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AUSTRALIA'S TRAMWAY MUSEUM MAGAZINE

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Douglas and Jenny Cowing with restored Sydney ballast motor 42s. Their father, the late Robert Cowing was instrumental in having the car restored.

Martin Pinches

Front Cover

The first passenger run for Adelaide's former Madrid Citadis 302 type cars was for tramway enthusiasts, organised by TransAdelaide on 28 December 2009. Car 203 made the return run from Glenelg to City West, and is seen passing through Black Forest on its return to Glenelg.

Steve McNicol

DYNAMIC BRAKING TESTS

FOR SYDNEY'S NEUTRAL BAY LINE

By Noel Reed and Ian Saxon

With plans to co-ordinate the tram and ferry services at Neutral Bay wharf in the late 1940s, a more frequent service was needed on the Neutral Bay tram line. This combined with the fact that it was uneconomical to run the old K class trams meant that a new service which would dispense with the unattractive and uncomfortable old tramcars, had to be developed.

Experiments were made with various systems of electrical braking, such as magnetic drags and battery operated brakes, but one after another they were declared unsatisfactory.

It was agreed that the R1 type corridor tramcar, with its clean attractive lines, modern equipment and comfortable seats, measured up to the requirements of the new service. The problem of making this car safe for the difficult Neutral Bay route was finally tackled by the Electrical Superintendent, Mr W Goodman, who produced the required specification.

With the assistance of practically all of the staff in the electrical section, Mr Goodman designed what he said was a relatively simple and most effective system which he termed a 'dynamic drag'.

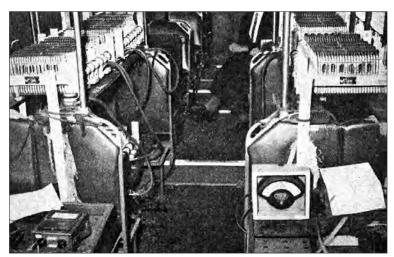
R1 class 1999 was used to test the dynamic braking scheme on the Neutral Bay line in April 1952. It had the equipment and meters, etc, mounted on temporary supports in the passenger compartments and did not carry regular passengers, only the DRT&T test engineers.

Following tests with No. 1999 on the Neutral Bay line, a subsequent new R1 tram, No 2029, had the braking equipment installed at Randwick Workshops. The extra resistor grids were housed in a ventilated enclosure on the roof between the trolley bases. The controllers were modified so that the dynamic braking could be engaged via a special notch beyond the 'off' position.

A test of the equipment was carried out on the Watsons Bay line which had a succession of steep hills each side of Rushcutters Bay, Double Bay and Rose Bay on the southern shore of Sydney Harbour. R1 2029 was subsequently transferred to the North Sydney system and took up regular service on the Neutral Bay line in November 1952. It only continued in operation on this line for 31/2 years as the Neutral Bay line was closed in May 1956 and replaced by a bus service.

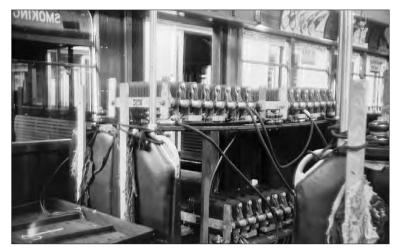
R1 2029 had the normal self lapping air brakes as fitted to all other cars of the class, and the air brake valve had nothing to do with the electrical part. For technical simplicity the 'dynamic drag' could not be applied with the tram in motion.

On journeys to Neutral Bay Wharf, the tram would be stopped by air brake at the top of the grade in Wycombe Road near Raymond Road. The driver would then raise a knob in the middle of the controller handle which would allow the handle to move to a



The test equipment mounted in the passenger compartment of R1 1999.

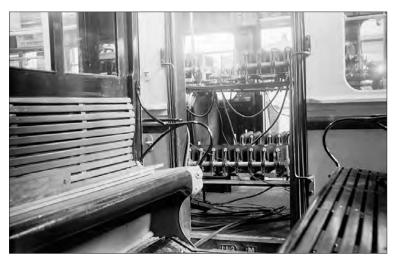
Newspaper clipping from J Burgess collection



Some of the resistance grids mounted across the centre door of 1999, seen whilst the car was at North Sydney Depot.

Ken Cowan

The dynamic brake equipment being installed in R1 1999, seen from an adjacent O class car. Ken Cowan



position beyond 'off". This action would switch the roof mounted resistors into the motor circuits.

The air brake would be released and the tram would coast down the hill for several seconds until the dynamic braking action took effect and the tram would descend Wycombe Road at a steady speed until it reached the corner of Kurraba Road where it would stop with the air brake. From there to the top of Hayes Street the tram would be driven normally, then the 'dynamic drag' would be re-activated for the descent to the catch point which had to be held closed by the conductor with the point hook. It then continued the short distance to a point just before the fenced-off tram wharf which was adjacent to the ferry wharf. (The tram wharf had been closed in February 1952, before No. 2029 entered service on the line.) For the return journey to Neutral Bay Junction the tram was driven in the normal manner.

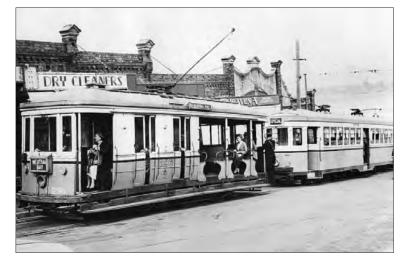
After closure of the Neutral Bay line on 27 May 1956, No. 2029 no longer needed the special equipment. The tram was sent to Randwick Workshops on 29 June 1956 where the resistor equipment on the roof was removed and the controllers locked internally so they could no longer move beyond 'off'. The car was given an 'A' overhaul, repainted and returned to North Sydney in October 1956 for further service. It was scrapped by burning at Randwick Workshops on 17 February 1960.

The dynamic braking on R1 2029 was devised specifically to safely control tram speed on the steep grades of the Neutral Bay line and not for regular use. It was similar in some ways to the 'Fourth Emergency' stop except that the power generated by the traction motors was absorbed by the roof mounted resistors to give a controlled low speed rather than a sudden stop.

Car 1999 with testing engineers on board, stands at Neutral Bay Wharf terminus.

John Burgess





Regular service car 1296 and dynamic brake test car 1999 at Neutral Bay Wharf. Car 1999 will follow 1296 to Military Road under normal control.

John Burgess



R1 1999 on a dynamic brake test run passes K class 1296 at Shell Cove Loop. 1296 is operating the normal Neutral Bay line service. John Burgess



R1 2029 in St James Road, City before commencing its first trial trip to Watsons Bay on 3 October 1952. Noel Reed



Another view of R1 2029 in St James Road before its trial trip to Watsons Bay on 3 October 1952.

Noel Reed



2029 in Wycombe Road bound for Neutral Bay Junction. The destination sign was often not changed for this comparatively short run.

Photographer unknown

The last run from Neutral Bay Wharf to Military Road was made by 2029 on 27 May 1956. It was photographed at Neutral Bay Junction. Noel Reed





2029 in Military Road outside North Sydney Depot on 15 May 1957, seven months after its return to service following removal of the dynamic equipment. Noel Reed

As reported in the August 2005 issue of *Trolley Wire*, consideration was given to equipping additional R1 class trams with the same braking system as No. 2029 but none of the various proposals was agreed to.

Q type trolleybus regenerative braking

Sydney's AEC Q type trolley buses had regenerative braking which probably worked well on the City to Potts Point route as the trolley bus wiring was paralleled with the adjacent tram wiring of the Watsons Bay and Bellevue Hill lines, and there were plenty of trams to absorb the regenerated power.

When the Potts Point vehicles were transferred to the Kogarah routes trouble was experienced if either of the two remaining Q type vehicles operated in slack periods as the substations at Rockdale station and Gray Street, Kogarah could not absorb the reverse power.

Sydney Q type trolleybus at Potts Point.

Photographer unknown



SYDNEY'S UNLUCKIEST TRAM

By Ian Saxon

One of Sydney's newest trams at the time only lasted one day in service before being destroyed in an accident. The tram concerned was R1 class number 2018. It was received new at Randwick Workshops on 1 May but was not issued to traffic until 8 May 1952, presumably to allow for fitting of lifeguards, etc, as these trams were delivered by semi-trailer from the Commonwealth Engineering Company. The accident occurred on 9 May 1952 and a report of the accident in Sydney's *Daily Telegraph* newspaper stated:

"At Petersham, a new steel corridor type tram was completely burnt out after colliding with a motor lorry in Crystal Street.

"The front of the tram smashed through the petrol tank of the lorry. The petrol tank burst into flames and an explosion showered flaming petrol over the front of the tram.

"Fifty passengers in the crowded tram struggled to escape as flames leapt through the long corridor, devouring rubber-cushioned seats, plastic covers and wooden ceiling. All passengers escaped uninjured and without burns, but a lady left a set of bowls under her seat in her hurry to escape.

"The driver from the Ultimo Depot had to scramble through flames to escape from the wrecked cabin.

"Tram traffic was disorganised for 45 minutes. Another tram pushed the burnt out tram to Rozelle depot."

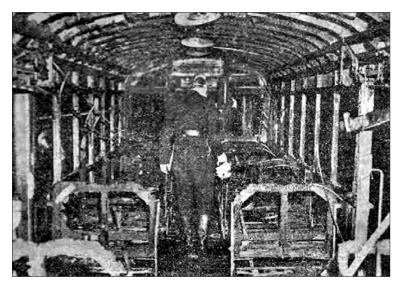


The end of the tram damaged in the collision with the truck and subsequently burnt out.

Leon Manny

The Randwick Workshops record card shows the car was written off on 30 November 1953 and its remains burnt on 26 March 1954.

- Additional information for this article was provided by Ross Willson and Norm Chinn.



Firemen are still on the scene checking the interior of the tram. The accident had ocurred at about 5.10pm.

Clipping from J. Burgess collection



2018 in the yard at Randwick Workshops. It is still coupled to another tram, possibly the one which shunted it into this location. John Burgess

Below:

The burnt-out interior of the tram. The Sydney Morning Herald of 10 May 1952 quoted the Chief Traffic Manager as saying that "...the tram's interior fittings and woodwork could be replaced". This was an optimistic statement in view of the condition of the car.

John Burgess



A view of the 'undamaged' end of the tram. For some time there were hopes that No. 2018 would be repaired or taken back to Commonwealth Engineering to be rebuilt. Representations were made by the Australian Electric Traction Association to have it reconstructed with some of the body features of a PCC car, but these proposals fell on deaf ears. John Burgess



RECOVERING A TRAM FROM SYDNEY HARBOUR

By Ian Saxon

There was a number of tram lines on the Sydney system that terminated at a wharf on Sydney Harbour to service the ferries. Some of these termini were located at:

- · Athol Wharf
- Cremorne Wharf
- ·Manly Wharf
- •Milsons Point Wharf
- •Mosman Wharf
- ·Neutral Bay Wharf
- ·Darling Street Wharf
- . Erskine Street Wharf.

There were two termini where the hill down to the wharf was very steep and required special arrangements for the tram to travel to the water's edge. These termini were:

- •Darling Street Wharf where a counterweight was installed so that the tram pushed the counterweight down the hill and the counterweight assisted the tram back up the hill; and
- •Neutral Bay Wharf where the Department had track brakes fitted to the E and K class trams used on this route, and installed regenerative braking on an R1 class tram which took over services from the older cars.

The only terminus where trams decided to enter the water was at Athol Wharf, and on three occasions trams ended up in Sydney Harbour. The trams involved were R class 1875 on 16 January 1942, R 1890 on

20 July 1952, and R1 2000 on 22 January 1958. After the second incident a speed restriction of 10 km/h was imposed on trams proceeding from Taronga Zoo down to Athol Wharf.

The accidents required the trams to be lifted out of the water by a floating crane as they were too far over the bank to be towed back by a recovery tram. The trams were placed on a punt and moved across the harbour to Pyrmont (or Fort Macquarie in the case of R 1875) where they were loaded onto a semi-trailer for transport to Randwick Workshops.

The Tramways Civil Engineer listed the arrangements with the Maritime Services Board (MSB) and Randwick Workshops for the recovery of tramcar 1890 on 23 July 1952. The report gives timings and the proposed method of recovery of the tram. It sets out that:

- •Randwick Workshops is responsible for providing the specially modified lifting equipment and three men which are to be delivered by 7:00am;
- •MSB to provide the tug *Sampson* (sic) to take the special equipment and men from No. 8 Cross Wharf, Pyrmont to the Athol site and to take a punt and shear legs;
- •The punt and shear legs to be at Athol between 8:30am and 9:00am;
- •The Randwick lorry which will take struts and other equipment to Athol to be there by the same time;



R class car 1890 ran into the harbour on 20 July 1952.

Hugh Ballment

The tide is rising....
John Burgess





A different view. Noel Reed

A view from above. The driver, conductor and two passengers, the only people aboard the runaway tram, were all injured. They were taken by Central District Ambulance to the Mater Misericordiae Hospital at North Sydney.

Howard Clark Collection





Three views of the runaway tram at high tide. The rear trolley pole is still in the raised position.

John Burgess







- •The lift is to be taken between 9:30am and 10:30am;
- •MSB to provide a diver to enable the hook at the front end of the tram to be attached;
- •The body is to be lifted and placed on the punt;
- •The bogies are then to be recovered and placed on the punt;
- •The punt, the shear legs and the tug are then to proceed to No. 8 Cross Wharf, Pyrmont;
- •Pittman's trailer (a contractor) to be in attendance at Pyrmont to collect the tramcar body round about 12:30pm;
- •Loading of the tram body to be completed round about 1:30pm;



Above:

A Sydney Ferries Limited ferry has left Athol Wharf for its journey to Circular Quay through the early morning mist.

Howard Clark collection

The ropes holding the tram from rolling over or forward motion are clearly visible.

John Burgess



The photos on this page are by John Burgess



The tram is being prepared for lifting by floating crane



Bags of shavings have been placed on the roof at the rear of the tram and the rear trolley pole has been tied down out of the way. The bags of shavings were provided as packing onto which it was planned the car could roll while coming into a perpendicular position.



The recovery lift commences.

John Burgess

Below:

The punt being brought into position under the front of the tram. The Departmental instructions for the operation referred to 'the tug Sampson', but its actual name was Samson and it was a steam lighter (utility harbour vessel) acquired new by the Sydney Harbour Trust commissioners in 1912/13.

David Keenan collection

- Pittman's float then to proceed to Randwick Workshops where it will be unloaded on No. 31 Road;
 - The bogies will be unloaded and placed on separate lorry and taken to Randwick Workshops;
- •Arrangements to be made for Police to be in attendance at Athol to control spectators; and
- A sketch to be prepared quickly for the installation of an ash buffer at the terminus.





The tram is now level and the bags of shavings on the roof can be removed. John Burgess

The bags of shavings have been removed. Oxyacetylene gas cutting equipment is lying in the foreground. This was provided to enable the trailing bogie to be cut free once the tram had been lifted and levelled.

John Burgess

The official report of the accident states that Acting Driver Simpson, the driver of 1890 reported sand equipment problems with his first tram, R car 1902 on his journey from Athol to Balmoral and reported the problem to Inspector Brennan. The inspector arranged for a replacement tram (1890) to be available when he arrived back at Taronga Zoo. The shed staff from North Sydney Deport reported that the sand gear on 1890 operated satisfactory. When the driver took control of 1890 he did not test the sand gear before proceeding down to Athol Wharf.

The driver reported that he continued the journey from the top gates to Athol Wharf with car 1890. He did not apply any power, only releasing the airbrake and, after travelling two or three car lengths, tested the air brakes which worked satisfactorily, but when re-applying the airbrake the car wheels began to skid. He was unable to regain control of the car, which continued to skid until it crashed at the terminus. All involved, two passengers as well as the driver and conductor sustained minor injuries.

The report also stated that light rain was falling immediately prior to the accident and the tram rails were greasy.

The special Board of Enquiry made a number of recommendations. One of the recommendations was to install catch points in the vicinity of Ashton Loop so that, in the event of a tram getting out of control, it could be diverted to some soft formation before it had an opportunity of gaining momentum.

After much discussion about where to place the catch points, the costs and the apparent issues of manipulation of points or staff not correctly setting the



catch points whilst trams pass over them, it was decided not provide catch points on the line.

However a report from Mr Shoebridge, the Commissioner for Government Transport dated 27 February 1953 listed a number of actions to be

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Oops! The rear bogie is still attached to the body, causing the rear of the tram to drop.

John Burgess





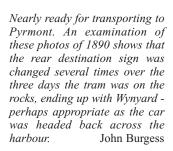
The rear of the tram is still on the rocks. John Burgess



The floating crane moves away from the shore to complete the transfer of the tram onto the punt. John Burgess



1890 being lowered onto the punt. John Burgess





taken with a view to ensuring future safe operation on the Athol line. These were:

- •Reinforce the speed limit of 6 miles per hour (10 km/h) with crews;
- •Drivers were not permitted to operate trams on the Athol line unless specially trained and a special list of drivers be kept at North Sydney Depot;
- •Driver training be more intense and stricter supervision of testing be done;
- •Warning signs be placed at appropriate points along the line;
- Trees and shrubs be removed on curves to improve visibility;
- •Tramcars which are to be run on the Athol line be subjected to a special check by the mechanical staff;

- •An ash drag be provided at a point in advance of the rail end at Athol;
- Arrangements be made for trams arriving at Athol
 to be turned into the Loop at the wharf to allow the
 through road to be kept clear so that a tram out of
 control would not collide with a standing tram
 loaded with passengers; and
- •Special reference to the safe working rules applicable to Athol line be made in the new book of *Instructions to Tramway Traffic Staff*, which was issued in December 1952.

A final comment at the bottom of the report stated "It is considered that there is no more likelihood of a tram getting out of control on the Athol line than there is of many other sections of the tramway system and, in the circumstances, it is recommended that no action be taken to provide catch points on this line."

Unloading 1890 at Pyrmont onto Pittman's trailer. Note the press photographer at right with his bulky camera.

John Burgess



The new edition of the *Instructions to Tramway Traffic Staff* booklet subsequently issued by the Government Tramway and Omnibus Services stated under the heading Special Line Instructions and Terminal Arrangements:

367. Athol Line.

Only experienced and specially trained employees are permitted to drive trams between Taronga Park and Athol Wharf. Drivers must sand the rails when making stops between Taronga Park and Athol Wharf, and must satisfy themselves that the sanding equipment is operating efficiently.

Cars on which the sanding equipment is defective must be changed over as soon as practicable.

On journeys to Athol Wharf the tram must not he driven at a speed exceeding six (6) miles per hour from Taronga Park Junction to Athol Wharf, and must be brought to a stand at the stop mark at the

facing points adjacent to the Wharf stopping place.

When the Conductor has set the points the tram must be driven on to the Wall-road (inner track), and the points then reset for the Wharf-road (outer track).

On arrival at Athol Terminus, the Driver must apply the hand brake securely at the end of the car from which he is driving. If coupled cars are in use, the Conductor-in-Charge must also apply the hand brake at the rear end of the trailing car.

When the tram is about to depart the hand brake is to be released by the Conductor-in-Charge on receipt of the starting gong from the Driver.

Cars must never be left unprotected while standing at the terminus.

- Additional information for this article was provided by Ross Willson.

No. 1890's repair (and an 'A' overhaul) was prolonged. It returned to service on 22 March 1954. The bulkhead doors and glass in the drop centre were removed, a modification unique to this car. It was used by the Australian Electric Traction Association for a tour, seen here at Customs House siding, Circular Quay, to mark the closure of the Abbotsford line. This was to be cut back to Fivedock on 3 July 1954. A bus mechanics strike caused the closure to be postponed until 15 August 1954. Noel Reed



RESTORATION OF PMTT NO. 84

By Tim Blythman

One of the exciting projects currently under way in the Bendigo tramway workshop is the restoration of former SEC single truck car No. 16 to its original guise as Prahran and Malvern Tramways Trust No. 84. We have received funding from the Department of Transport to undertake this restoration, and also to transport No. 84 and fellow Malvern tram No. 44 to Malvern Depot to celebrate the depot's centenary on 30 May 2010.

But first, some background on No. 84.

No. 84 was constructed as the fifth car in an order of 12 delivered in 1917. This group became the B class under the Melbourne and Metropolitan Tramways Board in 1920. Strangely enough, they were preceded chronologically by all other classes from C to J (except I). No. 84 was built in the California Combination style, with open and closed seating. The newly formed MMTB set about constructing large numbers of W class trams to replace cable trams as well as the motley assortment of second-hand trams it inherited. As a result, No 84 was sold to the State Electricity Commission of Victoria in 1931, as the provincial tramways sought to improve their services with second-hand trams from Melbourne and Adelaide. In Bendigo, it was given the number 16, and was the second tram to carry this number.

In 1935 it was converted to the Geelong style of one-man tram, and was unique in being the only conversion to have swinging doors instead of concertina gates.

In 1962, the tram was withdrawn from regular service by the SECV after the Bendigo branch of the Australian Tramway and Motor Omnibus Employees Association banned its use on account of the poor condition of its body. The tram was allocated to short workings - most notably the afternoon School Special which ran from Eaglehawk to Thorpe Street and as an extra car on the Eaglehawk line during Easter.

In 1965 the tram was withdrawn from all services and work commenced on addressing the issue of excessive body movement, when the two platform floors were removed with the intention of bracing the bearers and relaying the floor boards in a diagonal herring-bone format. A disagreement ensued



This motor has not been refurbished in over fifty years.

Bendigo Tramways



No. 16 in the Carpenter's Shop partially disassembled



The driver's bulkhead showing the ornate timbers.

Bendigo Tramways

The partially reconstructed No. 2 end of car 16.

Bendigo Tramways

between the SECV works overseer and the tram depot body builder as to how the job was to be completed, which resulted in a stalemate. No. 16 then sat out the final years of the SECV era at the rear of 6 road, without its compressor and end platform floors.

The tram was made fully operational by the Bendigo Trust in 1975 and since then has run special outings





from time to time. It was always the intention of the Trust to return No. 16 to its original condition as an example of a Prahran and Malvern Tramways Trust single truck tram. When this occurs, it will be the only tram restored to this state.

Restoration work continues on Car 16's No. 1 end driver's bulkhead.

Bendigo Tramways

A panel on 16 has been sanded back, revealing various colour schemes. Bendigo Tramways



The planned works include removing the destination box, restoring the driver's canopy and reinstating the roof mounted PMTT-style destination box. Reversion to the two-man configuration involves removing the drop-end seating, rebuilding the driver's bulkhead and fabrication of two full-width seats. Other works such as bracing the car body and refurbishing the truck and running gear will also be undertaken.

More information on this project is contained in the news from Bendigo in this issue of *Trolley Wire*.



80th anniversary and heritage shuttle service

The 80th anniversary of the Glenelg tram line and the H cars was celebrated on Monday, 14 December 2009. Compared with recent decades, this milestone event was somewhat low key, the current focus being on new trams and a new tram line.

H cars had not run on the line since July 2009 due to restrictions during construction of the South Road overpass. H car running resumed with car 367 on the weekend of 12 and 13 December 2009 as a free summer weekend and public holiday service (until Easter 2010) from Glenelg to Glengowrie (Stop 12) where there is a depot crossover. The service is being sponsored by the City of Holdfast Bay, which has provided volunteer on-tram guides, and the Jetty Road Traders Association. The car does not run to a specific

timetable and departs Moseley Square, Glenelg immediately after the departure of a service car.

A passenger on 12 December was Walter Bull, 95, who was among the crowd in Moseley Square on the opening day in 1929. His father was an MTT motorman at the time.

The resumption of limited H car running enabled the South Australian branch of the Australian Electric Traction Association and their guests to travel on H 367 from Glengowrie Depot to Glenelg on the evening of 14 December 2009 for their Glenelg Tramway 80th anniversary dinner at the Glenelg Jetty Hotel.



H 367 on a free Heritage Tram shuttle passes Flexity 105 in Jetty Road, Glenelg on Sunday 13 December 2009.

Steve McNicol



Guest attending the AETA (SA) Glenelg Tramway 80th anniversary dinner alongside H 367 on 14 December 2009. The tram is advertising the new weekend heritage tram service.

William Adams



Guests on the 80th anniversary trip on H 367 stand on the platform at Moseley Square after disembarking from the car. William Adams



An H, a Flexity and a Citadis at Glengowrie Depot on the day of the 80th anniversary of the Glenelg line, 14 December 2009 – cars 367, 104 & 203.

William Adams

Tram movements

To allow for depot construction works to make room for the six Citadis trams, three of the remaining five H cars are being transferred to temporary storage. Car 374 was the first to go on 20 November, 380 moved out on 7 January, and 351 followed on 12 January. Cars 367 and 370 have been retained at Glengowrie for the heritage shuttle service.

By January 2010, five of the six former Madrid Citadis model 302 cars had arrived at Glengowrie. They are being numbered in the 200 series. Flexity trams are numbered in the 100 series, and by coincidence the H cars are in the 300 series.

The first car to arrive was 204 on 14 November, followed by 203 on 23 November, 201 on 14 December, 205 on 11 January and 206 on 28 January. Testing and driver training was in full swing at this time.

Following several weeks of crew training, the first public trip of a new Citadis car ran from Glenelg to City West and return on the evening of 28 December 2009, hosted by TransAdelaide as a special trip for enthusiasts. Those planning to travel on the new tram were asked to pick up their tickets at Glengowrie depot before the event and a standing load eventuated.



Adelaide's former Madrid car 203 arrives at Brighton Road on the 7:20am service from Glenelg to the city on its first day in passenger traffic on 30 December 2009. It worked the City West to South Terrace shuttle before returning to Glenelg and the depot.

Steve McNicol

The scissors crossover under construction at the Hindmarsh (Entertainment Centre) terminus in the centre reservation of Port Road at Hindmarsh.

Steve McNicol



South Road overpass completed

No trams ran on the weekend of 5 and 6 of December to allow the track to be laid over the new South Road overpass. The work took longer than expected and no trams ran on Monday 7 December. After successful tests late in the afternoon of the Monday, normal service with trams using the overpass commenced on Tuesday 8 December 2009, one day later than planned. As a result of this a remarkable range of ill-destinationed country buses and minibuses had to be hired to run the Monday Glenelg and City Shuttle services.

The opportunity was taken during the weekend closure to relay the curve across South Terrace into King William Street from the South Terrace tram stop, and to install a crossover at Beckmann Street (Stop 8).

A number of weekend closures during October have allowed work to progress on the replacement of the overhead stobic poles on each side of the track in the tram line reservation with new centre poles and brackets.

Hindmarsh (Entertainment Centre) construction

Work on the 2.8 km extension from City West to the Entertainment Centre at Hindmarsh is progressing at a rapid pace. As at mid December 2009 the track bed had been excavated for the entire length except for a few road crossings. Track had been laid in concrete across two major intersections – Port Road & Park Terrace / Adam Street near the terminus, and Port Road & North Terrace & West Terrace at City West. A scissors crossover had been laid in concrete at the Hindmarsh (Entertainment Centre) terminus in the centre road reservation of the Port Road at Hindmarsh.

Track was in position for the new City West 'Terrace to Terrace' shuttle tram terminus in North Terrace near

the intersection with West Terrace and Port Road. The waiting shelter was also under construction. Shuttle trams will terminate at a terminal stub between the up and down tracks. This alignment has resulted in the up and down tracks across the Port Road & North Terrace & West Terrace intersection being some distance apart.

Sydney R 1808 goes to Auckland

R 1808 has been leased by the Sydney Tramway Museum to the Museum of Transport and Technology (MOTAT) in Auckland for a minimum period of seven years. The car had been stored at Preston Workshops since its one and only public excursion in Melbourne in 2003. It was loaded onto the *Pacific Chief* and departed Melbourne on 5 December 2009, travelling via Port Kembla and Brisbane. The tram arrived at the Port of Auckland on 18 December.

After being unloaded, 1808 spent a couple of days undergoing formalities such as additional cleaning or fumigation to comply with New Zealand's strict biosecurity regulations.

Car 1808 was transported to MOTAT on 23 December, where it underwent mechanical and electrical inspection checks before making two test runs between the two areas of the museum, known as MOTAT1 (main museum) and MOTAT2 (aviation, military and railway collections), on 29 December.

It was a significant day for two reasons. It marked nine years to the day since restoration of the tram was completed in Bendigo and it was also the 53rd anniversary of the closure of the Auckland Tramways.

No. 1808 entered passenger service on the Western Springs Tramway on 20 January, enabling Auckland streamliner 248 to be withdrawn for some overdue maintenance.

Sydney R 1808 with Melbourne W2 321 and Wellington Fiducia 257 at MOTAT's depot on 31 January 2010.

Howard Clark



Video Review: The Footscray Local Tramways

DVD; black and white and colour; running time approximately 80 minutes.

Available from Efftech Pty Ltd, PO Box 4034, Doncaster Heights Vic 3109.

RRP \$39.95 plus \$7.00 for packaging and postage. Also available from retail outlets and mail-order houses catering for transport enthusiasts.

The expansion of Melbourne's tramway system in recent decades tends to blur the memory that the MMTB system closed some lines in the early 1960s, not to mention the earlier loss of the Victorian Railways tram lines.

The major closure was that of the Footscray local network, operated by four-wheel trams that set it apart from the remainder of the system. The other line mainly run by four-wheelers, to Point Ormond, was the other route to be closed around the same time.

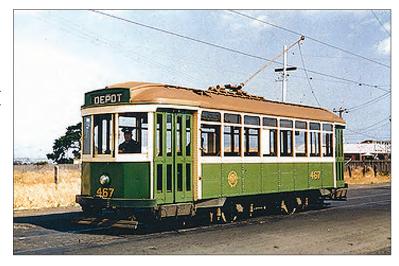
Roger Greenwood has done a remarkable job in producing a new DVD, *The Footscray Local Tramways*, which presents both visual images and a great deal of information, through a very informative commentary, about the Footscray tramways. Sections of the video deal with the planning of the system (and its takeover, before completion, by the MMTB); its routes, the different



Sydney R 1808 in service with Melbourne W2 321 and Auckland 11 on 31 January 2010. Howard Clark

With its destination sign already set for the return run to Footscray Depot, Melbourne XI 467 stands at the northern end of Gordon Street in 1954. This peaceful scene is in contrast to the usually busy operations of the Footscray lines, the subject of a new DVD reviewed on these pages.

Noel Reed



types of trams used, the depot, power supply, eventual closure and more. Although the streetscapes, cars and fashions of the 1950s will appeal to a broad audience, the level of detail means that this is not a presentation for the non-enthusiast.

Although focussed on the Footscray local lines, coverage extends to the cross-country service to Moonee Ponds and a particular delight are the scenes of former VR car 52 running on this line. Also interesting, and sad, are the images of a convoy of X1 cars making a one-way trip to Preston Workshops after closure. Earlier and happier special workings were those of W series trams running football specials from Moonee Ponds to and from the Western Oval on the Russell Street line.

The film content has been well chosen and well assembled. The limitations, in terms of image quality, of some of the 8mm material are inevitable, but the camera work is uniformly steady and the production is a pleasure to watch. The film material is well supplemented by a large number of well-chosen still images.

This DVD is both a nostalgic reminder of the Footscray tramways and a valuable record of their service over 40 years. Let us hope that Roger Greenwood finds another tram line or system to present on video.

DB

Mr Craddock Morton, Director of the National Museum of Australia, with Peter Hyde, Brisbane Tramway Museum Society, and Marie Treloar, Australian Electric Transport Museum, after presentation of certificates to representatives of museums successful in obtaining a grant under the 2009 Community Heritage Grants program.

National Museum of Australia



OFTUS

SOUTH PACIFIC ELECTRIC RAILWAY CO-OP SOCIETY
PO Box 103, Sutherland, NSW 1499 www.sydneytramway.muse www.sydneytramway.museum.com.au

From various contributors

A significant acquisition: Sydney P car 1729

Sydney P class tram 1729, which has resided at the Canberra Tradesmen's Union Club since 1981, has been acquired by the Museum.

The decision by the club to dispose of Sydney P car 1729 and R 1806 only came to the notice of the Museum when removal of the trams from the club was a little over a week away. Agreement was finally reached for the Museum to obtain car 1729 at 6 o'clock in the evening of 19 January after part of the southern wall of the club, mainly consisting of large windows, had been temporarily removed, as had a street lamp which was in the way. Later that evening car 1729, and 24 hours later 1806, were rolled out on temporary 'track' consisting of pieces of angle iron and timber. Once clear of the building they were lifted by crane onto a semi-trailer, which took them to a holding yard in Queanbeyan for an overnight stay.

P 1729 was reunited with its W2 bogies on the morning of 20 January, and was brought by Australian Train Movers (Mario Mencigar) to Sydney. R 1806 is in private ownership.

No. 1729 entered service on 26 February 1929. Later the same year it was decorated for the opening of the new promenade on Campbell Parade, Bondi on 21 December 1929.

It was the seventh P car disposed of and the first to be sold, on 11 November 1958. Its body was sold to a caravan park in Braidwood. In 1980 it was bought by the Canberra Tradesmen's Union Club and was installed in the club, on W2 trucks, during the following year. The seats in a number of compartments, which had been removed before or after the car was sold from Randwick, were replaced by new ones to the original design, made by the club's carpenters. Over the years it has been a venue for eating and drinking by club members and visitors. More importantly, for almost the last 30 years it has been under cover, protected from the elements. Of course the replacement of mechanical and electrical equipment represents a significant challenge, but a body in good condition is a very good start.

P car 1501, whose body was obtained from Lightning Ridge some years ago and is now at Bendigo, remains a candidate for restoration. Plans for 1729 and 1501 are still to be settled but there is no intention to dispose of the latter car.

A history of the tramcar preservation activities of the Canberra Tradesmen's Union Club will be published in a future issue of Trolley Wire.



P 1729 being removed from the Canberra Tradesmen's Union Club on the evening of 19 January 2010. In the background is R 1806, still inside the club building.

Dale Budd

An interior view of P 1729. Howard Clark



Annual Members' Day draws good crowd

The 2009 Members Day held on 5 December was the biggest event for members for many, many years, judging by the number of people who attended. The day also saw the launch of restored ballast motor 42s. As an added attraction, a barbecue was provided, followed by movies under the stars.

The activities commenced at 3:40pm when 42s was driven out of the depot yard into the back road in our picnic area, near the Railway Square waiting shed. From the deck of 42s, Workshop Manager Bill Parkinson related its interesting history and the work involved in the reconstruction to return the tram to operating condition. Bill also mentioned the efforts contributed to the restoration by the late Bob Cowing. Bob's daughter Jennifer and son Douglas and friends, the Garbutt family, attended to witness the vehicle's return to service.

Also in attendance was new member, John Jenkin, who drove 42s in its later guise as an overhead line car renumbered L707 in the railway roster. Diesel powered, and battery operated when running in the city underground, the old tram (nicknamed 'Gentle Annie') moved slowly around the city railway and over the bridge to the north side usually carrying a gang of linesmen to maintain the overhead wiring system. After its retirement from railway service, it was donated to the Museum in 1979.

At 4:00pm a convoy of three trams departed for the Royal National Park. Trams C 29 and R1 2001 carried the throng with 42s as the trailing car. Plenty of time was allowed for photo stops on the return journey with 42s leading the convoy.

Following the return of the official launch convoy, C 29 began several runs to Royal National Park followed by Melbourne Z2 111. Trams operated also to Sutherland and most of the trips on this line were operated by O car 1111.



Sydney P class 1729 after its arrival in western Sydney from Canberra. Howard Clark



Works Manager, Bill Parkinson relates the history of 42s and its restoration to the assembled crowd. Matthew Geier

As the sun slowly sank, our members and friends made themselves comfortable around the picnic area and relaxed as the barbecue got under way. The team served a total of 81 meals.

After dinner, the group moved into our open air cinema which had been set up in the traverser pit in front of the workshops. A large screen was suspended in front of the display hall with Craig Parkinson's digital projector mounted in the back of his van facing towards it. It was our first film night for many years and the films screened were of tramway and railway interest.

A wonderful time was had by all, with nearly 40 people still at the museum at midnight. It was a tremendous team effort that certainly paid off. Those who assisted deserve a special thank you for all their efforts.

Works report

Work is under way to open the doors on road 15 in the top shed in readiness for cleaning out around the cable grip car and Essanee grinder 3. These doors were installed when the shed was constructed but have never been opened. At present there is a build up of superfluous material surrounding the two cars which is to be removed to enable work to begin in the near future on the cable car. It is a project the team that rebuilt 42s is interested in. They hope to bring the cable car to displayable standard over the next few years. Material that had been stored outside the doors has been removed and repositioned to clear the access to road 15.

A new gate has been erected at the entrance to the depot yard. It is not angled as was the previous one, but has been erected more in line with the workshop rear wall.

Display hall and YMCA

Work is well advanced on the lining of the side and rear walls at the back of roads 7 and 8 to take the former Museum of Sydney display material which arrived with the return of cable trailer car No. 23 on 21 October.

A CSO plumber has set up the sewer pipes and the water lines for future toilets in the YMCA building adjacent to the southern fire stairs. Our CSO bricklayer has made good progress on the fire wall between the first floor of the YMCA building and the Display Hall.

Track relaying work

On 17 October the third pair of rails on the eastern track, working north from the south end of the Railway Square waiting shed, were placed, aligned, gauged and welded.

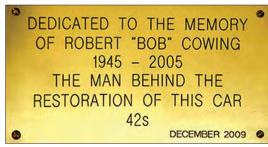
On 24 October the right hand points being fabricated for the future Rawson Loop were relocated clear of the western track just north of the waiting shed allowing the remainder of the western track to be lifted as far as the Cross Street corner. The eastern track bed was excavated and levelled to the same location by Holland's backhoe with the spoil being dumped along the TAFE retaining wall north of Pitt Street. Some of the old rail has been de-scaled for re-use and third panel of the western track was set up and welded.

Bob Cowing's son Douglas and daughter Jenny attended the launch of the car. Their father was very keen to see the work completed and did much to assist in the car's restoration.

Martin Pinches



The plaque attached to the cab of 42s. Martin Pinches



On 30 October four cubic metres of concrete was laid on the western track with a further five and a half cubic metres the next day mainly on the eastern track.

By 7 November the eastern track had been concreted as far as the SMC light pole. A temporary ramp of sleepers allowed fork-lift access to the 'six foot' between the tracks to facilitate the placement of more rails. The eastern track was then extended over the following weeks to join with the original rails at the Cross Street corner.

On 19 December a staggering 13 cubic metres of surplus concrete was received in three truck loads. Some old rails have been cut up and trimmed for the Sydney style track drain opposite the waiting shed. The fourth panel of track on the western track was gauged and welded on 9 January.

Main line trackwork

Sixteen timber sleepers were replaced along the Sutherland line in October and November.

During December, tree branches were trimmed and weeds sprayed along the Royal National Park and Sutherland lines. The tree trimming was carried out

from overhead line car 99u, the elevated tower being very useful for this task, and the weed spraying used our special weedicide trolley towed by R1 2001. A fallen tree just north of Pitt Street was cut up and the pieces removed using ballast motor 42s, the first works use of this car since its return to service one week earlier

Building works

The new timber for the repairs to the Railway Square Waiting Shed was received in mid December and work has commenced shaping the first of the two replacement 300 x 300 hardwood posts for the eastern side.

Overhead

With the now regular use of the Cross Street connection due to the current trackwork, it is hoped that an early start can be made on the erection of the permanent overhead wiring above this track.

Other necessary work, including inspection and maintenance of the overhead required under the Rail Safety Act requirements has taken precedence. As well, the reconstruction of the scissors crossover trolley wires is in progress at the same time as Cross Street.

Sydney D 117

The two new edge timbers have been mortised and fitted to the sides of the clerestory section of the roof of D 117 followed by the roof battens. These have been planed so that ridges will not show after the roof is canvassed. Two new laminated roof end bow rails were made by our joiner and have been fitted to both ends of the car supported by the pipe posts that will also hold



Dennis O'Brien is watched by Mike Giddey as he cleans accumulated grease and grime from the 22E truck from Ballarat car 37. Ian Hanson

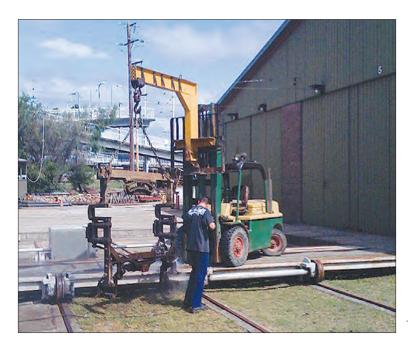
up the front aprons. Good progress is being made on sanding the interior woodwork.

Ballarat 37

Ballarat 37 has been lifted and both trucks removed for overhaul. The spare 22E trucks obtained from the N car at Woy Woy have been placed under 37 so the car can be moved around for cleaning of the underframe. This car has a very large build up of dirt on the frame and will need a thorough cleaning before work can commence on certain areas of the frame. The electrical equipment under the car has been removed for overhaul. The resistor grids were found to be in poor condition but have been repaired and are ready for remounting under the car once the frame has been cleaned and repaired. The line breaker is undergoing overhaul and the resistance tubes and interlocks replaced to operate on our 600V to 650V traction power. They were removed when the tram was in service in Ballarat as they were not required due to Ballarat's lower traction voltage.

Road vehicles

Work on AEC double-decker 2619 is proceeding well, but behind schedule due to unforeseen problems with the body framing. This has now been completed and the replacement of the body panelling is under way. The interior is also being cleaned out for fitting of new 'Masonite' interior lining.



Craig Parkinson steam cleans one of the Brill 22E bogie frames from Ballarat 37.

Ian Hanson

BALLARAT

BALLARAT TRAMWAY MUSEUM

PO Box 632, Ballarat, Victoria 3353 www.btm.org.au

From Dave McCartney and Warren Doubleday

Tramway operations

The recent return to service of No. 14 from overhaul has meant that for the first time in a number of years all seven former SEC single truck trams are available for service. The problem now is to rotate their usage so that they are all getting some regular running, not a bad dilemma to have! Only No. 38 of the running fleet is currently out of use, waiting for all of its undergear parts to be refurbished and the trucks to be re-assembled.

Dave O'Neil and Austin Brehaut ran the annual Cops'n'kids tram on 29 November. Each year, Ballarat police run a four day camp for children who are being treated for cancer. Tram 671 did two round trips and the kids had the usual wonderful time.

The seemingly never ending problem of cyclists falling off where the access track crosses Wendouree Parade has received more attention from the City Council. The head of the rail has been sand blasted to give it a rougher surface, while yellow cross hatching has been painted on the road surface between the rails to make the hazard more visible. The old layout at the SEC depot would have really tested the cyclists.

The Ballarat district has seen one of the best spring rainfalls for many years. Although still below the longterm average rainfall, at least the Gardens are green and the trees are bright. Lake Wendouree even has some water in it!

Museum developments

During January, No. 27 was taken out of service for a repaint, following an offer from one of the workshops staff to tackle the job. It will be painted in the authentic shade of green this time, based on an original pre-war 'Pay As You Enter' sign which the late Wal Jack obtained many decades ago. This is a darker, more olive green than that applied in 1985, when it was last repainted. In the intervening 25 years the tram has amassed some 25,133 km in service, so it is understandable that it is looking a little careworn.

The depot staff decorated No. 28 this year for the Christmas running season. Alan Bradley's article on Ballarat Santa trams (the Myers Christmas Trams) that appeared in the December 2008 issue of *Fares Please* was converted into an on-line web photo exhibition, along with two Santa tram stories, together with a photograph of two Santas on a tram – spot the imposter! The story can be seen at www.btm.org.au/Santa_Trams/santatrams.html

Sebastopol cross bench car No. 22 has had most of the timber removed that was in need of replacement. A dozen new side pillars have been supplied by one of our members' joinery to replace those on the south side, which were beyond saving. The first job has been



Car 14 runs the service in Wendouree Parade.

Warren Doubleday



Car 28 was our Christmas tram and is seen in Wendouree Parade. Peter Winspur

Dave O'Neil receives his 25 year badge from Society President, Stephen Butler. Warren Doubleday

to replace the bulkheads at each end in order to give the body some strength before the serious work can take place.

The side wall and ceiling of the new display area have been installed, along with the necessary power cabling and lighting. A large glazed door has been installed at the front of the area, of a size suitable for disabled access. Painting and fitting out is soon to commence.

Grants and administration

A number of grant applications have recently been successful, including \$3,850 from the Federal Government for small equipment items and a \$17,400 Victorian Heritage Grant for the interpretive display to



ESCo tram 22 is safely housed at the back of the depot where work on the restoration of the car can commence. Warren Doubleday



be installed in the refurbished display area. As well, a \$500 CVGT Community grant has been received. Having a professional fundraiser on the team certainly makes a difference.

At the Annual General Meeting, held on 8 November 2009, members of the Board were re-elected to their previous positions. On the day, Dave O'Neil was presented with his 25 year service badge. The only major change in allocated positions was that Warren Doubleday and Alastair Reither swapped the positions of Technical Services Manager and Assistant Technical Services Manager respectively.

BENDIGO

BENDIGO TRAMWAYS

1 Tramways Avenue, Bendigo, Victoria 3550

www.bendigotramways.com

From Tim Blythman

Santa arrives early!

On 7 December we had national, state and local government representatives on site to announce that we now have \$3.1 million for the depot redevelopment. The day was well attended by the local media.

The big day was attended by the Hon. Jacinta Allan, our local state Member of Parliament and Minister for Regional and Rural Development, Skills and Workforce Participation, as well as Steve Gibbons, Federal Member for Bendigo, and Councillor Rod Campbell, Mayor of the City of Greater Bendigo.

Tom Seddon, CEO of the Bendigo Trust, spoke in these terms on the day: "The project will see a host of

long-awaited and greatly needed improvements being made to the depot. The works will make the precinct a more appealing tourism site with well-preserved heritage features, but will also expand the workshop into a safe and thriving work-place that can take on major external restoration projects, both within Australia and throughout the world."

"Bendigo has the oldest operational tram depot in the Southern Hemisphere, and the Bendigo Tramways staff have a unique skills set that is highly regarded by other heritage tramways in Australia and many other countries. However, without the right facilities we cannot take on big projects. We are absolutely thrilled



Artist's impression of the Bendigo Depot upgrade.

Bendigo Tramways



Car 21 decorated as Myer's 2009 Santa Tram.

Bendigo Tramways



George Stirling and Bill Chan work on tram 84's roof.

Bendigo Tramways

that the funding has come to fruition and are looking forward to getting the project underway. It will also enable the Tramways to increase its intake of apprentices in trades such as carpentry, coach-building, plumbing, painting and fitting and turning."

The funding of the project is split up as follows:

- •\$1.5 million from the Victorian Regional Infrastructure Development Fund
- •\$1 million from the Commonwealth Jobs Fund
- •\$500,000 from the City of Greater Bendigo and
- •\$100,000 from the Bendigo Trust.

Some of the works include a new power supply, extension of the depot space, undercover parking for road vehicles, new toilets, restoration of the administration building and landscaping. Work on the redevelopment should start in the next few months.

No. 16 progress, and other tramcar works

In the week before the \$3.1 million grants news the local WIN TV news team came to do a story on No. 16 (PMTT 84), for which we had just received a \$146,000 grant from the Victorian Department of Transport. Our tired old single-trucker, un-touched by a paint brush since before closure of the SECV system in April 1972, is being restored in time for the Malvern Depot celebrations in late May which will mark 100 years of the Prahran and Malvern Tramways Trust's tramways. No. 16 and former PMTT maximum traction car 44 will go to Melbourne for this event.

Our local crack-testing man also visited recently to do a test on No. 16's wheels, prior to them being re-tyred. A crowd gathered to watch as he first sprayed the wheels with white paint, then applied a layer of magnetic black paint, and finally ran over the wheels with a large hand-held electro-magnet.

The work on No. 16's body continues at a steady pace, with each of the panels being carefully rubbed back to show over 90 years of history. The rocker panels show various shades of SECV green, preceded by a layer of SECV cream (dating from the 1940s), and a different shade of cream lined out in red dating from when the tram was built. The arch roof has been reinstated at one end, and the other end should follow quickly.



Car 84 in the workshop with its new apron fitted.

Bendigo Tramways

The truck has been disassembled, the varnished ceiling removed, and many exciting discoveries made in the woodwork. Numerous tickets and coins in imperial currency were found, providing good evidence that this tram has not seen substantial maintenance in over 40 years.

In other car news, Damien Steel's WorkSkills crew continues their work on Birney No. 302, which will be a valuable addition to our fleet. We also hope to see toastrack No. 17 out and about soon.

Haddon's W3 663 arrives

W3 663 from the Melbourne Tramcar Preservation Association arrived in November from Haddon, and is at the back of the Depot's '1' road waiting for work to begin on its roof. As expected, it rolled onto the loading ramp at the Gasworks depot off Weeroona Avenue without a hitch, and was driven under its own power to the City Depot. Various individuals who have never seen a W3 car before have marvelled at the ramped saloon entrances and No. 9 trucks.

December events

Our 37th birthday celebrations occurred on 12 December. They included a local choir on Z1 No. 74, and a barbecue fund-raiser for our wheelchair ramp. We had about 12 different trams in rotational service on the day. This was less than usual as most of the 'interesting' trams have been sent off-site in preparation for the major depot construction project.

Santa Claus (and his specially decorated tram, No. 21) has come and gone for another year. Myer

again decorated the single-trucker, and it ran special trips down Pall Mall to the Myer store laden with excited children.

The Bendigo North Primary School's 'lunch-box' choir provided some wonderful singing between 6 and 7pm on the Z1 as it shuttled people to the carols in Rosalind Park (behind our Charing Cross stop) on 20 December for a community 'Carols by Candlelight'. Depot Starter Anita Bagley (and a few others of Santa's little helpers) were seen cutting out cardboard silhouettes of Christmas trees and reindeer antler hats for the kids to put together on the 21 and 74 shuttles.

The last few weeks of 2009 were quiet, in terms of traffic operations, as we approached our end-of-year lunch on Christmas Eve. A smaller-than-usual crowd (due perhaps to the proximity to Christmas, and the hassles of last minute shopping) enjoyed a great and relaxing barbecue lunch.

Holiday time

Our Manager, Darren Hutchesson departed in late November on a well-earned holiday. He travelled to the USA for the wedding of our former Superintendent Tim Borchers in Florida. Tim and Cassandra later visited our depot on their honeymoon.

Our website

The attention of readers is drawn to our website, www.bendigotramways.com. Most professionally maintained by Michael McGowan, and up-dated almost daily, it contains a wealth of information about our operations, timetables, fares, up-coming events, recent and ancient history and so on.



Melbourne W3 class 663 at the Weeroona Avenue Depot before being transferred to the main depot for roof work.

Bendigo Tramways

HADDON

MELBOURNE TRAMCAR PRESERVATION ASSOCIATION

PO Box 324, Prahran, Victoria 3181

www.mtpa.com.au

From Kym Smith

W3 663

As reported in the November 2009 issue of *Trolley Wire*, W3 663 was transported to Bendigo on 26 October 2009 for the reconstruction of its roof. The loading at Haddon and the journey to Bendigo was uneventful, with 663 being unloaded in Bendigo using the ramp at the Gasworks Depot. After being checked over by Bendigo Tramways staff to ensure that it complied with their safety management system requirements, 663 was transferred to the Tramways Avenue Depot and stabled. Bendigo Tramways staff have since been completing their inspection of the roof structure so they can finalise the quote and commence work on reconstructing the roof of the tram.

L 103

New weather-blinds have been installed in L 103, completing its restoration. The blinds were made for us by Thorpe's Canvas Products in Bendigo, and were installed on a combination of former L Class and modified W2 Class blind rollers. The completed tram looks fantastic, as well as the blinds having the added benefit of reducing dust from entering the tram while it is stabled.

SW5 849

The damaged No. 2 end apron from SW5 849 was removed during November, and a replacement apron from SW5 809 selected from store to replace it. The

replacement apron had its advertising screw holes welded over and ground flat, and was sand-blasted, re-rolled and primed prior to installation on 849.

The overhauled door pistons for the sliding doors have also been re-installed and reconnected using high pressure nylon air line. Three of the sliding doors have been replaced with doors selected from store that were in better condition. The replacement doors required some adjustment and modification to fit, but now operated effortlessly.



SW5 849 after the replacement apron was fitted.

Anthony Smith



Frank Schroeders welds closed the advertising panel screw holes on the apron from SW5 809 prior to it being prepared for use on SW5 849.

Anthony Smith



The new weather-blinds fitted to L 103.

Anthony Smith



W3 663 is checked over after loading onto the truck for its journey to Bendigo.

Jacqui Smith



Later in the day, W3 663 is gently eased off the truck and down the loading ramp at the Gasworks Depot in Bendigo.

Jacqui Smith



W3 663 is seen stabled in Road 1 of the Tramways Avenue Depot in Bendigo. Jacqui Smith

Trackwork

The rail and checkrail for the north-western curve behind the Carbarn was received back from Yarra Trams during November after being rolled to the correct curvature. The correction of the curvature on this rail will result in a slight change to the alignment of the track behind the Carbarn. To allow the south-western curve to be aligned to match, it was lifted during December to allow the area to be levelled and where necessary for the rails to be adjusted.

Site works

The entertainment and barbeque area was painted and tiled during December, allowing it to be used for functions. 'The Met' logo and number decals have been purchased for installation on the sides of the SW5 drop-centre panels, as they have been painted in the green and yellow livery last worn by SW5 809, the 'donor' of these panels.

The control panels for the level crossing lights have been re-designed and modified to allow their

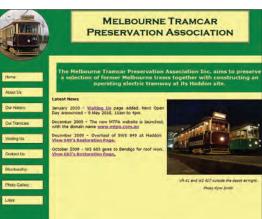


Arthur Ireland assists Anthony Smith (inside the tram) to remove one of the sliding doors from SW5 849. Jacqui Smith



The south west curve is lifted to allow it to be levelled and realigned to match up with the north west curve.

Jacqui Smith



continued operation now that the indicator lantern system has been removed. Overhauled overhead skates will be installed and wired during February to complete the work and allow the level crossing lights to operate again.

Website

The MTPA now has a new web address – www.mtpa.com.au – and a new website. The pages for the new site, which were designed and developed in-house, were then uploaded onto our new site by Warren Doubleday. The Association is grateful to Warren for his assistance with getting our new site operational.

PORTLAND

PORTLAND CABLE TRAMS INC.

2a Bentinck Street, Portland Vic 3305 www.portlandcabletrams.com.au

From Alan Rees

Heavy loading

October, November and December have been excellent months for Portland Cable Trams. We carried 1046, 1140 and 1050 passengers respectively for the three months.

Portland Cable Trams passed the 90,000 passenger mark in early December 2009. A lot has happened over the past year, with the successful relocation of the Wade Street RSL water tower shunt, grip car PCT002 and saloon car 171 running permanently in service, and the achievement of re-accreditation on 30 June.

During September we ran both tram sets on a number of occasions due to heavy loading. This was a great sight which turned the heads of many of the locals.

FRRR Grant

Portland Cable Trams received a grant of \$4,300 from the Foundation for Rural & Regional Development (FRRR). This will be put towards the motorisation of the depot turntable which will eliminate the need for volunteers to push the tram sets into position when running out of the depot and berthing them at the end of the day.

We have been working closely with Portland Aluminium and engineering firm Hatch who have agreed in principle to perform the works required. The grant money will go towards the parts needed to get the turntable operational.



The turntable in the depot yard.

Alan Rees



Our two trams at Wade Street terminus. Alan Rees

ST KILDA

AUSTRALIAN ELECTRIC TRANSPORT MUSEUM (SA) Inc

PO Box 213, Salisbury, South Australia 5108 www.trammuseumadelaide.com.au

From Colin Seymour

Positive visitor income results

2009 produced a much improved operations result for the AETM. Visitors and therefore general admissions are up for the first time in several years and we are averaging two charter bookings per week. This has put a huge demand on our volunteer workforce, but is very rewarding!

The pleasing thing is that book sales and kiosk sales have picked up at a faster rate than admissions income. Compared with the same period last year, visitor income is up 49%, book sales up 104% and kiosk up 126%. The fact that sales have increased more than visitor income is put down to more and better books, better display in the book shop and a better selection of ice creams! It is expected that the more attractive new drinks display fridge will also have a positive effect on drinks sales.

Tram restoration and maintenance

Headlights have been fitted to E type tram No. 118. The first set of headlight glasses cracked from the heat of the globe. Advice was sought from the glass supplier, who said the glass selected was too thick. A second set of thinner glasses have endured the heat from the lamp, so far without cracking. Jack Pennack relocated the resistance grids to their final under-floor location and continued with the painting of the tram. William Adams and Peter Letheby assisted with the preparative sanding of the outside. Bruce Lock sourced replica gutters and with assistance from the Friday team installed them onto the tram.

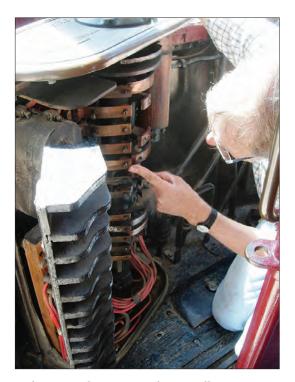
Bruce Lock has turned his attention to organising the fitting of brakes to the Bib & Bub set. A compressor has been sourced and Bruce is examining how it can be fitted to car 15.

Car 42 has re-entered traffic for the summer months. Peter Letheby is attending to loose seat backs and missing screws. Andrew Gilbertson and Michael Bosworth serviced car 111's controllers following a spate of notching-up difficulties with the No. 1 end controller.

Michael Crabb has taken over most of the general servicing of the operational car fleet. Trolley wheels on many of the cars have been measured for wear and replaced or lubricated as necessary. Motor bearings and compressors have also been serviced. Michael is using his fitting and turning skills to good use in fabricating new bushes to be used in restoring controllers for the Melbourne Tramcar Preservation Association at Haddon.

Big wheel turning

Ian Seymour was making good progress with re-profiling Ballarat Tramway Museum's wheels on AETM's wheel lathe. When it has been operating on Sundays, it has been quite an attraction for some privileged visitors. Then the gremlins struck: the lathe's motor controller malfunctioned. So far, Jack Pennack and Ian Seymour have identified two problems and are working on them, in an area difficult to get at for repair.



Mike Bosworth examining the controller contacts in car No. 111 following adjustments by Andrew Gilbertson.

John Radcliffe

Collection significance assessment

The Museum has received a grant of \$4,400 from the Commonwealth Collections Council to undertake a collection significance assessment. The assessment follows a formal framework and must be done by a person qualified in museum management. Marie Treloar, the Museum's Honorary Archivist is such a person and has been engaged to do this work.

Archives

We are concerned to improve the management of our archives so as to meet the accreditation requirements of the South Australian History Trust. Marie Treloar has also been working hard on this project, ably assisted by others. Her understanding of the MOSAIC accessioning software, and the principles of good archives management make us confident that we will satisfy the requirements of the History Trust.

Displays

The new horse tram display in the Southern Depot has been erected and the trolley bus display is close to completion.

Track and overhead

Andrew Gilbertson, Andy Hall, Mark Jordan, Jack Pennack and Ian Seymour inserted 10 replacement sleepers between pole 25 and the start of the curve into the loop (approximately pole 28) on 10 October 2009. They were able to remove all the old sleepers and enlarge the trenches before breaking for lunch, and then had the new sleepers laid, packed and backfilled by about mid afternoon.

Andrew Gilbertson, Andy Hall, Jack Pennack, Ian Seymour, and Graham Jordan from Melbourne, attended a further track work day on 7 November. They were able to install four new hardwood sleepers near Samphire Road.



Marie Treloar, the Museum's Honorary Archivist, at work on cataloguing the Museum archives.

John Radcliffe

Website changes

The Museum website has two new sections accessed from the tabs displayed below on the home page. Australasian enthusiasts can now purchase selected books and DVDs through the Online Shop page. The Tram History tab brings together information based on our interpretive displays which was already on the site, but previously only accessed from 'click ons' from other pages. A new section has been added to Tram History which is titled Today's Adelaide Tram System. It covers the current Adelaide tram system and includes a brief history from 1958 when the Glenelg line became our only remaining tram line. Visit the website www.trammuseumadelaide.com.au to see the changes.

A side-on portrait view of dropcentre 282.

Bob Merchant



WHITEMAN PARK

PERTH ELECTRIC TRAMWAY SOCIETY (INC)

PO Box 257, Mount Lawley, Western Australia 6929 http://pets.railpage.org.au/pets10.html

From Michael Stukely

Tram restoration

Both of the 77E trucks (from Kagoshima, Japan) for use under Perth car E 66 have been fitted with new brake hoses, and the brake cylinders have been serviced, cleaned and refitted by Graham Bedells. Brake rigging is being installed by Graham Bedells and Graeme Eddington. A compressor refurbished for us by Bendigo Tramways is to be used on No. 66. Manual brake equipment is being manufactured. The sanding and air-brake valves are being serviced by Noel Blackmore. The bumper over-riders have been drilled and brackets to take a rigid tow-bar are to be fitted. Trial seat installations have continued in the saloon, and the sockets for the foot-rests have been attached to the side walls by John Davies and Graeme Eddington. Cable-ducting along the saloon floor must be completed before the full seat installation can proceed.

The restoration of the body of Perth B class single-truck car 15 for static display by the City of South Perth Historical Society is progressing well, in the capable hands of Bryan Adcock, John Budd and David Carling. The east end motorman's cab windows have been temporarily fitted while the west end cab windows are being glazed. The eight new saloon window frames (four for each side) have been received from the cabinet maker. The east end saloon bulkhead panelling has been fitted along with a sliding door from our stock, which was first fully stained and varnished. The car body is to be mounted at its new home on a mock-up 21E truck, now to be constructed from a railway bogie after substantial modification and lengthening. Measurements were made by Noel Blackmore and Lindsay Richardson, a drawing made by Noel, and preparations for the work are in hand with the engineering firm.

A new problem was discovered when Fremantle 29 was out in very wet weather in spring – rainwater could gain access to the marker lights mounted below horizontal boards attached under the roof edges at each of the four end platform entrances. The mountings have now been enclosed by John Davies to prevent this.

Museum and tramway improvements

The upgrade to the steel traction poles along the full length of the Village Mall (300 metres) by Whiteman



SW2 No. 426 at the Village tram stop on 7 January, showing the newly painted dark green steel traction poles with added (small) finials and street light brackets, as well as the newly painted Perth-style Tram Stop signs on the poles.

Michael Stukely

Park Management has been completed. Small finials were attached to the four remaining poles to complete the finial installation. All poles, including their tramway bracket arms and the matching lighting brackets recently installed on the opposite side of each, were then painted in dark green, with excellent results. Pole numbers were re-attached, and new red and white Tram Stop signs were painted on both sides of the poles at each side of the Village Tram Stop. The overall appearance of the line of newly finished green poles along the Mall is a great improvement on their earlier, very unattractive, rusting grey.

Another batch of steel sleepers, made available following railway upgrades, is to be obtained from the Kalgoorlie area in late January or early February. Track Supervisor, Trevor Dennhardt visited the site and inspected the available sleepers in November, and transport arrangements are in place. This will be a very



No. 426 passes the water playground at left as it departs the Village for the Carbarn at the end of services on 7 January. The newly painted steel traction poles fitted with standard large finials are prominent.

Michael Stukely

timely acquisition as we are down to about the last 100 steels of the 1200 or so that we acquired in 2000. Meanwhile, the track maintenance team has continued the spot replacement of rotted timber sleepers with steels, with 35 installed from August to October. Sunken rail joints, mostly in the Village Mall, were lifted and packed, and other work carried out as required. Trevor Dennhardt and Lindsay Richardson were assisted at various times by Kim Freind, Shane Parsons, Laurie Ahearn, John Shaw, Frank Edwards, Jack Kendall and Michael Stukely. Weed spraying of the main line was delayed due to wet weather on September workdays.

Most of the lining and trim work in the members' room extension in the Oketon Geddes Carbarn was completed in a further push by Bryan Adcock, Jack Kendal and John Budd. The extension was then painted by David Carling in October; the older part is still to be repainted. Refrigerators and cabinets have been moved to new positions, which allows for far better table and seating arrangements as well as improved access and egress space. This is greatly appreciated, especially by our large team of regular Wednesday workers.

The driveway from Workshops Road to the Carbarn fan and our parking areas was resurfaced with crushed limestone by Park Management in November. A new spur road was also added from this driveway through to the rear of the lower hardstand, east of the Lindsay Richardson Carbarn. A long-term flooding problem in the rear compound has been addressed. In wet weather, the drainage sump in A Road would fill and flood the surrounding area, including the floor in the WP Pennenburg Workshop. Museum Site Supervisor, Lindsay Richardson reports that the sump has been filled with sand and topped with road-base, giving much improved drainage as well as removing a hazard for both vehicles and people.

Other news

Spring patronage was generally good, but wet weather in September led to lower levels on some days. Daily services in the October school holidays produced a good result. SW2 426 was still in service in early October after running for most of August and September. Fremantle 29 was then used more than usual, running 226 km in October, with W4 674 also seeing some service, to spread the load until W2 441 was again available. All of these cars were again used in November.

No. 426 moves away down the Village Mall for the Carbarn on 7 January. The newly painted steel traction poles at the extremities of the Mall (beyond the tram) have not had street lights and brackets added.

Michael Stukely



FERNY GROVE

BRISBANE TRAMWAY MUSEUM SOCIETY

PO Box 94, Ferny Hills, Queensland 4055 www.brisbanetramwaymuseum.org

From Peter Hyde

Activity at Ferny Grove has slowed with the advent of Christmas holidays and summer heat – activity in all areas, that is, except mowing where the summer rains threaten to turn the drought parched lawn dustbowl into potential jungle!

Conduits have been laid for the new 11,000 volt cable (pictured in the November 2009 issue of *Trolley Wire*). Some difficulty was experienced when an unexpected rock formation was encountered by the excavator, causing delays.

In the workshop, activity continues on FM 400 and Dreadnought 136. The curved steel side panels were badly rusted, leading to the decision to order new ones. The shape and thickness of these is critical as they form part of the supporting structure of the car body.









Ken Howard and John Lambert placing conduits for 11,000 volt cable. Peter Hyde

Left and below:

The conga line of members carrying the panels for dreadnought 136 into the machinery workshop where numerous attachment boltholes were drilled.

Peter Hyde







Dreadnought 136 showing repairs to the timber structure in preparation for installing the new curved side panels.

Peter Hyde



Each year in January all the trams used in regular service at Ferny Grove are turned around on the triangular junction to the main workshop to even flange wear. Ten-bench 65 and Fourmotor 429 were photographed during the move on 19 January.

Peter Hyde





The city-bound track over Adelaide's new South Road overpass was tested by Flexity 107 at 5:15pm on 7 December 2009. Flexity 103 tested the Glenelg-bound track fifteen minutes later.

Steve McNicol



Sydney R1 class 2029 turns from Kurraba Road into Wycombe Road, Neutral Bay on its journey from the ferry wharf to Neutral Bay Junction in the 1950s. 2029 is fitted with roof-mounted dynamic braking equipment to assist its journey down the steep grade from the junction to the wharf.

Noel Reed