in late November and early December saw several large party groups having Christmas celebrations in the Park, and extra service cars were rostered to cater for the demand.

## Service trams

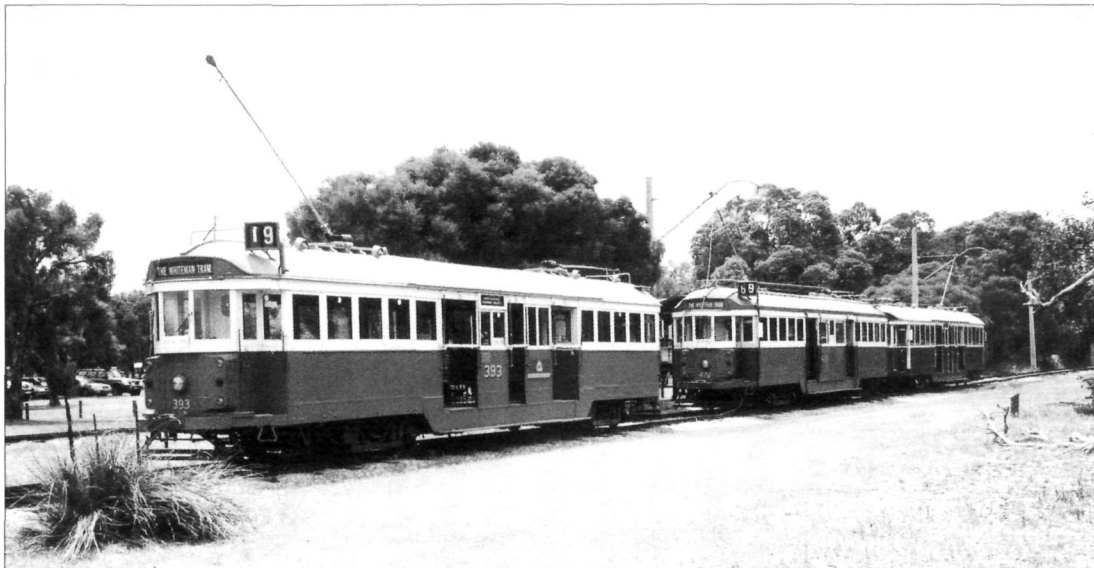
The overhaul of an additional No.1 truck was well under way by mid-November, with bolster side-bearings, motor-to-axle suspension bearings, and brake rigging fitted. This work was carried out by Kurt Gahler, Jim McCamley and John Azzaro.

In maintaining the service trams, we have now unfortunately reached the stage where we have had to start to manufacture a supply of spare parts ourselves.

The manufacture of truck-bolster side bearings and body-bolster side bearings for our ex-Melbourne trams has been completed successfully. Through the assistance of our regular suppliers, Ausco Products, a local engineering firm donated all of the steel, profile-cut blanks to our specifications and drawings; these were then machined by Ausco Products at a special rate.

The next stage will be the manufacture from scratch of motor-to-axle bronze suspension bearings. With no drawings of these being available to us, Noel Blackmore has had to produce new drawings, and a pattern is being made. Casting and machining will follow, and then at least the supply of these essential components will be secure for the foreseeable future.





*On 'Cubilee' day, 6 November at Mussel Pool – service car W2 No. 329 (right) has arrived back from its first trip, while SW2 No. 426 (centre) loads a group of Cubs to run out in convoy with 329; W2 No. 393 (left) will then load and depart about ten minutes later, crossing the other returning cars at Stockmans Loop.*

Terry Verney

### Tram service pit

The Wednesday Team continued making good progress with the tram service pit up to the start of their one-month holiday recess period in mid-December. In preparation for laying the connecting track through the front (eastern) doors to link the pit to the points on Road 4 of the Carbarn fan, the surplus sand was excavated. Repairs were also made to the eastern doors of the shed. Conduit was laid between the traction sub-shed and the Carbarn, and the installation of below-floor conduits for electrical services for the pit was nearing completion.

*Cubs alight from W2 No. 393 at Mussel Pool after their trip to Village Junction and back, on 6 November.*

Terry Verney



*Late in the afternoon on 13 November, two special 'cattle-drive' runs were arranged on the Lord Street branch for a group of international tourists, using W2 No. 393. Here Lindsay Richardson has stopped the tram at the west end of Bullpen Curve as the stockman goes to move the cattle.*

Michael Stukely



Two steel span-poles (with concrete still attached to their bases from the time they stood in Perth's streets) were selected from the stockpile for preparation for installation on the pit road. They were placed on a special sty of sleepers, where John Azzaro and Tony Grose, assisted by Paul Pickett, removed the concrete in quick time with the compressed-air jack-hammer. De-scaling of the poles with a needle gun commenced in mid-November, in preparation for painting.

### WAGT tram No. 66

John Davies completed repainting the ceiling of the saloon on 14 November, and has replaced the quarter-windows in the bulkheads facing the saloon.

Following the re-canvassing of the roof, Frank Edwards and Darren Ward have marked out and started reinstalling the timber cross-brackets that will support the trolley bases and the catwalk along the full length of the saloon. Roof air-vents are also being reinstalled.

### Infrastructure and plant

Noel Blackmore has serviced the main three-phase contactor for the traction power supply. Maintenance and repairs as required have been done to the overhead by Noel with assistance from Scott Parker.

In collaboration with Park Management, improved pedestrian access crossings were planned for the

*W2 No. 393 runs slowly past the cattle on the way back to Lord Street to collect passengers for the second cattle-drive run on 13 November.*

Michael Stukely





*Frank Edwards installing timber cross-brackets to support the trolley-bases and catwalk on the roof of Perth E 66 on 13 November.*

Michael Stukely

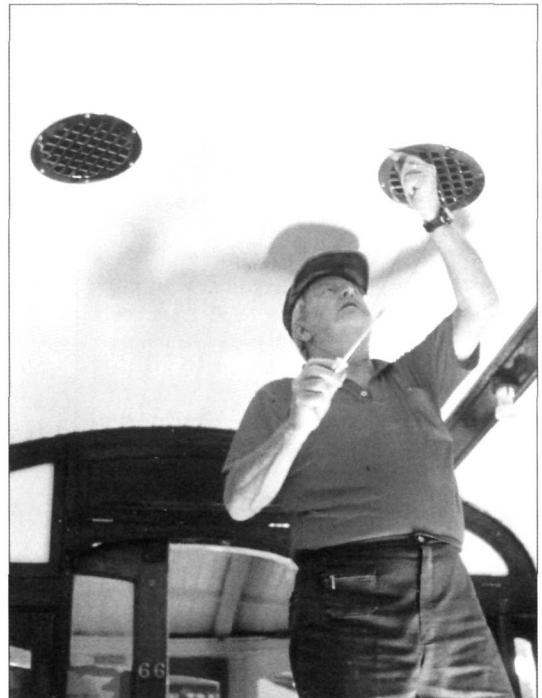
*John Davies fits a newly chromed air-vent cover to the freshly-painted ceiling of Perth E 66 on 13 November. The restored saloon bulkhead is behind him.*

Michael Stukely

Mussel Pool East tram stop and on the Goo Loorto Walk Trail between the Bennett Brook culvert and Farmgate Curve. Prior to the addition of roadbase to railhead level to form the crossings, two steel sleepers were installed and packed at each site by PETS members, to replace timber sleepers that would be covered.

A further 12 rotted timber sleepers were replaced with ten steels at the site of the former siding points north of Stockmans Triangle. This siding has now been completely removed. Two timber sleepers were replaced with steels on each of the curves in the passing loop, with some crowing of rail also being carried out here, and one more sleeper near the western road crossing at Bennett Brook was replaced. Two crossing timbers were replaced at the northern points of the passing loop. Three lengths of surplus rail were moved from the Triangle to Farmgate Curve where a check-rail is to be installed.

The Broomwade air compressor was repaired and the No. 2 pneumatic packer overhauled and serviced by Noel Blackmore and John Azzaro in September. Lifting and mechanical packing has progressed over a significant part of the long upgrade from the Triangle towards the Village, following resleepering. The retaining wall on the embankment at Red Dam was extended (north of the creek) by adding three sleepers (on the east side of the track) and two old timber spanpoles (west side). This wall is necessary to counter the erosion of the track ballast caused by the Park's resident cattle when crossing on the embankment.



A shelving unit has been installed in the Per-way shed to enable this area to be tidied up. Various tools and other items were re-located here in November by Lindsay, Jim and Tony – and some surprising 'finds' were made! Further space will be freed up in the Per-way shed when the trailer-generator now stored there is moved to a new lean-to that is being constructed for it alongside the wall of the transformer compound.



## General

Recently a 1,000 volt 'Megger' unit formerly used by the WAGT and subsequently by the MTT workshops was donated to the Society. Donations of lubricants including track grease and wire rope lubricant have also been received from the suppliers.

# BENDIGO

## The Bendigo Trust

1 Tramways Avenue, Bendigo, Victoria 3550

<http://www.bendigotramway.com>

From Kym Smith

## VR No. 41

Painting of Victorian Railways tram No. 41 was completed in early January with signwriting being applied during the month. The finished product is nothing short of resplendent, and it is hard to believe it is the same tram that arrived in Bendigo from Haddon in 2001.

Approval for test running has been given by the Department of Infrastructure after the submission of the necessary documentation, and test running has shown VR41 to be a very smooth runner, with a very nice spur gear sound. Test running will continue, and the current plan is to launch VR 41 back into service on 28 February 2005 – the 46th anniversary of the closure of the Victorian Railways St Kilda to Brighton

Beach line, with VR 41 returning to Haddon in mid March.

Tony and the crew at Haddon can be justifiably proud of the tram, and it is a credit to their perseverance that the tram is operational again.

## Annual tram cavalcade

The Annual Tram Cavalcade was held on Saturday 11 December 2004, with 18 trams lining up in Pall Mall. The two stars of this year's cavalcade were ESCo No. 8 and VR No. 41: we received special permission from the Department of Infrastructure to operate these two trams in the event.

*Master coachpainter Les Woodfield applies the finishing touches to VR 41's cream paintwork.* Bendigo Trust





*Sign-a-Rama staff Gretel and Heath applying the signwriting to VR 41. Bendigo Trust*

The 18 trams, in order from North to South, were Nos 33, 28, 16, 5, 19, 30, 466, 7, 9W, 15, 35, 25, 41, 8, 441, 44, 31, and 36.

### Christmas trams

*Apprentice painter Cindy Tassie painting the black chassis on VR 41. Bendigo Trust*



This Christmas, No. 30 was chosen by Myer again for Santa Tram duties. It was joined this year by three other decorated trams, Nos 15, 36, and 441, with their sponsors donating the cost for materials for decorating each of them.

The four trams were used heavily in the weeks before Christmas, and were also used to operate a special service to the carols at Lake Weeroona.

### Christmas holiday services

Between 26 December and 26 January, 20 minute services were again operated during the day, with hourly services operating into the evening from 5:00pm to 9:00pm. Once again our crews rallied to the cause to ensure all services operated to time, and all roster positions were covered.

Running a 20 minute service stretches our traffic and maintenance crews to the limits, and they are to be congratulated for their efforts in making sure the services ran seamlessly.

### Congratulations and welcomes

Congratulations to Jodie Knight and Alice Williams, who recently passed their examinations as Tram Drivers, and to Meagan Waller, who recently qualified



*Electric Supply Company of Victoria No. 8 leads Victorian Railways No. 41 down Pall Mall to form up with the other trams for the Cavalcade.*

Bendigo Trust



*Cavalcade trams lined up near the corner of Pall Mall and Williamson Street.*

Bendigo Trust



*The four trams, Nos 441, 15, 36, and 30, decorated for Christmas.*

Bendigo Trust





*J 675 is pushed by a tractor slowly over the bridge towards the entrance to the depot.*

Howard Clark

Below left:

*The O class truck is lifted, with J class 675 and the 77E trucks still to be unloaded.*

Bob Merchant



### Brussels trucks

The overhaul of the first of the Brussels trucks for use under J 675 has been completed, and the truck has been placed on display in front of the depot under a temporary roof.

Overhaul of the second truck, which will be placed under Geelong No. 2, has commenced, with the side frames being shortened to achieve a 2.44m wheelbase.

### Other tram news

The defect in the motor of EScO No. 8 that was found during testing has been repaired, and temporary panelling has been installed to the saloon sides. Further funding will now be sought to complete the tram.

After repairs were carried out to Bendigo No. 33's trucks, the trucks under No. 35 were removed after one of the motors showed excessive wear in the armature bearings. To enable No. 35 to remain in traffic, a truck swap was carried out with No. 31, with No. 31 being placed temporarily out of service.

The trucks from No. 35 were then fully overhauled, utilising some components from trucks previously acquired from the MTPA at Haddon to speed up the overhaul. Once the trucks were completed, they were placed under No. 31, returning it to service.

Work on Bendigo No. 21 has progressed, with the majority of the interior timberwork now scraped back and being revarnished. Particularly impressive is the drop-end ceilings – those that have scraped ceilings in the past knowing the effort needed to achieve a good finish would appreciate the workmanship that has gone into the ceilings.

as a Conductor. Welcome also to Graham Wood, who has started as a Museum Attendant.

### Sydney J class No. 675

After loading in Sydney the previous Friday, J Class No. 675 arrived in Bendigo on Sunday afternoon 16 January 2005, being unloaded early on the Monday morning. Accompanying No. 675 were two 77E trucks and an O class truck which will also receive some attention in Bendigo.

*Tom Guthrie surveys his task of shortening the ex-Brussels truck.*  
Bendigo Trust



*The ex-Brussels truck destined for J class 675 on display in the depot yard.*  
Bob Merchant



*The ceiling of No. 21 after scraping and sanding, and before the application of shellac and varnish.*  
Bendigo Trust



The exterior has also been scraped back, and is currently being undercoated and filled prior to the final painting being carried out.

The completed cabin fronts for Adelaide E type No. 118 were transported to Adelaide and installed on No. 118 in December. Luke Jenkins, our coachbuilding apprentice who completed the majority of the construction, was more than a little relieved when he got the news that the fronts had been installed successfully.

Work on North Melbourne No. 4 has continued, and is reported in the news from Bylands elsewhere in this issue.

### Gasworks depot

Over the Christmas-New Year period, a forklift was hired for a discounted rate and a tidy-up of the Gasworks Depot yard carried out. By stacking up a large number of items, shifting others, and sending off over 10 tonnes of scrap, the Gasworks Yard is now looking much neater.



*Miniature tram No. 10, recently refurbished for promotion work, on display in front of the Bendigo Town Hall.*

Bendigo Trust

## LOFTUS

**South Pacific Electric Railway Co-op Society**  
PO Box 103, Sutherland, NSW 1499

[www.sydneytramwaymuseum.com.au](http://www.sydneytramwaymuseum.com.au)

From Howard Clark and Mike Giddey

### David Burke honoured with OAM

David Burke, noted railway historian and Friend of the Sydney Tramway Museum, has been honoured by the award of the Medal of the Order of Australia (OAM) in the Australia Day honours list.

David's award was for service to the community as a historian and author, particularly through the

preservation and promotion of the history of rail transport in Australia and exploration in Antarctica.

As a young journalist on the Melbourne *Sun* in the early 1950s, David organised sponsorship by the newspaper of farewell trips on the narrow gauge line, then facing closure, from Upper Ferntree Gully to Belgrave. The success of these trips led to the establishment of the Puffing Billy Preservation Society.



David is the author of many books on railways and of the definitive history of aviation in Antarctica, a continent to which he has travelled many times.

Although best-known for his railway books, David has also always been a tramway enthusiast. He was a member of the Australian Electric Traction Association from its foundation in Melbourne. When the Sydney Tramway Museum began its 'Friends' scheme in 1985, David was the first person to become a Friend.

We extend our warm congratulations to David Burke on the receipt of his award.

### Old Site Shed

There have been no further developments concerning potential access and use by the Museum of space within the old site depot building, pending an engineering report called for by the National Parks & Wildlife Service on the condition of the roof and repairs required.

### VR Tram Bogies

The Brill 5ft 3in gauge bogies upon which J 675 sat since its arrival at Loftus in 1996 were placed upon rails spaced to that gauge on Mario's trailer. Recently Bendigo Tramways were contracted by VicTrack to remove the Brill 21E truck belonging to Victorian Railways toastrack 20 (a J car equivalent previously owned by Bob Prentice) stored at Newport. Interest in our trucks was expressed by VicTrack as they are the only original 5ft 3in gauge tram bogies in existence,

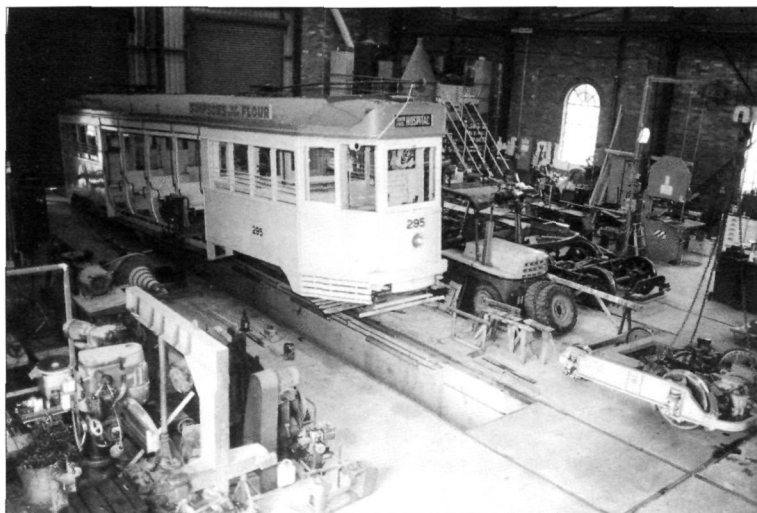
and in view of assistance provided to the Museum in recent times with the provision other donor equipment, the opportunity was taken to place them under J 675 for the trip as far as Bendigo. In due course an agreement with VicTrack will be worked out for these trucks.

### O car 957

With some prompting by Peter Kahn and Bruce Worthington in particular, opportunity was taken to load the spare O car bogie on Mario's trailer with J 675 for the trip to Bendigo, where it is intended that the bogie will be stripped down and overhauled as a further step towards the eventual restoration of O car 957. Bill Parkinson and Bob McKeever are working on a solution to a problem with the other bogie, as we only have one additional GE247D motor for fitting to a 33in wheel and axle set. They are looking at the steps required to adapt a GE247A motor for the purpose. Bill is also working on restoring the multiple unit controller for the car.

### Other tram news

R1 class 1971 entered the workshops on 7 August when sister car 1979 was outshopped after air horns were fitted. Car 1971 received the same repairs to its brake rigging as was done to 1979, as well as a roof repaint. It returned to road 1 on 4 January when Brisbane 295 entered the workshops with a hot pony wheel axle box. The journal was found to have been scored so the overhauled spare bogie was extracted from the back of the display hall. The car was lifted on 22 January and the bogies exchanged. Whilst in the workshop the car was fitted with air horns.



*Brisbane dropcentre car 295 in the workshop with its leading plate-framed maximum traction truck removed for repair.*

Howard Clark

The motor generator set from Nagasaki 1054 has been repaired and is awaiting re-installation. Car 1979 had an emergency rewire of its side destination boxes after a short circuit. Melbourne Z2 car 111 had an electrical fault fixed that had disabled the car for several weeks. It took some finding but it was caused by a speck of grit on a contactor.

Various cars required for use on the October Members' day were checked and serviced the week prior to the event.

Bob Cowing continues working on 42u mainly on weekdays. The completed bogie has been placed back under the south end of the underframe, the new main cross member at the other end is in place and currently new steel is being welded into the channel iron diagonal cross braces which were badly corroded. Bill Parkinson dismantled the third traction motor for 42u and found that it must have been a replacement at some time, as the holes for the motor leads were on the opposite side of that motor to the other three. Longer motor leads had been fitted to compensate, but building wire had been used, which was not a good choice. The motor casing was drilled for leads on the correct side, the old holes were plugged off and new flexible leads and pole connections were installed. Work has yet to start on the fourth motor.

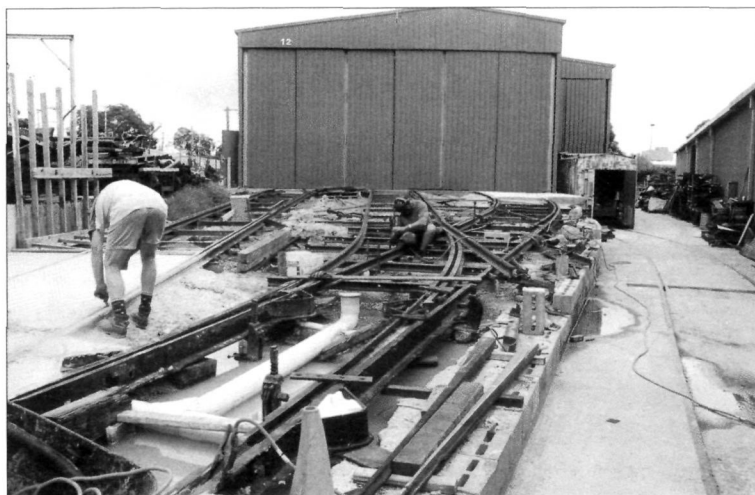
The traction motor that was removed from 99u several months ago has had new armature bearings fitted. However the bore was found to be too tight and it has been dismantled so the bearings can be bored out to provide proper clearance from the shaft and to allow room for oil circulation.

## Works

In the depot yard a redundant wooden pole was removed after the span wire it supported was transferred to the workshop extension. The point rod pits for the 1 and 3 road point levers have had steel cover plates provided for pedestrian safety. The point-rod cover plates in the yard were welded and are now in place.

A retaining wall is being constructed along the clay bank at the side of the bogie storage track (which is level) and the adjoining yard track which climbs a steep grade to road 12 in the top shed. The wall was started at the bottom of the grade and is being poured in sections of about 2.4 metres, with the formwork being relocated uphill after each pour. The first panel was poured on 9 December 2004 and the fifth on 22 January 2005. The '4 foot' (the space between the rails) of road 12 and the strip between the road 12 track and the new wall is also being progressively concreted uphill towards the top shed to provide access for the concrete trucks.

Two ex-Melbourne cast point blade units have been cut into the lead to road 14 to provide the left hand turnout to road 13. Rails have been bent and cut to provide the connections to road 13. Check rails are being fitted and a connecting box from the Bendigo Tramways is being provided to connect the two blade units. It includes a socket for a Melbourne style point bar. Old rails and lengths of heavy angle iron are used as steel sleepers in this work. The angle iron is obtained by cutting up riveted steel trusses that we obtained some years ago from a demolished railway building at Erskineville that made way for the Eastern Suburbs Railway.



*This view in late January shows the progress being made on installing the pointwork for the top shed access and the retaining walls bordering the site. Former Melbourne pointwork components are being installed in the foreground. Howard Clark*

## VALLEY HEIGHTS

**Steam Tram and Railway Preservation Society**  
PO Box 571, Springwood NSW 2777

---

From *Steam Scene*

### Steam Motor 103A

The wheels have been undercoated, dome cover replaced and the pressure gauge refitted. The two cabin doors have been fixed and painting of the sides and end aprons has begun.

### Trailer 93B

Painting recommenced in October once the cold weather had passed, and is continuing. The glazing of the doors is under way and the glazing of the partitions is now complete. Dave Torr has adjusted two odd-sized door recesses to take standard glass.

Steve Tolhurst has done some valuable work machine turning pins for the bogie brake hangers. One bogie fit-out is complete and the other is under way.

### Locomotive 1022

Member Ralph Boesel did some very good work on the axle boxes by machining the vertical faces. Welding on the yoke / cylinder castings has been completed except for a little tidying up.

### Carriage CBI 1073

Greg Rudd, a workmate of Steve Tolhurst's, has volunteered to finish painting this car. Greg has started with the washing down of the mouldy undercoat.

### Locomotive No. 2 'Stepho'

Our Commonwealth Portland Cement Co. locomotive No. 2, built by Robert Stephenson in 1906, passed its boiler inspection last July. Of course there is a lot of preparation and 'boxing-up' after the inspection and this year it will be even bigger – a full strip-down. A balance pipe has been installed between the saddles of the water tank.

## BYLANDS

**Tramway Museum Society of Victoria**  
38 Piccadilly Crescent, Keysborough Vic 3137

---

[www.tmsv.org.au](http://www.tmsv.org.au)

From *Running Journal*

### Restoration at Bendigo

Work on U Class tram No. 4 at Bendigo has seen Stage One of the reconstruction works almost completed. These works consisted of repairs to the side pillars and replacement side panels, straightening and strengthening of the body, repair and replacement of the floors, complete rewiring of the car and overhaul of all 600V electrical equipment. Once this work is complete, in the near future, the car will once again be operational.

Funding for this work has been covered by the reserves that remained unspent from the original grant received from the Victorian Government for the works as originally undertaken at North Fitzroy through BEST Inc. Funding must now be sourced to undertake

Stage Two of the project, that is to fit-out the bodywork, including the remanufacture of many missing or damaged components, final painting and detailing of the car, and accreditation.

Approaches will be made to several sectors of the community to assist with the funding, and members are encouraged to also assist by making donations towards the overall cost. Long time Society member Ron Scholten has again led the charge with his welcome and much appreciated support. If appropriate funding is forthcoming, it is anticipated that the tram can be finished before the end of 2005 and available to celebrate its centenary and that of electric trams in Melbourne in 2006.





*Visitors inspect the interior of XI class car 467.*

John Radcliffe

### Museum works

At the last working bee in November some mundane tasks were successfully completed. Member Harry Twining received plenty of exercise pushing a motor mower around various areas of the site. A concerted effort was made to clean out the ex-Mentone H class tram body and to remove any valuable fittings for safekeeping, and several surprise finds were made. Other works saw a number of holes filled and levelled, the gravel over the drain at the front gate re-spread and the remains of some of the cypress trees and other rubbish added to the firewood pile.

Our small, energetic band of workers must be thanked for their hard work. Special mention must be made of a recently joined new member Wilhelmus Van Lammeren, who travelled from Portland to assist and stayed overnight locally. Will came back on the following day to assist with other works.

Trackwork outside the Exhibition Shed has continued at a steady pace. All of C road has been spiked, fishplated, lifted and packed. All that now remains is final spreading of ballast between the sleepers. The 'Malcolm' tram was used to test the track as it resides inside the shed on C road. Work on D road



*Passengers alight from SW2 car 644 at the museum entrance on 2 January 2005.*

John Radcliffe

*Well-known Society member Keith Kings serving visitors in our shop.*  
John Radcliffe

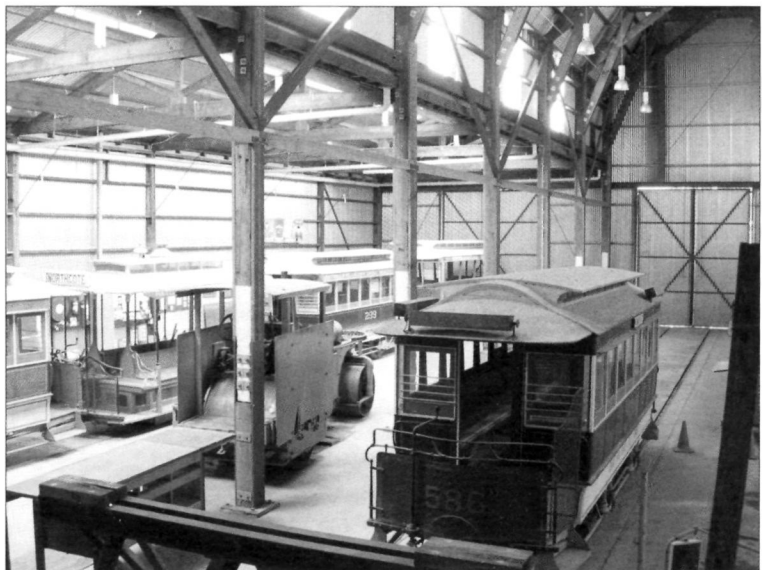


has seen one rail spiked, with the other yet to be gauged and spiked. Planning is taking place for the construction of the remaining roads A and B as well as the associated pointwork and connecting track to the main line.

Restoration works continue on Ballarat No. 17 and tank car 7W. It has been necessary to repaint all the cream paintwork on Ballarat No. 17 due to its faded condition in several areas. A decision has also been taken which will see the saloon windows removed for repair and repainting in the near future. As with the work on 7W, these tasks continue as time permits

between other jobs. With the recent reinstallation of the trolley bridges, poles and other associated fittings on 7W, this car is now operational once again and can be moved under its own power.

Regular servicing of the tram fleet continues; with W2 643 now back in traffic. At the start of December, Ballarat No. 36 had its first full day in passenger service after many years. MK VI bus No. 776 has been transferred to Dysons Bus depot in Bundoora for some minor works to complete its mechanical rehabilitation. Work also continues on the repainting of Mk VI bus No. 759 in the Exhibition Shed.



*A view of our cable cars in the Exhibition Building.*  
John Radcliffe



a sper magazine