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"SPARE THAT TROLLEYBUS PART!"

TROLLEY WIRE

AUSTRALIA'S TRAMWAY MUSEUM
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Front Cover:

Sydney P class car 1497 stands in the glare of floodlights for its night portrait at the Sydney Tramway Museum on 7 August 2004.

Robert Merchant

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A Kiwi and two ex-Aussies catch the morning sun at the Museum of Transport and Technology's tram depot in Auckland on 12 July 2004. Auckland 11, a 1905 Brush-built 'Combo' stands beside 1925 Holden-built Melbourne W2 class 321, and 1891 Baldwin steam motor 100, which started life in Sydney and ended its days in Wanganui.

Robert Merchant

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Sydney trolleybus 19 outside State Rail's Apprentice Training College at Chullora on 8 December 1988. The training college closed at the end of 1988 and No. 19 was moved to Loftus for completion of its rebuilding.

D. O'Brien collection



*Sydney trolleybus 19 in service on the Rockdale-Kogarah-Sans Souci system in the 1950s.
The Late Terry Bolton*

"SPARE THAT TROLLEYBUS PART!"

By Dennis O'Brien

Some readers of this article may find the title a little strange, while others will realise it is derived from the famous cry "Junkman, spare that tram!" It is however appropriate because from the acquisition of a trolleybus by the Sydney Tramway Museum through to the near completion of the restoration of the vehicle, Museum members have had to search the world for the various missing parts.

Sydney had two very interesting trolleybus systems, which used both Associated Equipment Company (AEC) and Leyland chassis vehicles with a variety of coachworks. The first of these systems commenced operation between Wylde Street, Potts Point, and Elizabeth Street in Sydney's central business district in 1934. It was later extended to the Sydney Town Hall in George Street.

The second system commenced operation between Rockdale, Kogarah and Sans Souci, and replaced the last government-operated steam tram service. It was opened in 1937 and operated until 1959, using a total of 21 double deck buses built on Leyland TTB and AEC 664 T chassis.

When the Sydney Tramway Museum was established to preserve vehicles formerly operated by the NSW Department of Road Transport and Tramways, its collection policy encompassed trolleybuses. To this end, the Museum aimed to include a trolleybus from the Kogarah system in the collection then being assembled.

At that time, the Museum was informed that the only way it would be able to obtain a trolleybus would be to tender for one together with other potential buyers. This outcome was regretted, as the Museum at the time could not afford so much as a dress rim from one of the road wheels, let alone a complete trolleybus! In the event, the buses were sold by tender to the highest bidder. Some of our younger members at that time maintained an interest in their whereabouts after the buses were removed from the depot at Ritchie Street, Sans Souci.

Twenty of the twenty-one buses were eventually towed to the former Manly tram depot where the dismantling process began. About half the buses had their top decks removed; the upper decks were then placed on purpose-built trailers which enabled them to be used as caravans. Two of the chassis were removed from their bodies and were fitted with a diesel engine and manual transmissions, thereby converting them to

prime movers. None of the conversions, however, appeared to be successful.

With the credit squeeze of the early 1960s taking effect, buyers were difficult to find. As a result, the rest of the units were towed first to Brookvale then to a dismantler's yard at Chullora where they were scrapped.

Prior to the closure of the Kogarah system, trolleybus number 24 was towed to Randwick Workshops for overhaul. With the closure of the system, the overhaul was terminated and the body was re-assembled to ready the vehicle for sale. Museum member Mike Giddey recalls seeing it being towed south along the Princes Highway. It was later discovered that the trolleybus was taken to Lake Congola where it was used as a sleep-out. It was scrapped several years later. With its demise, the curtain seemed to close on the Museum acquiring an example of a Sydney trolleybus.

However, in March of 1977, member Robert Lewis arrived early to work at Pagewood bus depot and stopped to talk to maintenance staff. The staff knew of Bob's interest in old vehicles and told him that over seventeen years ago that they had acquired a trolleybus and had it moved to Catherine Fields where they used it as a sleep out whilst trapping rabbits. They thought it may still be there, and was he interested in it?

Aware of this information, it did not take long to locate the bus. However, what remained was in poor condition. Several months before, most of the outer aluminium body panels had been removed and sold as scrap, and all the running gear, electrical and mechanical equipment had already been removed. Nevertheless, it was still recognisable as a trolleybus.

Our first move was to locate the owner of the property where the bus was located and to formally acquire it. The property owner was pleased for us to have it, and wished us good luck in its restoration. A search of the surrounding area where the bus had been standing for the eighteen years yielded items such as the rear staircase, clearance lamps and various other body fittings.

Once in Museum ownership, a working group was assembled to develop a strategy for its restoration. It was felt that the bus should be taken to the museum site at the Royal National Park as soon as possible to prevent any further deterioration. A small area had



The remains of trolleybus 19 rusting away at Catherine Fields in 1977. Bill Parkinson



been set-aside at the rear of the main building to accommodate it.

Member Brian Muston had unearthed an AEC Regal bus chassis that had seen service with the Metropolitan Tramways Trust, Adelaide, and later Stone Bros at Auburn. The chassis was in the process of being scrapped, and Brian acquired the air braked front suspension for fitting under our vehicle. This was the project's first connection with Adelaide as a source of parts. Once the front suspension was fitted, the trolleybus could be towed to Loftus.

The Sydney Tramway Museum wrote to all our fellow museum groups in Australia and New Zealand in its quest for suitable equipment. A priority was to acquire a suitable rear bogie assembly to enable the bus to be moved more readily. Allan Mortimer from Perth, WA, advised us that a six-wheel Leyland trolleybus

chassis had been found in a scrap yard in Perth. Although it still had a rear end fitted to it, it lacked differential centres. The chassis had been one of 22 vehicles used by the Western Australian Government Tramways between 1933 and about 1963. Some quick calculations of our chassis width revealed that this assembly would fit our vehicle.

Member Mal McAulay visited Perth for a live steam model locomotive convention and, whilst there, visited the wrecking yard. Purchase was arranged and the bogie assembly was dispatched to Loftus. On arrival at the Museum, it was cleaned and fitted to the bus under the guidance of Brian Muston and Brian Mantle.

At last, our bus was on wheels. But steering it was our next problem. No motor bus steering box appeared to be compatible.

The top deck of trolleybus 14, mounted on an International truck chassis, served as a mobile kitchen for a caterer in its latter days. It was purchased in 1978 for use in the restoration of No. 19.

Dennis O'Brien



Locating trolleybus bodies

Enquires revealed that some of the top deck to caravan conversions were still in existence and that one or two of these units could be a source of spare parts. Brian Mantle advised our group of a catering firm that had used a top deck off a former trolleybus to rebody a KB series International motor bus built about 1946-47. As an apprentice body builder, Brian had assisted the proprietor, Harry Williams, to rebody the unit and convert it to a mobile caterer's kitchen. In this capacity, it was used on film locations through out Australia to provide film crews with meals. After its purchase, the author drove it from Kensington to North Turramurra for storage until required.



Subsequently, a Sydney newspaper carried an advertisement offering for sale 'a top deck from a former Bondi Beach (sic) trolleybus'. The vehicle had been used as a caravan at Mona Vale and was in good condition. The asking price was \$3,000. Bruce Pinnell answered the advertisement, and discovered it to be one of the former Kogarah trolleybus top decks in good condition, one of the conversions carried out at Manly circa 1960. The bodywork had a doorway fitted to the front right side to allow entry and this was the only alteration carried out. The rest of the structure was complete down to the interior light fittings, ventilators and conductor's bell push button assemblies. Bruce was acquainted with the vendor and it was able to buy it for \$300. Soon after, arrangements were made to have it towed to a storage site at Hoxton Park, a suburb in Sydney's southwest, until required.

Attention now focused on the mechanical and electrical equipment.

Information had been received that the Metropolitan Transport Trust in Launceston had retained certain electrical components at their depot, after the city's trolleybus system closed in 1968. Member Richard Jones and his family were on holiday in Tasmania and

In 1979 another top deck was acquired. This time it was from trolleybus 21 which had been used as a caravan at Mona Vale.

The Late Bruce Pinnell



The top deck of trolleybus 21 after its conversion to a caravan.
The Late Bruce Pinnell

called in to inspect the equipment. Through Don Lange, our man in Tasmania, we were able to obtain circuit breakers, a traction motor, contactors, resistance grids and controllers together with many small electrical bits and pieces. These parts were freighted back to Loftus, with assistance from Mal McAulay and Colin Rhodes, and were stored in the back of the museum building until required.

With assistance from John Radcliffe, John Hoffman and Trevor Tatte at the Australian Electric Transport Museum in South Australia, we were provided with the locations of former Adelaide double deck and single deck trolleybuses. It was suggested that one of these

vehicles might provide a source of mechanical parts including the missing running gear. A positive lead directed us to Lindsay Dennis of Bute, about 180km north of Adelaide. Trevor Tatte recommended that we write to him as he had found him most co-operative in the past over similar matters. As a number of Sydney Tramway Museum members were planning to travel to Adelaide for the 50th Anniversary of the Glenelg Tramway in December 1979, the opportunity was taken to travel to Bute to inspect what Trevor had seen on a previous visit.

Several members made the trek north on a very hot day to locate the remains of AEC trolleybus 418. On arrival it was noted that only the body remained on site and that Mr Dennis did not appear to be on the premises. Examination of the body revealed that the chassis had been removed and the body used as children's cubby house. When the owner appeared, he explained that he had removed the chassis from the bus 20 years earlier. It had been converted into a wheat bin which was still in use at that time. We asked about the steering box, we were told it was 'in the bottom paddock where it was used to tether a donkey'.



Mal McAulay and Brian Muston remove parts from ex-MTT Adelaide AEC trolleybus 418 at Bute, South Australia, on 18 December 1979.

Dennis O'Brien

Former MTT Adelaide Leyland trolleybus 432 (with body by the MTT) at Hindmarsh Island, South Australia, in June 1978. The driver's door and hinges, air brake foot valve and other body parts were obtained from this vehicle. Chris Jacobs



Examination of the steering box revealed that the sector shaft was located in the reverse position to a similar item fitted to a motor bus. The puzzle was solved at last. We were permitted to remove any useable body parts which included the headlamps, interior lamps and some glass including the windscreen. The hand brake lever was also retrieved from under a mountain of dirt and grass nearby. Our small group returned to Adelaide very satisfied with their recovery effort for parts suitable for the restoration of No. 19.

After visiting Adelaide, the group turned their attention towards Hindmarsh Island in the south of the state where former Adelaide trolleybus 432 was located. From this bus we were able to obtain the driver's front door, Westinghouse air brake valve and

other small body fittings. When the restoration project began, it was found the driver's door required only very small adjustments for a near perfect fit.

To digress slightly, it was not by coincidence that the five MTT trolleybuses in the group 431-435 bore a similar appearance to the Kogarah units. The MTT had sent their photographer to Sydney to record and measure the Kogarah trolleybuses and used this material as a basis for the bodywork for their vehicles.

It was always intended that No. 19 be restored to operational condition. Accordingly, the search for a suitable air compressor and rear bogie continued.

Well-known Sydney bus enthusiasts John Ward and David Wilson reported that during a visit to the United

Kingdom, they had found a scrap yard in Wales in which several former double-deck BUT trolleybuses from Cardiff were stored. Sydney Tramway Museum Chief Engineer Richard Clarke and his family were travelling to London, and were asked to visit the location for us. Richard reported that it was like a supermarket of spare parts. However, as the vehicles were parked very closely together, access was difficult. Meagan Clarke, Richards's eight-year-old daughter was instructed what an air compressor looked and felt like, and was asked to look under one of the vehicles. She reported from underneath the bus that the required item was still in place. It might be left unsaid what Meagan's mother had to say about this! Several main components were purchased, and it was suggested that one of the rear bogies still fitted to these buses would be purchased later. All the buses held for dismantling were of post-war vintage, and with minor alteration the rear-bogie assembly could be fitted to our bus. Eventually, the required finance was raised and an assembly was shipped to Loftus where it was cleaned down, the brakes relined and the worn suspension bushes replaced.

In the early 1980s, the transport authorities in Johannesburg, South Africa, were in the final stages of closing down their once extensive trolleybus system. We were fortunate to obtain several motor mountings from this source.

John Radcliffe discovered on a farm at Keith, South Australia, ex-Adelaide AEC trolleybus 425 which had

still attached some of the parts we were seeking. Removing the parts was not without its problems as the bus had a wild beehive located between the upper deck floor and lower deck ceiling, with bees entering the ventilators! The lower deck was full of bees. After consulting apiarists, it was decided that winter would be a more suitable time to tackle the bees. Four months later, the bees were sprayed – albeit unsuccessfully – by the apiary section of the Department of Agriculture. However, John was able to remove the driver's foot pedals and additional motor suspension mountings.

The last of the electrical equipment required for the bus, the 'power on' indicator, was obtained in New Zealand by Bob Casey and Peter Rendall.

Sponsorship

It was felt that sponsorship from motor dealers and training colleges should be sought to give impetus to the project. At first, this was not successful and the whole project almost stalled.

At this time, the Public Transport Commission of NSW operated a highly regarded Apprentice Training College at Chullora and had just completed some restoration projects for the Powerhouse Museum and the NSW Rail Transport Museum. The Sydney Tramway Museum had corresponded over the years with the PTC and its predecessors, and had sought its assistance in restoring small four-wheel cable car trailer No. 23 from the former King Street system in



A general view of the scrap yard in Cardiff, Wales where former Cardiff trolleybuses were dismantled. The rear bogie, compressor and other parts were obtained from this yard.

Richard Clarke

Former MTT Adelaide AEC 661T trolleybus 425 (with body by J.A. Lawton & Sons) on Ross Egel's property at Mt Charles near Keith, South Australia. Wild bees inhabiting the bus had to be removed before the driver's foot pedals and additional motor suspension mountings could be salvaged. John Radcliffe



Sydney. We were advised that our friends at Parramatta Park were to have their KA class tramcar restored. However, as our trolleybus had a steel frame, the College desired to use it as a training module for the metal trade apprentices.

Restoration begins

With almost military precision on 5 November 1980, the bus and all of the spare parts required to complete the restoration were assembled at the Chullora Training College. Under the guidance of Instructors Fred Graham, Syd Cooper and later John Gatley, restoration began. The project would take seven years to complete as the apprentices undertook training modules in their various trades. These comprised body building, carpentry, a range of metal trades and training in electrical skills.

Electrical equipment

All the equipment obtained had to be serviced and fitted. This included the traction motor and associated

gear; high and low voltage wiring; and internal and external lighting systems. Rebuilding and installation of resistance grids was completed, as was the installation of the controller and circuit breakers. The bus's trolley poles and their roof-mounted frame were also restored. Museum member Laurie Gordon had obtained the last-mentioned equipment from trolleybus No. 20 in the wrecking yards at Chullora about 1960. Laurie purchased it on the off-chance that it might come in handy one day.

Running gear

Apprentices from the mechanical section fitted the bogie assembly from Cardiff, Wales, with great enthusiasm. The spacer plates used to secure the unit to the chassis were profile cut in the boilermakers' fabrication workshop. Handbrake ribbon acquired from former AEC motor bus 1930 was remanufactured by the late Athol Temple and fitted. The handbrake sector shaft and associated gear was remanufactured and the front suspension serviced. Ken Butt supplied financial assistance to acquire serviceable tyres from

The top deck of trolleybus 21, and the motorised top deck of trolleybus 14, outside the Apprentice Training College at Chullora on 5 November 1980. The mobile body frame of trolleybus 19 can be seen in the background. Dennis O'Brien





The top deck body frame from trolleybus 21 being lowered onto the frame of the lower deck of trolleybus 19 at Chullora in 1986.

Dennis O'Brien

Warringah Shire Council and these were fitted to the existing road rims at Chullora.

Bodywork

All the bodywork was either repaired or replaced, including top and bottom floors. The rear staircase was repaired and installed. The top deck was removed and replaced with the top deck from No. 21. The rear platform was rebuilt and all glazing fitted. A front door was manufactured by the Stage 1 carpenters and fitted using hinges and top roller guide from a former Municipal Tramways Trust, Adelaide Leyland Worldmaster motor bus. Hunters Hill Bus Co (later North & Western Bus Lines) had used these interesting vehicles, and owner Ken Butt was most supportive of our objectives. Ken allowed us to remove many items including brake rods and clevises to complete the project.

Other body items, both large and small, were collected. These included the kerosene emergency tail lamp from Frank Moag that had previously been allocated to trolleybus No. 13. It was ironic that about this time David Wilson located the top deck of bus 13 at Quakers Hill in western Sydney. Once again, small body parts were obtained. Destination blinds came from the late Norm Boxall and an interior builder's plate from Ian MacCowan. However, the most interesting items were a trolley pole retrieving rod and an interior AEC English Electric winged badge. The late Terry Bolton had acquired these on the last night of the trolleybus service in 1959. The wheel nut guards

(dress rims) were donated by various private bus companies across New South Wales. The locating studs were turned at the Sydney College of TAFE.

Over the years that the bus was being worked on, a large number of apprentices gained skills that were to stand them in good stead as tradespersons.

By December 1987, the restoration had proceeded to a stage where an inspection was arranged for museum members and friends who had supported the project from its beginning on 12 December 1986. George Joyce and his staff kindly showed us the progress made on the trolleybus, and also on the KA class tramcar then being refurbished for the Steam Tram & Railway Preservation Society.

As a result of a restructuring of the State Rail Authority of NSW, the Apprentice Training College closed at the end of 1988, and the trolleybus was returned to the Sydney Tramway Museum for completion of its restoration. A small handover ceremony was scheduled at the college on 8 December 1988. George Joyce gave a brief address on the project and Bob Cowing, Chairman of the Museum's board of directors, accepted the restored bus on behalf of the Museum.

The move to Loftus

The next day, our friends from the Bus and Truck Museum arranged to tow No. 19 from Chullora to their museum site at the former Tempe tram depot.

A rear view of trolleybus 19, outside the Apprentice Training College, after the bus was handed over to the Museum on 8 December 1988.

D. O'Brien collection



Overnight, our bus was in the company of trolleybus No. 1, on loan from the Powerhouse Museum. This interesting single-deck three-axle AEC trolleybus had operated on the former Wylde Street-Kings Cross-Town Hall service and was later transferred to the Ritchie Street Depot at Sans Souci. It had been donated to the Museum of Applied Arts and Sciences for preservation in 1957 and had been restored commercially.

Several former garage staff from the Ritchie Street Depot, including the driver and conductor of the last trolleybus service, had shown great interest in our bus and had requested an inspection of it. Under the guidance of Roy Gould and Jon Graham from the Tempe museum, trolleybus 19 was towed along Rocky Point road and parked outside the site of the former depot where many former trolleybus staff had

assembled. Many yarns were exchanged and memories rekindled during the 1 1/2 hour layover. The bus then continued its journey to Loftus where it was stabled in the new display building.

Chris Jacobs and fellow members installed the top deck seats and carried out a small amount of additional work associated with the restoration. The very last electrical item to be procured was the electric hooter. This was made available from our friends at Tempe, and the author can testify that it works very well.

The project to restore trolleybus 19 would not have been possible without the help of many people, who provided assistance, financially, materially and physically. We offer our sincere thanks to them all.

Trolleybus 19 arrives at Loftus, hauled by the HCVA's Perth MTT No. 3 tow truck. The tow truck was converted from a former Melbourne Leyland half-cab bus.

Dave Smith, conductor on the last trolleybus, took this photo



Footnote

Since this article was written, advice has been received that the former owner of the chassis of AEC trolleybus No. 2, located at Orange in the central west of NSW, had died. Inquiries through the Bus and Truck Museum revealed that this complete chassis had been donated to them for eventual display at Tempe.

Whilst travelling to Parkes, the author visited the premises and was allowed to examine and photograph

the chassis where it had lain for the last 45 years. It is unfortunate that the Sydney Tramway Museum did not have access to this item when searching the world for parts.

However, all was not lost, as we were presented with the original headlamp rims and reflectors from the long ago scrapped bodywork. After being polished these were fitted to our bus, finally finishing off our long efforts in securing those elusive trolleybus parts.

SYDNEY TROLLEYBUS 19 IN SERVICE



Sydney trolleybus 19 in Rocky Point Road at the 'loop' in August 1958. Martin Pinches

Trolleybus 19 departing Kogarah railway station several weeks before the closure of the Kogarah-Rockdale-Sans Souci system in the early hours of 30 August 1959. David Taylor



HERE AND THERE

NEWS ITEMS OF INTEREST FROM ALL OVER

Possible extension of Sydney's light rail line to Circular Quay

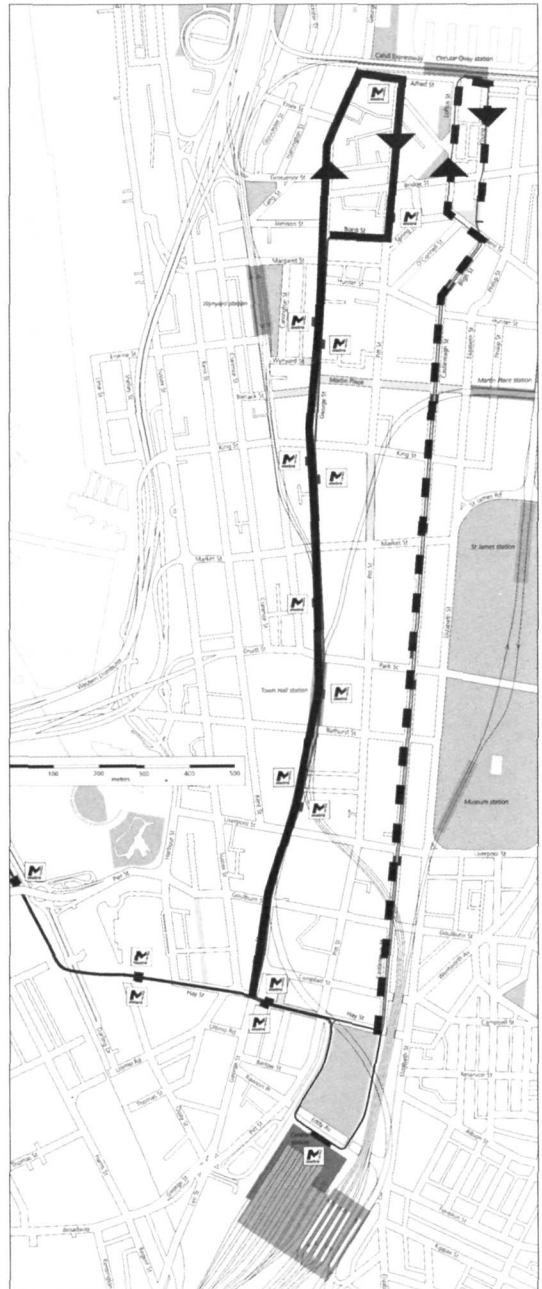
An extension of Sydney's light rail line is almost certain to go ahead with a new \$200 million link taking passengers in both directions along George Street from Central Station to Circular Quay, according to Sydney's new Lord Mayor, Clover Moore.

Cr Moore supports the extension of the line into the city's central business district, which she said had the support of NSW Infrastructure Minister Craig Knowles. In May, Mr Knowles announced two proposals for extending the light rail into the CBD. Although these included a route along Castlereagh Street, Cr Moore said the George Street route was preferred.

The Lord Mayor said the CBD link would give impetus to expanding the light rail system from Central Station to the University of Technology and the University of Sydney. Other extensions could include Redfern and Green Square. "There could be another link from the CBD to sports stadiums at Moore Park and the University of NSW," she said. The \$200 million collected by the NSW Government through its CBD parking levies could finance the new links. A light rail extension in the CBD would provide much needed public transport in the city," Cr Moore said.

"The first stage is going to be built and we hope will lead to an extension to the inner west. Craig Knowles has acknowledged that this is going to happen. We are going to prepare a comprehensive transport plan in consultation with him. He says he wants to work with us and he wants to see it happen", Cr Moore said.

This map shows two options for extending the light rail line through Sydney's CBD to Circular Quay. The solid line shows the preferred route along George Street, and the broken line shows an alternative route along Castlereagh Street. Courtesy Metro Transport





An artist's impression of trams in George Street, Sydney, looking south from Liverpool Street.

Courtesy Metro Transport

Adelaide's Bay Line

The South Australian Government has been accused of poor planning because of a \$16 million cost increase for the proposed Glenelg light rail project. Budget estimates place the cost of building the nine new trams at \$71.9 million instead of \$56 million as planned. Transport Minister Trish White told Parliament in May that factors including increased worldwide demand for light rail vehicles had contributed to the price rise.

"From the time when the Government approved the original estimate in September to when the tenders were received in January, there was a significant increase in the price of trams worldwide," she said. Her department had sought advice from the private sector, had considered the price of trams being bought by Melbourne, and had monitored the cost of comparable overseas purchases. "It is apparent now that the Victorians purchased at the bottom end of the market before the increase in demand occurred" she told Parliament.

Funds for replacing the Glenelg tram fleet were contained in the Government's 2003-04 state budget. The new commuter system between Glenelg and the city is planned to include an upgraded power supply, track improvements, upgraded tram stops in addition to the nine new trams. A worldwide call for tenders for the new cars closed on 6 January 2004.

Ms White said tender negotiations were still under way, and the first trams expected to be delivered on schedule in December 2005.

Ground-breaking start for Vermont South tram extension

Work began on the \$43 million Vermont South tram extension project on 8 June 2004, when Victorian Minister for Transport, Peter Batchelor, turned the first sod to extend integrated tram and bus services to Knox City.

Mr Batchelor said the project would result in improved transport services for Melbourne's eastern suburbs, providing growth opportunities for the area.

"The tram route will be extended along the Burwood Highway from Blackburn Road to Vermont South shopping centre. The Knox City bus service will be improved to such an extent it will be arguably Melbourne's best bus service," Mr Batchelor said. "This will mean residents in Melbourne's east will have better access to the excellent shopping centres and facilities in Vermont South, Knox City and surrounding areas, as well as to metropolitan Melbourne."

Mr Batchelor urged people travelling on the Burwood Highway to be patient during the construction period. "Every effort will be made to minimise traffic disruptions. However, despite careful management, some traffic delays can be expected in a project of this nature. A detailed traffic management plan has been developed to minimise inconvenience to road users, and changes to traffic conditions will be extensively advertised in advance."

Mr Batchelor emphasised that the long-term benefits of the project would far outweigh any short-term inconvenience during the construction period. "It is essential that our growing suburbs are connected to both metropolitan Melbourne and surrounding suburbs, and that all members of the community can readily access community facilities and shopping centres without needing to rely on a car."

Thiess Pty Ltd has been contracted to design and construct the road and tram infrastructure with works scheduled for completion in mid-2005. Construction works include extending tram route 75 three kilometres along Burwood Highway from the current terminus at Blackburn Road to Hartland Road, Vermont South.

Kirstie Marshall, Member for Forest Hill, said an integrated tram/bus interchange would be built opposite the Vermont South shopping centre and ten new raised tram platforms with shelters would be installed along the route. "In addition, an extra set of bus stops will be installed between Vermont South and Morack Road, thereby reducing the walking distance to stops. The increased frequency and accessibility of local buses and trams will provide a more efficient and convenient public transport system for the eastern suburbs," Ms Marshall said.

Peter Lockwood, Member for Bayswater, emphasised that the improvements to the bus services were a major component of the project. "Every tram will be met by a bus to Knox City, nearly doubling the current frequency of the Route 732 bus between Vermont South and Knox City," Mr Lockwood said. "This will ensure that the benefits of the extended tram line are passed on to those further to the east."

The tram line extension and the associated enhancements to the Knox City bus services form part of the Victorian Government's transport package for the Mitcham-Frankston corridor which aims to provide integrated and accessible public transport for Melbourne's east and south-east.

For regular updates on the project visit <http://www.linkingvic.vic.gov.au/vermontsouth>

Yarra Trams renews tracks in Collins Street and Glen Huntly Road

Yarra Trams began a major track replacement project in Collins Street over the Queen's Birthday long weekend.

The work took place in Collins Street between Swanston Street and Spring Street from Saturday, 12 June to early morning on Tuesday, 15 June. Trams on routes 109 and 112 were diverted in both directions

via La Trobe Street. Shuttle trams operated in both directions along Collins Street from Elizabeth Street over Spencer Street to the Collins Street extension.

The work was part of a \$3 million project to upgrade tram infrastructure in Collins Street. It included replacing tracks laid in 1969. The remainder of the Collins Street track replacement was due to be completed by the end of July 2004, programmed on two weekends.

Also on the Queen's Birthday long weekend, Yarra Trams scheduled maintenance in Glen Huntly Road between Station Place and Mernda Avenue. Tracks installed in 1921 were replaced as part of a \$1 million project. Buses replaced Route 67 trams between Glen Huntly Depot and Carnegie terminus.

New tram stop opened at Middle Park

Yarra Trams Chief Executive Officer, Hubert Guyot joined Victorian Transport Minister, Peter Batchelor and the Mayor of the City of Port Phillip, Cr Dick Gross at the launch of a new tram stop. Invited guests travelled by tram to the Danks Harold Easy Access Tram Stop in Danks Street, Middle Park.

The new tram stop has been funded by the City of Port Phillip under its Streets for Living program. Yarra Trams CEO Hubert Guyot made the following remarks during the launch:

"It was nearly 80 years ago, in 1925, when trams first travelled along Danks Street here in Middle Park. At that time, the trams shared the street with horse-drawn vehicles as well as automobiles. To this day, Danks Street still retains much of its charm, but in 2004 it also has many more cars than it did all those years ago.

"It is estimated that 60 per cent of commuters in the Middle Park area drive a car to work, but Australian Bureau of Statistics census data show that commuting by tram has increased to around 25 per cent.

"That is why Yarra Trams is proud to be a partner in a project that recognises that our streets are not just for motorists.

"The City of Port Phillip has invested in a vision that makes the streets more liveable. By challenging the notion that streets are for cars, the City of Port Phillip has reaffirmed the importance of improving public transport facilities.

"Yarra Trams has a vision to improve tram infrastructure for better tram travel. We want to improve journey times, reduce boarding delays at tram stops and provide greater comfort and safety for our

passengers. The Danks Harold Easy Access Tram Stop is a demonstration project that could be a prototype for other locations around the tram network.

"This new Easy Access Tram Stop helps the Yarra Trams effort to improve the service for our customers. It will certainly be appreciated by the nearly 2,000 tram passengers who either use - or travel through - this stop every weekday. We want to change the feeling that public transport passengers are second class citizens. They are first class citizens and they deserve first class treatment.

"That is why Yarra Trams applauds the City of Port Phillip on its initiative here in Danks Street to reinforce that public transport is valued by the community. More improvements to tram travel can be expected because of the two-year Tram Priority Program. Yarra Trams is

a partner with VicRoads and the Department of Infrastructure in this \$30 million initiative.

"The objective is to improve tram travel times on the busiest parts of Melbourne's tram network. The Tram Priority Program will achieve this with new-design tram stops, new rules for motorists, improved technology and a link between the VicRoads traffic management centre and the Yarra Trams control centre."

Trams may yet return to Hobart

Hobart may see the return of trams after a council committee opened the way to re-activate the city's bicentenary tramway project. The Policy and Inter-government Committee will recommend that council consider a new route, linking the CBD with the waterfront.



Melbourne Z2 car 107 at Flinders Street railway station whilst operating the last M>Tram service at 2:10am on 18 April 2004. Ray Marsh



Melbourne B2 car 2109 in Victoria Parade at Brunswick Street on 19 May 2004. 2109 is advertising the operation by Yarra Trams of the entire Melbourne tramway system, after the departure of National Express. Steven Altham

Hobart's bicentenary tramway project faced abandonment when heritage and viability concerns were raised about the proposed Sullivan's Cove route. The committee has now decided to call for a report on running the tramway from the Collins Street end of Elizabeth Mall to Hunter Street on the waterfront. An extension to the Botanical Gardens could be considered in about three years when the existing railway line became available.

Committee chairman Lord Mayor Rob Valentine says a good outcome has been reached. The full council, which has the same composition as the committee, is certain to pass the recommendation.

Newcastle L/P car 284 moves again

Newcastle L/P class car 284 moved from Cessnock to the Newcastle Regional Museum for restoration on 22 July 2004. The museum's curator, Julie Baird, reported that the restoration would cost at least \$10,000. It will include the installation of new glass, exterior painting, roof repairs and interior refurbishment.

Hong Kong trams celebrate their centenary

Amid the frenetic pace and gleaming architecture of Hong Kong's financial district, trams may seem slightly out of place. But 100 years after they first entered service, the island's double-deckers remain one of best-loved modes of transportation in a city not known for preserving its history. Together with the Star Ferry and the Peak Tram, the trams are one of the most endearing forms of Hong Kong's heritage. Many events are planned to mark their centenary.

In terms of speed, efficiency and routes, the trams by no means match the sophistication of Hong Kong's buses or subway system. There are six routes which serve the north of Hong Kong Island and cover a distance of 30 kilometres. No doubt its inexpensive fares – only two HK dollars (about 34 cents Australian) – have helped the system to continue to attract passengers. However, there are other more sentimental reasons which have kept it going.

Frankie Yick, director of the Hong Kong Tramways, which operates the trams, defends the misconception that they are slow. He argues that "statistics show that buses and cars usually only travel at about 10 to 12 km/h in the busy districts, but trams travel up to 40 km/h because they use a fixed route".

The routes take passengers along one of the most historically rich areas of the city, making trams a joy to ride for both locals and tourists alike, Yick says. "Trams are part of the routine for people who take them every day as they become so familiar with its

route, and it is a pleasure to travel on trams. Some like the fact that they are not air-conditioned and they can feel the breeze on the top deck, while others simply like to take in the views," Yick said. "Passengers develop feelings for them; there is something sentimental and nostalgic about them," he said.

Hong Kong Tramways began in 1904 with a fleet of 26 single-decked tramcars. In old colonial Hong Kong, the trams were divided into first class or third class. Class distinction was not abolished until 1972. The familiar double-deck trams were first introduced in 1912. Today the fleet comprises 163 trams and is the world's largest fleet of double-deck tramcars still in operation. It serves an average of 240,000 passengers each day.

As testament to their resilience, the trams survived the opening of the underground railway in Hong Kong in 1980, which many thought would render them redundant. Despite an initial drop in passengers, numbers quickly rose again after people discovered that the underground trains were not always quicker or more convenient than their older, hop-on hop-off counterparts.

The tramway system also pulled through the Severe Acute Respiratory Syndrome (SARS) crisis of 2003, which saw business fall by as much as 20 per cent amid a widespread fear of crowded spaces in which the disease might spread.

Frankie Yick does not see the trams' popularity waning any time soon. "I only see trams becoming more popular. In the 1970s and 1980s, many countries abandoned the street trams for cars and buses. Today, as the world is increasingly environmentally aware, they are making a comeback," said Yick.



Two 5-section Combino trams in Swanston Street on 23 June 2004. The leading car is 5002.

Howard Clark



Melbourne Z3 car 118 at the intersection of Elizabeth Street and Bourke Street on 12 May 2004. The car carries Yarra Trams' livery, of which there are several variations.

Steven Altham

These two former Melbourne W2 class cars, 415 and, at right, 350 are mounted on makeshift bogies which formed part of the "Tram Eatery Darwin" on the city's waterfront. A visit in April 2004 suggested the business was defunct. Is Darwin's Stokes Wharf precinct the most northerly point reached by a Melbourne W2 class tram in Australia?

Catherine Burke





Melbourne 3-section Combino 3524 at Domain Interchange in St Kilda Road on 21 April 2004. The tram's advertising uses a haystack theme to promote a website.
Ray Marsh

WHITEMAN PARK

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

www.pets.org.au

From Michael Stukely

Tramway operations

Between April and June, patronage on the trams has continued at satisfactory levels generally, with April an outstanding month.

As always, visitor numbers at Whiteman Park have been strongly influenced by the weather. Mothers Day and the June long weekend are usually busy days requiring two-car operations, but this year, wet weather was experienced on both occasions and passenger numbers were low, with only one tram needed. The Bennett Brook Railway's 'Friends of Thomas the Tank Engine Day' was held on Sunday 23 May. Two trams were rostered as this event is usually also very popular, but wet weather meant that only one was needed.

Easter, in contrast, was fine, the Park was busy and two cars were used on both the Sunday and Monday. We are very grateful for the generous assistance of our visiting Melbourne-based member, Bill Kingsley, who drove service trams on each of the four days again this year. Thank you, Bill.

Trams and infrastructure

The Wednesday team has continued its sterling work in several essential areas, including tram maintenance.

W2 class tram No. 393 underwent minor, major and 'C' (periodic) services in May-June, and Fremantle 29 was given minor and major services. Geoff Morrison, Jim McCamley, Kurt Gahler and Gareth Watts have assisted Noel Blackmore with this work. Frank Edwards has fitted anti-slip tread sheets to the end-platform boarding steps of FMT 29, which is a significant safety improvement for the winter weather.

The No. 1 truck from W2 No. 393 has been successfully tested following its repairs carried out by Kurt Gahler, Jim Paton, David Secker and Gareth Watts. It had been planned to install this truck under W2 No. 329 in June to enable the return to active service of that tram. However this has been delayed as it was found that the badly worn centre bearing of the truck requires attention.

Noel Blackmore has carried out the annual maintenance of the traction power supply system, and Noel, together with son Ray, has repaired and adjusted the overhead as necessary. The war continues against the termites that apparently regard our jarrah span poles as a delicacy, with several more poles requiring treatment.



Replacing rotten crossing timbers at the southern points of the passing loop at Stockmans Triangle on 3 April. Terry Verney (nearest camera) guides the sleeper with a shovel as it is pushed into position by a tractor driven by Trevor Dennhardt. Lindsay Richardson (left) and John Davies check clearances.

Michael Stukely

The track team has done some major sleeper replacement work just north of Stockmans Triangle. Six rotten timber sleepers were replaced with timber and steel sleepers at the southern loop points (including crossing timbers), and four sleepers replaced at the site of the old siding points which have been removed. Check rails have been reset at the southern loop points, and at the mainline turnout leading to the Lindsay Richardson Carbarn. Minor

maintenance has continued at various locations, and the track generally is in good condition following the completion of the main steel sleeper installation program between the Carbarn and Village Junction terminus. Jim Paton, Tony Grose, Peter Rankin, Terry Verney, John Davies, Martin Grant and Michael Stukely have assisted Trevor Dennhardt and Lindsay Richardson on various occasions.

A run of ingots for new check-rail spacer blocks has been cast, but before this could be done the wooden pattern for manufacturing them had to be repaired and re-sized by Noel Blackmore. Tony Grose is now preparing the blocks for use.

The Lord Street branch, which now does not see regular traffic, has occasionally been re-energised for special trips; the track and overhead must now be checked each time before trams are operated beyond the section insulator east of Stockmans Triangle.

Museum site and facilities

Lindsay Richardson reports that Noel Blackmore and Kurt Gahler have completed the final lining and levelling of the rails and their supporting pillars on the tram service pit in the Engineering Shed. This now enables the commencement of the next step towards the pit's completion – the selection and fitting of rails to complete the track through the rear doors and connect with the track already laid in the rear compound to the west of the shed.

A major tidy-up of the W P Pennenburg Workshop is progressing, with electrical and mechanical parts being transferred to the Geddes Spare Parts Shed.

Motor vehicles and plant

The tractor and Albion cherry-picker, two essential items of equipment, have received maintenance attention. The Broomwade air compressor (used mainly for trackwork) has received urgent repairs after its cooling radiator failed and a fusible safety plug was lost. Pat Ward, Noel Blackmore, Kurt Gahler and Jim Paton have been busy in this area.

Several very useful items of equipment have been donated to the Society recently. These include an unused "Avometer" model 7 Multimeter, a new electric hand saw and carpenter's work bench, an electric winch for use on the per-way Toyota and a 2-tonne chain block for lifting operations in the workshop.

WAGT tram No. 66

The pace of work on the restoration of Perth E class tram No. 66 has increased in recent months, with Frank Edwards and Darren Ward attending regularly.

The track team stands W2 class 393 passes over the re-sleepered points at the southern end of the passing loop on 3 April.

Michael Stukely



The roof boards had shrunk significantly over the last summer, leading to a widening of the gaps. The timbers have now been fully coated with Duram to provide a flexible and smooth base for the application of the new canvas. Other finishing of the roof and edges has been completed. The tongue-and-groove cladding boards have been returned to the end-platform sides of both end bulkheads, and the bulkhead windows and refurbished sliding doors installed. Preparation of the interior fittings for installation is continuing.

Accreditation matters

Personnel from the Regulator carried out the annual safety compliance audit on 20 April, and we passed with flying colours receiving a small number of Observations (matters drawn to our attention) that required minor administrative follow-up action.

The new National Standard for Health Assessment of Rail Safety Workers took effect in Western Australia from 1 July 2004, and we have had to apply for a Variation of Accreditation to implement the new requirements. Risk assessments of all of our rail safety tasks had to be carried out and documented, in order to determine the appropriate levels of medical testing necessary for our personnel. Michael Stukely and the Safety Management Committee have coordinated this work.

Promotion and new souvenirs

One of our major external promotional opportunities each year is the Australian Model Railway Association show, held at Claremont Showgrounds over the June

long weekend. John Stone coordinated our display/sales stand again this year, with assistance from many other members. The Society won the award for the best non-trade display. We were fortunate to have on show a new scale model of a Perth Leyland 3-axle trolleybus that was built from scratch recently by Laurie Ahearn, in addition to his Sunbeam trolleybus model, and Kurt Gahler's model of Perth E class tram No. 66.

Carbarn tours have continued on the fourth Sunday of each month, conducted by Tony and Beth Kelly, and attendances (and sales) have been encouraging.

Martin Grant has introduced a new line of sales items that has already proved popular – a colouring book containing line drawings of trams from various Australian systems. Other recently introduced lines include specially designed caps and stubby-holders.

COTMA conference

Four PETS members and one partner travelled from Perth to attend the recent COTMA conference in Auckland, New Zealand. Members were delighted to hear that we received an Achievement Award for our mainline re-sleepering project, and it was very fitting that this award was received on behalf of the Society at the conference by our Track Supervisor, Trevor Dennhardt and Track Adviser, Lindsay Richardson.

We take this opportunity to congratulate and thank Paul Dillicar (FRONZ) and Chris Cameron (Western Springs Tramway) and their organising committee for all their hard work in organising this very successful conference.

BALLARAT

Ballarat Tramway Museum

PO Box 632, Ballarat, Victoria 3353

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

From Dave Macartney

A strategic planning day was held on Saturday, 3 April to discuss various options for future projects. The venue was the Moorabool Reservoir Lodge of the Ballarat Water Board, with some sixteen members attending. A full day was spent mulling over various prospects.

The second annual tram pull was conducted at the Gardens Loop on Sunday, 2 May. The museum provided Nos 26 and 28 for the occasion, with the actual event under the control of Ballarat Rotary – Young Ambition. Teams of ten heaved the trams up and down the loop until a winner emerged. This year it was the team from TGM which took first prize. Some \$6000 was raised, which was donated to the Ballarat health Services for the installation of a dialysis machine. A protest based on the weight difference between the two drivers was dismissed.

During autumn the Ballarat City Council undertook the resurfacing of Wendouree Parade from the Loop to Carlton Street. Much of this had been untouched since the SEC days and had become very uneven. Initially the old asphalt was stripped from between the rails and replaced, then outside the rails on the Parade side. By 8 June, the work was finished and, with the St Aidans Drive end resurfaced last year, the whole tramway now looks like new. Since the completion of this work the undergear of the trams is much less dusty at the end of the day's running.

Around the depot, work continues on No. 40, with the trolley bases stripped back to bare metal. When struck with a hammer the springs now make a melodious twang instead of the dull thud when covered with twenty layers of paint. The dash panels are being removed for replacement, with work also being carried out on handrails and roof canvas. The armature from the No. 1 motor returned from re-insulation on 16 April, but minus the gear pinion. This was subsequently located at the contractor's workshop but the nut could not be found and a new one is to be manufactured. All this is delaying the re-trucking of No. 40.

Track cleaner No. 8 progresses slowly due to the onset of winter weather. A leaking sandbox has been sealed and the tank supports stripped and primed, but the remainder of the repaint is waiting for better weather.

A charter with a difference took place on 20 May, with 175 Year 8 students from St Patrick's College visiting on the subject of 'changes'. They were split into seven groups of 25 and visited various locations around the Gardens throughout the day. Secretary Peter Winspur had to deliver the same speech seven times.

ST KILDA

Australian Electric Transport Museum (SA) Inc

GPO Box 2012, Adelaide, South Australia 5001

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

From Colin Seymour

Annual General Meeting

The 47th AGM of the AETM was held at the Museum from 4:00pm on Saturday, 1 May 2004. This was about four weeks earlier than normal as a number of members planned to be in Auckland from the end of May for the COTMA Conference. The committee remains the same as last year.

In his report to the meeting, President, Colin Seymour, pointed out that the enforced five months operating as a static museum, without public rides, saw a disastrous drop in visitor numbers and hence income. Adult visitor admissions against the same five-month



Penrice Soda has erected a fence with cloth barrier along the north-east side of its salt lake adjacent to the St Kilda tramway. Car 264, driven by Barry Fox, passes the new fence.
John Radcliffe

period the previous year were down 62 per cent and concession admissions were down 80 per cent. The increases in visitor numbers immediately prior to, and immediately following static operations were welcome, but were not sufficient to make up for the loss of visitors during this period. The Museum survived financially as budgeted expenditure was put on hold because of the unknown effect of our inability to obtain public liability insurance cover.

The conclusion drawn from the 'static museum' experience is that while the Museum's constitution defines its purpose as conservation of Adelaide's historic transport vehicles, the principal revenue source for the Museum to pursue that goal rests on the public's interest in the recreational opportunity that

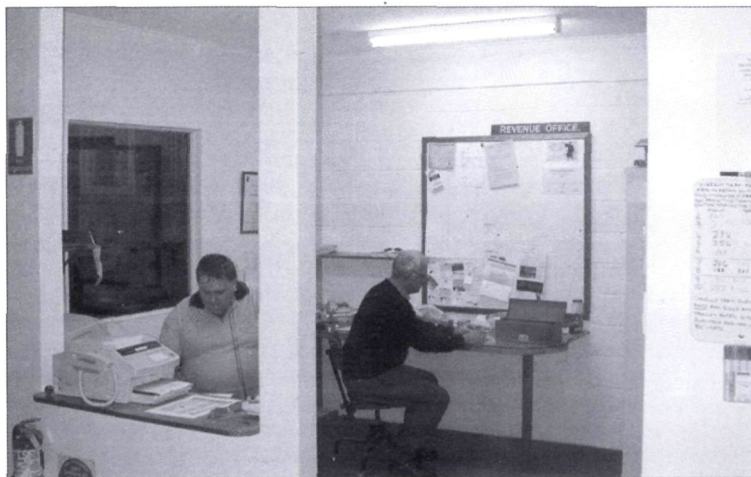
tram rides present. However, when the public liability issue is resolved, it is likely that we will have to pay at least double, or possibly more, than we did several years ago. In short, in order to survive, we must have more 'bottoms on seats'.

Public liability insurance

The AETM has joined with five other heritage rail groups in South Australia to obtain public liability cover through the Local Government Risk Services (arranged in conjunction with SA Tourism) for 12 months from 1 July 2004. The premium is considerably more than we had hoped, so we will watch other developments around the nation with much interest.

End of the day at St Kilda – Peter Vawser tidies up computer records while Gavin Fuller counts cash.

John Radcliffe





The 'low' or saloon end platform of E 118 has had the small steel bulkhead and a motorman's seat installed.

Ian Seymour

Winter Solstice Day

Following the initiative of the Sydney Tramway Museum in 2003, a Winter Solstice Day was held on 20 June 2004. Instead of closing at 5:00pm, the Museum remained open until 7:00pm to enable passengers to experience the thrill of night rides on our museum trams. This was a bold move as it is somewhat

colder in Adelaide in June than it is in Sydney. The forecast was for a bleak winter weekend. However, the afternoon weather remained sunny with little wind. It is interesting to note that it does not get dark in Adelaide until about 5:35pm. Although the afternoon started quietly, numbers increased later in the day. In fact, several adult fares were sold at 5:45pm! The day was quite successful, although we could improve on the publicity.

Our Winter Solstice Day coincided with an 80th birthday party at the Museum for member, Peter Letheby. Members joined Peter's family and friends from Pichi Richi Railway where he is also a member, for a barbecue around a bonfire. The sight of night tram rides made for a very special birthday party.

Car 118

The Museum has accepted a quote from Bendigo Tramways for construction of the end cabins for 118. John Pennack has refurbished and re-installed the longitudinal saloon seats.

Rail groups meeting

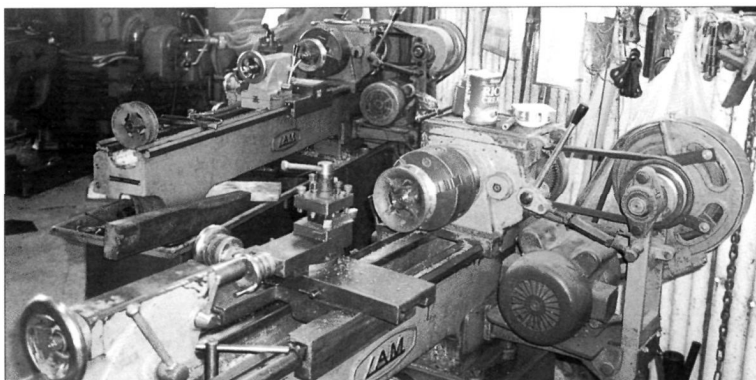
The AETM was the meeting place on 19 and 20 June 2004 for a gathering of representatives from heritage and tourist rail groups from each state. The purpose of the meeting was the formation of a national body. Ian Seymour as convenor of CHRTSA (Council of Historic Railways and Tramways of SA) and also representing COTMA, hosted the meeting which was held in the Museum lounge.

On the Saturday, tram 294 was used during the lunch break for a ride to St Kilda and 111 was used for transport to the evening meal at the St Kilda hotel. The meal ended up as a candle lit dinner because of a power failure in the St Kilda district. A car pool system brought diners back to the museum after the meal. The meeting finished at lunchtime on Sunday, and a guided tour of the workshops and lathe shed was arranged after the visitors had sampled our public operations.



A small Lantaine lathe (rear), similar to that purchased in the early 1980s (front), has been obtained to speed up completion of jobs in the workshop.

Ian Seymour



A small Lantaine lathe (rear), similar to that purchased in the early 1980s (front), was recently obtained to speed up jobs in the workshop.
Ian Seymour

COTMA

Four members attended the COTMA conference in Auckland. Ron White gave a talk on the museum experience during the period of static operation from April to September 2003, and Ian Seymour gave a talk on the wheel turning lathe at St Kilda. Ian also attended the Association of Tourist Railways of Victoria conference hosted on the previous weekend, 29-30 May, by the Puffing Billy Railway.

Other news

A colour museum brochure has been printed through a contact of Geoff Grantham.

The lack of public transport to St Kilda can pose problems, especially for interstate and overseas visitors. Geoff Grantham, who runs Buses R Us, is providing a return bus from Salisbury Station to the Museum on the second Sunday of each month at no cost to the Museum. The bus departs Salisbury at 12:30pm. Passengers must book beforehand by phoning (08) 8262 6900. The service is now publicised in newspaper advertisements.

New controller finger segments for our direct control cars are being made from square copper bar to replace worn ones beyond refurbishing. One lathe is set up for drilling and tapping the copper and the second one for turning the half round profile or refurbishing partially worn tips.

LOFTUS

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

www.sydneytramway.museum.com.au

From Michael Giddey, David Critchley and Howard Clark

Grants

We have received the good news that our application to NSW Heritage was successful and matching funding of \$50,000 (out of \$58,000 applied for) has been provided to support the restoration of J class car No. 675 under the 2005/2006 heritage initiatives programme. We had previously gained a \$5000 grant to support the acquisition of a Brill 21E truck for the car which is now in Bendigo, where preliminary work on its restoration including new top chords is under way. The clean out of J 675 on site will need to be completed as the next step towards its restoration.

YMCA building

Following the receipt of a \$50,000 developer 'gift', stonemasons were engaged to complete the ground floor columns. This was achieved by removing the original stone blocks to a quarry for cutting into slabs for cladding against a steel supporting frame. For the thinner northern end column, full size blocks were cut to fit. The original decorative fascia over the doorway was slotted into place using the original full size stones. The two stones above the doorway were cut to fit whilst new header cornice stones were moulded to shape based upon original photos, as the original stone



Vic Solomons (right) operates the overhead crane to lower an overhauled motor bogie 42u. Warren Howlett, Terry Thomas and Aaron Peek, our work experience student from Endeavour Sports High School, are ready to settle the motor into position.

Martin Pinches



Our Wednesday work team has constructed the framework for our barbecue shelter. Andy MacDonald cleans tiles ready for fitting to the structure.

Bob Merchant



Chris Olsen adjusts the overhead wiring in the depot yard. The work pauses as Tom Tramby, operating the bucket controls, discusses a point with Bob Cowing. A CSO worker panel beater was restoring the bodywork of the truck, but he completed his time before the work was finished.

Bob Merchant

This view shows the work on the ground level columns of the YMCA façade in June 2004. The steel supporting columns are clad in slabs cut from the original stone columns.

Bob Merchant



was not recovered from the demolition. Sign-writers will now replicate one of the original signs to fit above the shopfronts. The other three are outside our budget and require approximately \$7,000 funding.

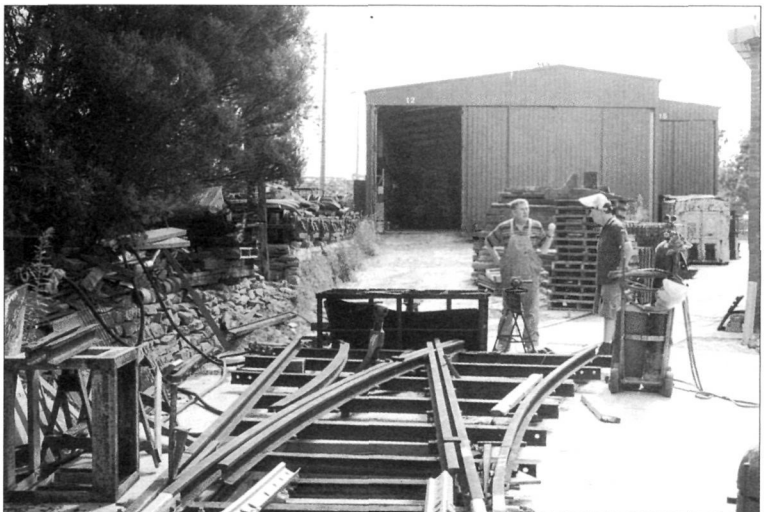
Depot yard

The completion of the extension of the 100mm fire hydrant main from the front of Road 1 to the back of the workshop and the backfilling of the trench has allowed most of the remaining unpaved areas of the depot yard to be concreted. At the time of writing work is in progress to concrete the area alongside the workshop extension. This has involved welding some light steel I beams to act as permanent formwork for the point rod pits leading to the point levers for the three-way point and the removal of an old wooden span

pole at the south-west corner of the traverser pit. This pole became redundant on 19 June when David Rawlings erected a new span wire across the yard, which is tied off to the workshop building in lieu of the pole. Some drainage pipes, electrical conduits and additional track drains were also laid in this area and Graeme Russell has continued with the thankless task of descaling the rails in preparation for concreting. A steel cover has been placed over the Road 3 point-pit. Angle iron frames were welded and placed over a drain across the side roller door of Road 1 and over the fire main isolating cock so that the areas around these pits could be concreted.

The Tramby family Bobcat was on site for some weeks and was used to excavate the bank for the future 14 Road point lever. It was also used on 8 July to

John Matts discusses with Mike Giddey the construction of the pointwork for the top shed (background). Bob Merchant





Chris Olsen polishes our Bedford tower wagon prior to its display at the Council of Motor Clubs' classic event at Eastern Creek Raceway on 8 August.

Bob Merchant

Not previously mentioned in Trolley Wire are the signs added to the four museum signs erected by CityRail on the platforms at Loftus railway station. The additional boards provide information on our opening days and times. They were provided when other signage at the station was replaced earlier this year.

Bob Merchant



excavate around the side access ramp entry and side roller door to the top shed in preparation for construction of a brick retaining wall for the ramp and more concreting. It was also used to grade the way for the track into Road 14 after relocation of stored material. Tracklaying has commenced from the door of Road 14 as the first part of the fan for the top shed.

Our Wednesday team have been working on the new roof over the electric barbecues. It has a steel frame and is tiled with original French tiles salvaged from the Railway Square waiting shed. When re-erected, the waiting shed was roofed with new tiles, as there were not enough complete original tiles remaining. The left over tiles have been stacked on pallets so they can be readily moved.

Geoff Olsen placed two lights on poles to floodlight the facade at night and it was first used to display the façade during our Dawn to Dark special day. Geoff has carried out further electrical work inside the main shed and the workshop extension using the bucket truck manned by Tom Tramby.

Car news

On 5 June O car 1111 was returned to the depot after being outshopped from the workshop. Its place was taken by R1 car 1979 still on its temporary W2 shop trucks. Re-bushing the brake rigging of the trucks belonging to 1979 has been completed and work is now in progress on repairing worn brake rigging components under the car body. The bogies have been painted black. Compressor governors have been repaired on 1497 and 1971. Z2 car 111 had its Melbourne trolley poles replaced with Sydney poles with trolley wheels on 3 July, as the sliding shoes were causing excessive wear and tear on the pressed steel Sydney point frogs. Although we obtained crossing pans from Randwick Workshops we only had a small number of the more important point frog pans. A number of worn-out pans have been reconstructed by welding and modifying crossing pans.

The first of the Brill 27G trucks from 42u has been reassembled and is fitted with new cast brass axlebox covers with the Brill inscription and patent details. The motors and gear cases for the second bogie were moved from the storage rack to the workshop on 9 June and are now being cleaned. New gusset plates have been welded to the south end main cross member and the cross-member refitted to the frame.

New armature bearings have been cast for the defective traction motor removed from 99u and these will be machined and fitted to the motor.

Craig Parkinson and Chris Olsen have been working long hours on our AEC Matador recovery vehicle, to

Sydney O class car 1111 in Tramway Avenue on the evening of 20 July, with the floodlit YMCA façade in the background. Martin Pinches



have it ready for re-registration. The vehicle has been repainted, re-wired and fitted with a set of new tyres. They also stripped down the diesel air compressor for oil seal replacement and a general overhaul. However, some front end work was required which is being carried out in Wollongong and the Matador will unfortunately not be ready in time for display at the Council of Motor Clubs' classic event at Eastern Creek Raceway on 8 August.

Dawn till dusk

Sunday, 20 July 2004, the winter solstice, was the shortest day of the year, but at the Museum this year it was the longest day.

In the cold darkness of early morning, single headlights began to glow, and the peaceful pre-dawn calm was broken by the thud of compressors and the clang of bells as tramcars awoke from a winter slumber. Dawn that day bought an unusual spectacle as trams ran out to begin our very first early morning service. Then, as the smell of bacon and eggs cooking on the barbecue wafted in the breeze, R Class 1740 commenced the first journey of the day, the 7:15am trip to Sutherland. There were seven passengers and three crewmembers on this historic early journey. Seven passengers experiencing an almost forgotten Sydney experience; the early morning tram. Was it a workers tram heading for industrial Zetland or Alexandria? Was it the first trip across the Harbour Bridge? Or was it a journey through the exposed sand hills to La Perouse? It was all of them and more, the long shadows cast by the rising sun on a clear crisp winters morning, the biting chill of the breeze seeping through the canvas doors, the cold damp feel of leather seats. Although passenger numbers were only small,

we considered the morning a success, and fortunately for us the day only got better.

By 4:30 in the afternoon there was a buzz of excitement. Dusk was approaching and around the Museum the hard work of Geoff and Chris Olsen began to be appreciated. In the twelve months since our first 'Trams after Dark' event many more lights had been installed around the Museum. Among them, the temporary lights set up to illuminate the YMCA facade last year have been replaced by powerful permanent floodlights, the depot fan is positively 'bathed' in light and three lamps now illuminate Depot Junction.

Crowd numbers were similar to last year, with two tram convoys operating the 5:00pm and 5:30pm journeys to Sutherland. The feel was of peak hour, crowded trams brilliantly lit, passengers rugged up against the winter chills, children staring in awe of the drivers of C 29 standing bravely on the open platform. This year there were many more cameras than last year, tripods were in abundance and lens glinted in the dark. Again our barbecues came into their own as families arranged winter suppers while watching the passing parade of trams.

All too soon, it was time to finish up and trams made their way back into the depot, and our longest day finally came to a close. Some 12 hours had passed since the first journey of the day and it was a tired group that adjourned to a local Chinese Restaurant for a jovial evening meal.

We would like to thank all the crews who participated in the day and night, but in particular we would like to thank our early morning crew of Frank

McQuade, David Critchley, Kris Lawry, Ben Barnes and Bob Cooper for getting up so early to open the Museum. Thanks also to Geoff and Chris Olsen for their very important contribution and to Bob Pearce, Secretary of PETS in Western Australia and visitor on the day, for his support and encouragement. And finally, thanks to our workshop team, who ensures that we have a choice of operating tramcars available to use on these special event days. It is amazing to see what we can achieve when we work as a team.

Off-site activities

Greg Sutherland represented the Museum at a recent meeting called by the Railcorp Heritage Review Committee to canvas views on rail heritage matters

within NSW. The meeting was well attended by most rail heritage groups. Apart from the insurance issues facing all such groups another matter discussed concerned the need for protective undercover storage of heritage equipment, thus denying access to vandalism and deterioration from the elements. Mr Vince O'Rourke, the former Managing Director of Queensland Rail and previous senior NSW executive, chaired the meeting.

We have also provided input to heritage architects and consultants concerning a range of subjects including heritage adaptation of buildings and potential heritage tram operations, to the potential benefit of the Museum.

BYLANDS

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

www.tmsv.org.au

From Running Journal

Museum works

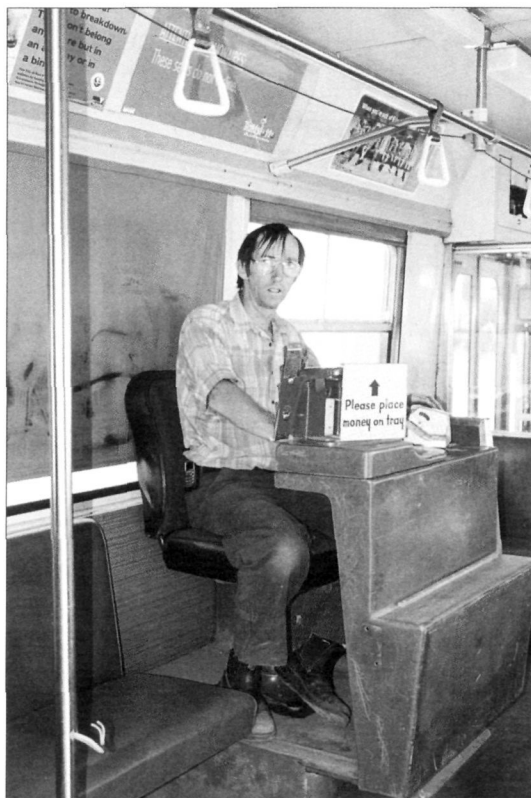
Work around the museum continues at a steady pace, mainly as a result of the continued dedication of a small band of volunteers. A number of tasks are under way at any one time, dependent on priorities. Effort is also being placed on the maintenance and presentation of a number of exhibits.

The construction of the trackwork for the Vehicle Maintenance Building is now complete, but still awaits welding of several joints and electrical bonds. Track lifting and packing is under way, but we need to purchase more ballast to complete this task. Rail trolley T2 was the first rail vehicle to travel around the new reverse curve into the Vehicle Maintenance Shed and over the pit. The bogies from W2 457 were later pushed around the curve for storage undercover in the shed.

Changes have been made in the kiosk. The members' table has now been relocated into the area immediately behind the current kiosk. This area is now called the 'Members' Lounge' where members can congregate during the day and at meal times. A

refrigerator has been placed in this area for members' use, thereby keeping the kiosk fridge free. The last piece of roof capping has finally been installed on the kiosk roof, which has now made the whole area waterproof. Unfortunately there were no original pieces of capping available, so it was necessary to make a replacement from a suitable piece of material. The picnic tables near the flagpole have been repaired and straightened and are now in a much more useable condition. These tables are popular with visitors in the warmer months of the year.

The clean up around the site continues between other tasks, with a quantity of old timber being consigned to the firewood pile. The former B van has also been cleared of material. The bus parts and motor in the old carport have been removed, sorted and restacked under cover elsewhere. It has also been necessary to adjust some of the visual displays in the Exhibition Shed, and relocate or add to some other display items. Filling of potholes in the various roadways around the site continues and several of the dangerous cypress trees around the house have been cut down, with more to follow.



Society Secretary Graham Jordan sits at one of the reinstalled conductor's consoles in Z1 No. 5. The console fittings – coin dispenser, ticket punch and ticket machine – have also been refitted.

Michael Fedor

Working bee day

On 15 May a small team comprising Graham Jordan, Daniel Berry, Brooke Tolliday, Becky Edwards and Corey Robertson undertook rectification work on a small section of our main line just north of the depot junction which had been found to be slightly wider than standard gauge. Six tie-bars were installed over the affected 10 metre section of track. Preparatory work had been undertaken several weeks earlier with digging out between the rails at the desired locations.

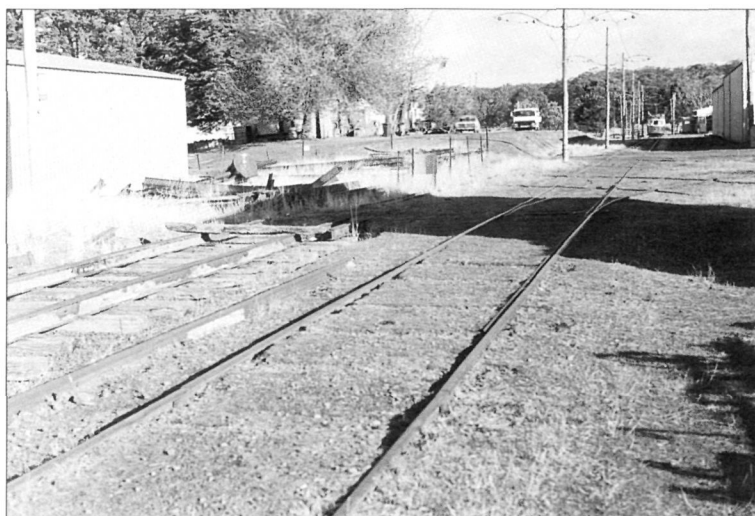
Once the main line was corrected, attention was turned to the final fixing of the rails to the pit. Sixteen holes were oxy-cut into the top channel of the pit along the inside edge of the rails. Specially designed rail fasteners originally used at the former South Melbourne depot were then placed and bolted into place. The outside edges of the rails had already been welded in place. Soon after the rails were secure, the ex-Preston tram trestle trolleys that have resided outside on the top of No. 1 road for some years were transferred to temporary undercover storage over the pit.

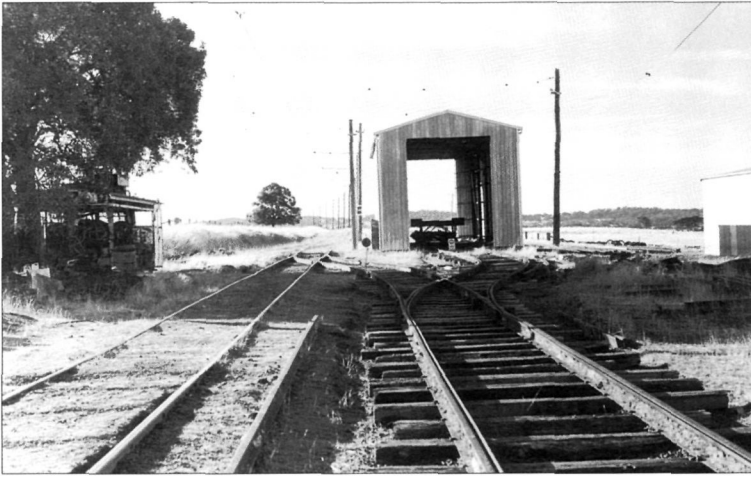
Other work undertaken on the working bee day saw a number of holes in the central pathway between No. 1 and 2 roads filled with screenings and some ballast distributed on the track in the Vehicle Maintenance Shed. Member Harry Twining must have thought he had been consigned to the rock pile for his efforts on these tasks. Keith Kings, John Walker and Michael Fedor assisted on the various tasks during the day.

The final work on this day saw a large portion of the cut-down cypress trees and other assorted combustible

Remedial work has been undertaken on a section of the main line north of the depot junction. A ten-metre section of track became over-gauge and required realignment. To the left is the end of the new siding, constructed as part of the trackwork for the Vehicle Maintenance Building.

Graham Jordan





The double track at Bylands: looking north from the depot junction are the completed crossover from the main line and the turnout to the Vehicle Maintenance Building.

Graham Jordan

rubbish burnt. A second clean-up has taken place since, with the remains of both the cypress trees and another fallen dead tree adjacent to No. 1 road now gone. We are certainly getting a taste for toasted marshmallows!

Fleet works

Works on tramcars and buses continue. The tasks of painting Ballarat No. 17 by Graham Jordan and tank car 7W by Michael Fedor continue as time and climatic conditions permit. Daniel Berry recommenced installation of the new longitudinal decking timbers that hold the trolley bases and poles on 7W, and these have now being fitted and secured. The original timbers, or what was left of them, were removed several years ago, before the car was placed

under cover in the depot on No. 1 road. It is hoped to soon fit a new steel plate floor under the compressor of this car to structurally strengthen this section, which like the rest of the car has suffered from many years of storage, both in Melbourne and Bylands, in the open. Once these tasks are completed the car will again be operational. Meanwhile its cosmetic repaint will continue.

John Walker has patiently been cleaning and detailing both the interior and exterior of Ballarat No. 36. As part of this work, John has polished all the internal brassware, which has lifted the internal appearance. Whilst we were recently resorting and restacking a number of stored items, we stumbled across a pair of Z class lifeguard trip gates and lifeguard support bars. The lifeguards and trip gates



Inside the Vehicle Maintenance Building rails have been fastened to the pit using fittings from the former South Melbourne Depot. The surrounding floor will be filled and levelled.

Graham Jordan

were removed from the Z class trams between 1979/80. It was decided the trip gates be immediately refitted to Z No. 5 rather than waste time and double handling later. Graham Jordan undertook this and had no difficulty as the original holes for the mounting brackets still existed under the car.

John Walker also continues to repair and restore the wooden controller covers from various trams to their original varnished appearances. Adjustments have also been made to the pin striping on W3 667.

Corey Robertson and Keith Kings continue work on the bus fleet. Preparations for the external repaint of Mk VI 759 are well in hand, with only some minor body filling and priming still to be completed. Several of the batteries in our buses have also been recharged. Some much-needed attention is presently being given to some of our lineside street furniture by Brooke

Tolliday and Becky Edwards with the two red post boxes presently being prepared for repainting.

Signage upgrade

Following several comments made recently by visitors, it was decided that we urgently need to upgrade our signage of exhibits. For many years this has been in the form of information sheets which were attached to external windows of particular trams. These sheets are not provided in many trams, whilst others are either out of date, have small print or have faded, which makes them hard to read. A new prototype sign was designed and attached to Ballarat trams Nos 17, 23 and 36, VR 34 and PCC 980 as a trial to gain feedback from visitors. They have been placed at a suitable height for easy browsing by visitors of all sizes. It is hoped to extend these visual displays to all exhibits in the near future.

BENDIGO

The Bendigo Trust

1 Tramways Avenue, Bendigo, Victoria 3550

www.bendigotramways.com

From Kym Smith

Vale – Anthony Jennings

With great sadness we record the passing of our plumber, Anthony Jennings. Anthony passed away on 4 May 2004 at the age of 36, after suffering a severe asthma attack at home. A large number of his Bendigo Tramways and Bendigo Trust friends attended his funeral at White Hills and burial service at the White Hills Lawn Cemetery.

Anthony was well respected and loved by everyone at Bendigo Tramways. No job was ever too difficult, nor was it ever too much trouble for Anthony to assist. Bendigo Tramways and the tramway museum movement grew to know Anthony as a person who was prepared to have a go, always in a quiet, yet cheerful manner. He was a person who loved to tackle the hardest jobs, and persevere until the problem was solved. His attention to detail meant that the pneumatic systems he built on many of the trams not only functioned with perfection, but were an artwork in their precision.

We will greatly miss his cheerful nature and witty remarks, and we extend our heartfelt condolences to his girlfriend, Mel, and to Anthony's family.



John Withers and Denis Rodda determining the final positioning of cabling and cappings in the motorman's cabin of VR tram No 41.

Bendigo Tramways

VR No. 41

Work has progressed on VR No. 41 with completion of the flooring, including the installation of the floor slats. Significant work was then carried out scraping down, repairing, and refinishing the saloon seats, and manufacturing the dropcentre seats from other surplus saloon seats.

The roof-mounted destination boxes and other roof hardware have now been installed. The capping pieces for the lighting wires and the wooden blocks for the light fittings were also installed after adjustment to suit the refurbished roof structure.

New motorman's cabin and dropcentre steps have also been made, using the remains of originals as patterns for the new steps. Most of the interior brass work such as light fittings, conductors bells, and strap rail hangers have now been polished and lacquered, along with seemingly thousands of wood screws.

Work is now progressing on priming, stopping and undercoating the exterior, and continuing with the varnishing of the interior.

MTPA members, including Tony Smith, John Withers, Arthur Ireland and Craig Tooke, and assisted by a workmate of Craig's, Ron Darlison, have continued with the wiring of the tram, and the refurbishment of some of the components prior to delivery and installation.

ESCO No. 8

After completing a motor-less truck for a private customer for Geelong 28 (ex PMTT 66), work

continued on assembling the 21E truck for ESCo No. 8.

Once the armatures for the Westinghouse 225 motors were returned from our contractor, they were installed in the overhauled cases, and installed in the truck. The truck was then re-united with the body (a trial fit was carried out previously for display at our centenary celebrations), and the car moved from the body shop to road 3, for final electrical, pneumatic and brake rigging work to be carried out.

Two of the original style of 'flip over' type pole bases were overhauled, from the remains of at least four remnants of bases – one for use on ESCo No. 8, and one for display on our other ESCo car No. 7.

Track repairs

The long awaited repairs to the track network were carried out over the weekend of 15 and 16 May 2004. The contractors, Coleman Rail, took on three sites – the set of points at the Fountain Tram Stop, the curve into North Bendigo Terminus, and the biggest site, the passing loop and triangle junction in McCrae Street. In conjunction with this work, Bendigo Tramways volunteers and staff undertook the replacement of all of the span wiring over the passing loop and triangle junction, and the installation of a new span network over the points at the Fountain Stop. They worked each night until completion in the early hours of Friday morning, 21 May.

The triangle junction now has automatic points, installed by Yarra Trams and the supplier, Elektroline, on the southern and eastern legs, which necessitated the fitting of transponders to all of our operating fleet,



VR No. 41 at the entrance to the Depot yard.

Bendigo Tramways

Denis Rodda bolts the newly manufactured running board to VR No. 41. Bendigo Tramways



Les Woodfield completes the varnishing in the saloon of VR No. 41. Seating was re-installed recently.

Bendigo Tramways



together with extensive training for our maintenance and operations volunteers and staff.

Trams resumed running on 21 May, with the automatic points being commissioned for full operation on 1 July 2004, after all of the training and material change documentation had been completed.

Shop upgrade

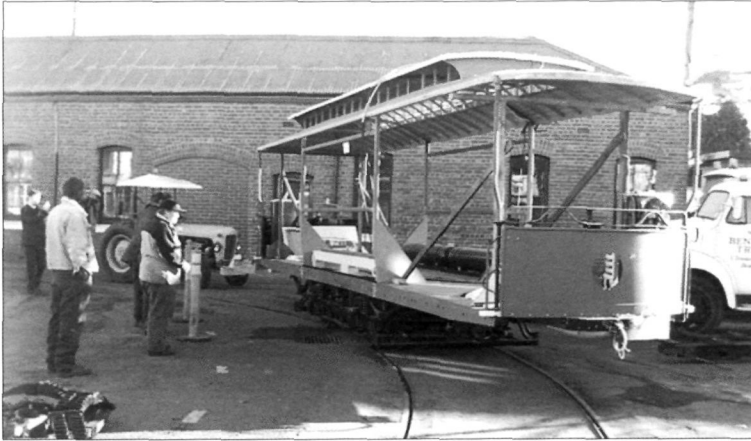
While the trams were off the road for the track and overhead works, the remainder of our team who were not on the overhead gang carried out a much needed upgrade of our souvenir shop at the Tram Depot.

Given the fairly descriptive brief of 'Make it look like a friendly and inviting retail area, and less like an outback dunny!', our volunteers and staff set about removing some of the tired looking displays, constructing a storage area at the rear of the shop, dry-walling the previously painted rough brickwork, replacing industrial-style fluorescent lights with decorative brass pendant lighting and low voltage halogen spotlighting, installing cornices, architraves, skirting, and carpet, and repainting the area in a heritage style.

The end result is a much improved retail area for our customers. The next stage will involve constructing display panels in the public area of the Tram Depot to better interpret the history of the Bendigo Tramways to our passengers.

Lake extension

After being approved by Council in March, the Lake extension was appealed against by a number of residents to the Victorian Civil and Administrative Tribunal (VCAT). Hearings were subsequently held in Bendigo on 22 and 23 June 2004. VCAT subsequently dismissed the appeal and approved the planning permit.



ESCo No. 8 being shunted from the workshop after the body was lowered onto the 21E truck.

Bendigo Tramways

While there still seems to be a group determined to stop the extension, the Council has stated that the works will be completed within 9 to 12 months.

Accreditation re-write

A revised version of our Rail Safety Management System came into effect on 1 July 2004, picking up the changes brought about by the implementation of the new medical standards, the addition of the automatic points procedures, and a number of other changes.

Conductors

Conductors have now been put back on all tour tram services, in order to provide better customer relations

as well as improving safety. After initially returning as ticket sellers during March, a training program was 'conducted' (no pun intended) during May to accredit the ticket sellers, and re-accredit a number of drivers, as conductors. It has proven to be a successful step – not only is there less fare evasion, but our customer service has improved, and a number of our drivers now enjoy swapping duties each trip to have a break from the traffic!

Congratulations and welcomes

Congratulations to Bill Earl and John Watts, who recently completed their training as tram drivers, and welcome to Alice Williams, who has joined the tram crews as a conductor.



The triangular junction at McCrae Street and Tramways Avenue after excavation.

Bendigo Tramways

Yarra Trams, Elektroline, and Coleman Rail staff install the electric point mechanisms on the southern leg of the triangular junction.

Bendigo Tramways



School holiday special

With trams now able to enter the North Bendigo Terminus again after the repairs to the track, the opportunity was taken over the July school holiday period to run a joint promotion with the Chinese Joss House. Tram passengers were encouraged to visit the Joss House, receiving a special discount on the admission price on presentation of their tram ticket. Our conductors assisted by promoting the Joss House,

and collecting questionnaires from passengers on their return to the tram.

It is hoped that this sort of promotion will continue in the future, and that the data obtained will be used to promote better networking between the Tramways and other attractions along the tram line.



The completed eastern leg of the junction viewed from Tramways Avenue. Bendigo Tramways

FERNY GROVE

Brisbane Tramway Museum Society
PO Box 94, Ferny Hills, Queensland 4055

From Peter Hyde

On Sunday 25 July, the Queensland Minister for Transport & Main Roads, the Hon Paul Lucas officially opened the new workshop complex at Ferny Grove. The State Government provided funding for its construction, as a result of the Museum's involvement in the cancelled Briztram and Brisbane Light Rail projects. During his speech the Minister referred to the building as being "more open than usual" – perhaps detecting from the odd grease stain that the facility had indeed already been used.

The dry cooler days of winter facilitated the external works necessary to finish-off the surrounds of the new buildings before the opening. The Tuesday crew has completed the retaining wall along the northern side of the Workshop and built a set of steps down to the personnel door near the lunchroom. They also built the long retaining wall in front of the building and a set of concrete stairs leading up to the Trolleybus shed. The final sections of concreting 'outside-the-rail' were also completed on the main running track.

In last issue's report, mention was made of a bogie being removed from Dropcentre car No. 341 to

investigate problems with the main bearing plate. This was successfully carried out, with the problem being identified as a faulty weld. Given the small distances travelled by the car at the Museum, it is possible that the tram may have failed in service if it had operated in regular traffic back in 1968 for only a few more days!

Baby Dreadnought No. 99 is well advanced. David Revis is mid-way through the internal painting and Keith Tidey, Mick Topp and Wayne Chaseling have finished the electricals. Lionel Weston and Brian Martin have completed the external trim with the only major work still to go being the external painting. Some of the trim was missing and we were unable to source new material in the correct cross section. Noel West shaped the pieces we needed by copying the profiles from original pieces and he has done such a good job you cannot tell the new from the old. One piece needed a substantial bend in it so we experimented with steam bending one Tuesday. The result was a nicely curved moulding. Another skill mastered!

Queensland's Transport Minister, Paul Lucas, and Peter Hyde in Phoenix car No. 554, after driving through the ribbon to mark the opening of the Workshop.

David Revis





David Revis paints the interior of Baby Dreadnought No. 99.
For David Revis



Ken Howard, Noel West and Keith Tidey refitting the handbrake mechanism to No. 99.
David Revis



Noel West, Brian Martin and Lionel Weston at work on No. 99.
David Revis



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