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A SURVIVOR OF THE SPECIES - J CAR 675

TROLLEY WIRE

AUSTRALIA'S TRAMWAY MUSEUM
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*This accident to Sydney's first LRV on its delivery trip
from Melbourne is reported in Here and There. The
prime mover is upside down in the foreground while
the trailer with car 2101 can be seen nose into the trees
on the opposite side of the road.*

STOP PRESS

The first LRV to arrive in Sydney, 2103, was
unloaded early on the morning of Saturday 31
May. Test operations began later the same day.

Front Cover:

*Brisbane 548 and Sydney R1 1979 cross the Princes Highway (Highway 1) to return to the Sydney Tramway
Museum from a trip to the Royal National Park.*

Howard Clark

Back Page:

*Top: Sydney Tramway Museum's Berlin cars 3007, 3717 and 3008 made a trial run on the National Park line on
8 March 1997 after being fitted with trolley poles.*

Robert Merchant

*Bottom: Sydney freight car 24s made its first appearance on 15 March 1997 marking completion of its body
restoration at the Sydney Tramway Museum.*

Ken Stockdale

A SURVIVOR OF THE SPECIES - J CAR 675

By Howard Clark

The year was 1936 and Australia was still in the grip of the deepest financial depression the modern world has seen. It was in July of that year when the remains of retired J class car 675 were 'put out to pasture'.

A little more than two years earlier, Sydney began receiving deliveries of new tramcars built to a radical new design under a programme to assist with employment opportunities. These cars were the handsome R class corridor cars which, under austerity conditions, included a number of recycled components from retired cars. The R class cars introduced to Sydney the concept of a totally enclosed dropcentre saloon design. They also eliminated the need for conductors plying the external footboards to collect fares.

The first victims of this progressive development were the time-expired single-truck enclosed toastrack style J type tramcars which together with their less maligned K type sisters had held exclusive domain on

J class car 675 is in King Street bound for Erskine Street. The policeman steps aside to let 675 pass as it crosses George Street in this 1905 view.

Kerry & Co. / Vic Solomons collection

the Watsons Bay line from cable car days in 1903 until early 1934. By the latter half of 1934, the J type tramcar (of which there were 47) became the second Sydney tramcar type (after the G class in 1928) to be consigned to oblivion.

Over the years of constant and heavy use on the Watsons Bay line, with its hilly and curved terrain, most of the J cars had required truck rebuilding or repairs and frame strengthening to extend their life. Cars of the more numerous E and K types, which had a more varied operational life, continued in service for much longer and in some instances until after the Second World War, thus providing operational examples to be included amongst the first exhibits obtained by the Sydney Tramway Museum (STM).

The search for one of the elusive J cars, to include in the STM collection had occupied the minds of all serious minded historians for many years. Skeletal remains of bodies in distant parts of the state were talked about and inspected in places such as Kangaroo Valley, only to be discarded as beyond restoration or succumb to bush fires before inspection. Some had been used as tennis sheds in the Sydney metropolitan



A 1906 view of J class car 675 and its driver bound for Ocean Street, Double Bay.
Town and Country Journal / Vic Solomons collection

area only to be replaced in the early 1950s by other withdrawn cars of later types such as L/Ps as their body condition worsened and their roofs leaked through lack of maintenance. One car was found to exist in the St Mary's area of Sydney's western suburbs only to disappear before the opportunity arose to consider the worthiness of its possible rescue for potential museum purposes.

Rumours of tramcar bodies cocooned in sheds in some distant or unspecified location continue to exercise the attention of historians in case they be true. Thus it was with the J car; always there was the wish (as there continues to be with the G car) that one day one such rumour would prove to be valid and such a car would present itself. The existence of J 675 was the answer to one of these dreams. It had been known about by a very small number of people from about the

Behind the cladding on this backyard shed lurks a J class tram! Howard Clark and his children Stuart and Sonia inspected the tram in 1988. Howard Clark





The interior of J car 675 in 1988. Herb Woodroff is showing Stuart Clark his workshop. Howard Clark

1960s although its whereabouts remained a secret and thus to those not in the know it tended to remain in the wishful rumour category. Finally in the early 1980s it came to pass that the writer was included in the small privileged group of insiders, including David Wilson and Vic Solomons, to know of its whereabouts.

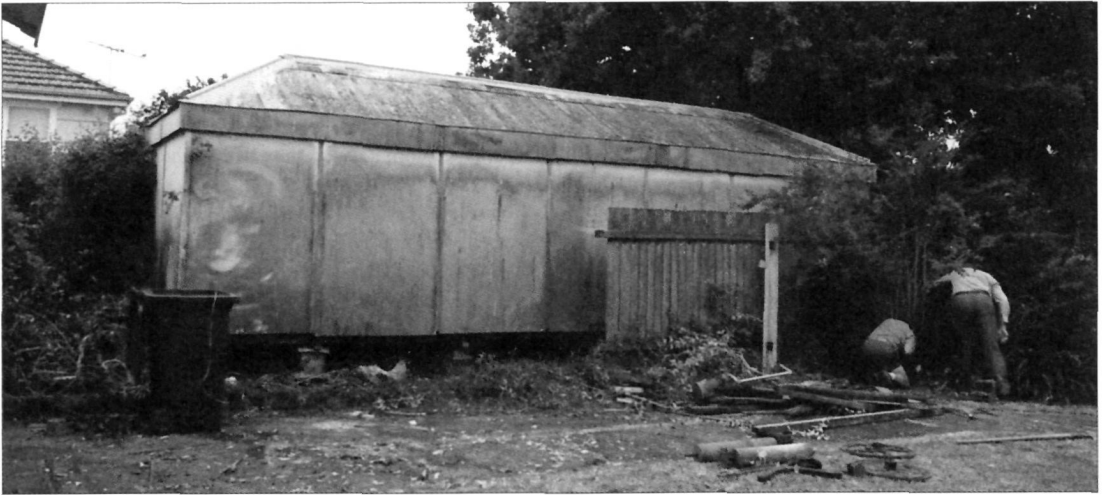
It was in late 1985 that I first made contact with the owner of 675 at his Punchbowl home and together with my two young children in January 1986 met Mr Herb Woodroff and his wife Jean who extended every courtesy to us and allowed inspection of the car. At this stage and right up until it was obtained by the museum on 29 November 1996 the car was protected by a fibro cocoon on all sides with a pitched roof also of fibro and mounted on brick piers. Thus what remained was in sound condition and eminently restorable. The only external suggestion that this rectangular shed was a former tramcar was the curved bumpers which protruded from under the end walls.

During that visit Herb explained a little of how he came to acquire 675 some 50 years earlier. He had a

Members of the Woodroff family make their farewells and last inspection of their father's / father-in-law's tramcar workshop before it is moved to Loftus.

Howard Clark





young family of four daughters and needed more space and a workroom. His father worked for the Tramways and mentioned the J type cars which had been stripped of all electrical components, doors and most internal seats ready for disposal. Various Tramways social groups had obtained some of these for use as tennis pavilions, etc. For an overall outlay of about £7, his father was able to acquire a car for Herb which was ideal for his purposes. Transport in the form of a truck similar to those used as timber jinkers was arranged to transport the car from Randwick to Punchbowl. Here empty 44 gallon steel drums were placed under the car body and it was rolled and manoeuvred on these drums into the backyard, was jacked up and then in due course lowered onto brick piers where it rested for the next sixty years. Herb was a remarkable man with many skills. Although the car was virtually a shell when he received it, Herb was able to remove a number of the side panels and the remains of some bulkhead

The removal of the tram began with the dismantling of the fence between it and the next door neighbour's property.

Bob Merchant

seats and bulkhead timber which were Australian cedar or blackwood, to assist him in the manufacture of several dining table chairs for his home. During these depression years Herb was unemployed for a time and turned his talents into making reproduction antique furniture for sale to wealthier members of the

The tram is jacked from its brick piers and moved sideways into the next door property using a boat moving trolley which will be repositioned lengthwise for the move along the driveway.

Bob Merchant





With the tram shed now safely in the neighbour's yard, a break is taken before the move up the narrow driveway begins.
Bob Merchant

community in order to support his young family. He was later employed in the carpentry section of the Postmaster General's Department, building and restoring telephone boxes and other related items. Smaller timbers were used in his hobby of model shipbuilding. Subsequently he added a pitched roof and cladding to the car to protect it from the elements and enable its use as a workshop. When inspected in 1986, Herb's workshop was a veritable treasure trove of woodworking tools, lathes, timber and other things accumulated over the years.

Herb Woodroff was only too well aware of the rarity value of his precious J car, and he made it very clear he wished the tram to find a home eventually at Loftus to fill the gap in the Museum's collection. He expressed a preference for the car to be given to the Museum after his death. He was already nearing 80 and in his eyes nothing could replace the comfortable surrounds of his workshop of so many years and the sentiment he attached to it. The temptation to see the car restored and running at Loftus was inviting, however. As he said, because it was naturally well insulated, it was his own retreat and both 'cool in summer and warm in winter', there was just *no* substitute.

Herb fascinated my children as he proudly showed off his model ships and described his construction

techniques. They were truly a wonderful work of art and later in the 1988 bicentennial year featured in an exhibition at the Sydney GPO. Herb and his wife and family members were guests at the official opening of the Sydney Tramway Museum's new site in March 1988 and he took a keen interest in our achievements and a ride on K car 1296. Herb passed away on 2 February 1991 at the age of 84 and about a year later his widow Jean contacted the Museum to discuss the transfer of the tram to Loftus. At that time road widening behind their house may have made removal simpler, however a number of other matters required prior resolution and thus it was that agreement to remove 675 did not finally come to pass until early 1996. Herb's daughter Annette and her husband Brian Leary had been in constant touch with the Museum during the intervening period. The family needed to remove various items from 675 before all was ready and finally on Brian Leary's advice in early November 1996 the go ahead to move was given.

The logistics of the move had changed from several years ago and as the construction of town houses behind the property prevented a move 'through the back door route' other systems needed to be explored. This was not simple since the car body was located behind the house with restricted room beside the house for truck and crane access, leaving aside yard restoration afterwards. A 200 ton crane lift over the house was explored; however, the logistics with electricity cables in the street and the huge costs involved caused innovation. Fortunately, two key factors provided the end solution. First, Annette and Brian sought and obtained the elderly neighbour's



consent to use his driveway for access. Secondly, a neighbour of mine was involved in boat transport.

Recalling that often backyard boat builders require the fruits of their labours to be moved seaward, I sought his advice. He directed me to Warren from Portaslip who at first was somewhat sceptical and disbelieving of our requirements. Once he knew we were serious, Warren visited the premises and deemed it a challenge, although feasible. In lieu of the crane options, Warren elected to use a method involving the jacking up of the tram, sliding it sideways on plates under a purpose built trolley into the neighbour's property, turning the trolley at 90 degrees and then winching the trolley to the street along the driveway between house and fence with an estimated maximum of two inches to spare.

The appointed day for the move, 29 November 1996, arrived bright and clear and at around 7:00am a Museum group led by Tom Tramby, Brian Hague and Geoff Spaulding arrived to commence preparatory work, particularly the removal of the fence panels between the properties. Already the Woodroff family had removed from the tram a substantial amount of timber and small tools to assist in this process and further similar activity took place during the morning with ever growing piles of timber and rubbish being accumulated in both back yards. More members of the family were present to join in and witness this activity,

The tram cum shed on its trolley is winched carefully along the driveway of the neighbour's property. Clearances were certainly tight!

Bob Merchant

and Brian dutifully videoed the events in a most professional manner.

The jacking up process was conducted without drama. Various brick piers and other bric-a-brac, including the remnants of an old clothes mangle, were removed from underneath the tram. The skate rails were put in situ and then the trolley lined up for sliding underneath. A break for lunch of fresh bread rolls and fillings generously provided by the Woodroff daughters was gratefully accepted by all involved. Back to the task suitably refreshed, all undertook their role with renewed vigour. It was necessary to dig out some further earth and gravel in an effort to make the skate rails more level. All was ready again and with a team of helpers to push, the car lurched sideways on its skates and, with a couple of minor obstacles removed, finally was lined up ready for the forward move. A few more obstacles needed to be overcome before Warren was happy to connect the winch rope and commence the haul along the driveway.

The clearance problems became apparent as first the trolley ran foul of the short brick boundary wall beneath where the fence panels stood, and then finally



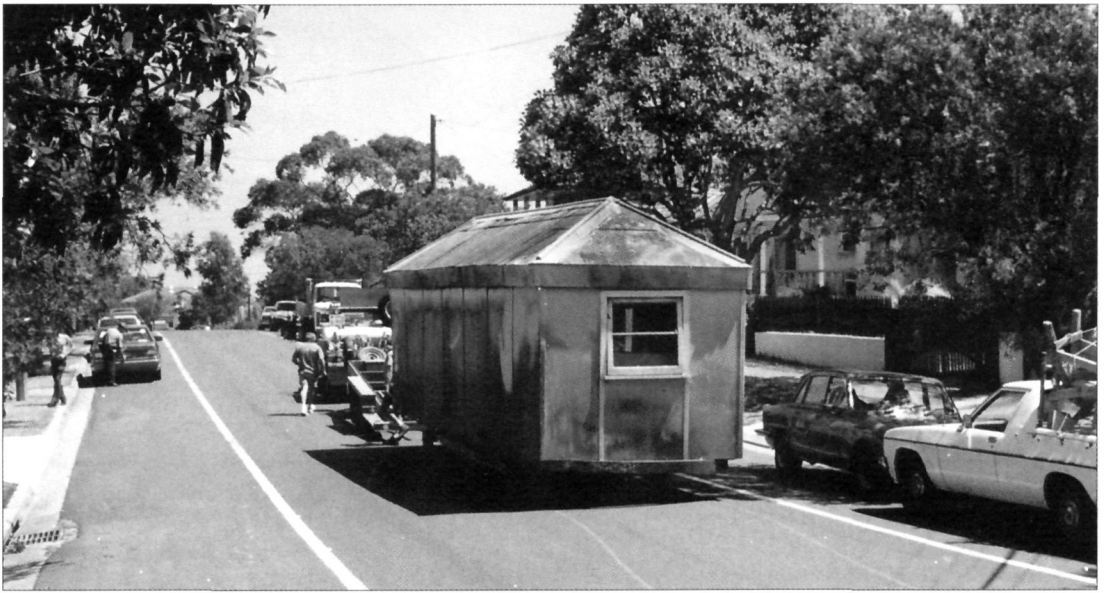
Clearance as it passed the downpipe (left) and between the electric meter box and the shed/tram is only a centimetre. The fence at right had to be moved to allow passage.

Bob Merchant

Under the gaze of fascinated neighbours, the tram/shed is winched into the street, which was blocked to all traffic for about twenty minutes.

Bob Merchant





we all took a deep breath as the car brushed the house and its electricity meter box on one side while it snagged the fence post on the other. Tom did the deed on the fence post and again Warren slowly activated the winch. Finally the trolley and its contents were past the house without damage to the house or driveway, and then were headed for the small incline to the footpath and the minor problem of some overhanging branches. Neither presented a major problem and finally the trolley and its tow vehicle were in the street blocking both traffic lanes temporarily until the winch was reset and the trailer readied for hauling aboard the tray of the truck. This was achieved by 3:30pm and Warren set off, to the bemused looks of the street onlookers and the relief of the participants, towards King Georges Road and Loftus where a pair of 5ft 3in bogies on a track panel awaited its unloading.

At the house, the fence was re-erected and rubbish piled up ready for removal by the family's handyman who was ready to move as soon as the tram cleared the driveway.

The unloading went smoothly and by 5:00pm our 'backyard shed' had been unloaded onto its temporary outside storage and with the chalked lettering emblazoned thereon proclaiming its origins and its first appearance on Sydney's streets since 1934.

Brian Leary subsequently presented the Museum with a video of the events of the day and we are indebted to Mrs Woodroff and the Woodroff family for their support and generosity and for electing on the day

In this view only the bumper protruding from beneath the fibro sheeting gives its origins away as 675 is winched along the street, lined up with its trailer and winched aboard for the journey to Loftus.

Bob Merchant

to waiving the requirement for a replacement shed on the property so as to provide the opportunity to set aside the funds saved towards the eventual restoration of 675.

Members of the family have now been included in our register of friends and a tram plate has been made proclaiming the tram to be the 'Herb Woodroff Tram' for erection in the car which was donated to the Museum by Mrs Woodroff in memory of her late husband.

For the record, 675 entered service on 24 December 1904 and operated exclusively on the Watsons Bay line until stored at Leichhardt Depot on 13 April 1934, written off the books on 5 November 1934, condemned on 10 October 1935 and sold to Herb Woodroff in July 1936. It is important to reflect that the tram has spent two thirds of its 90 plus year life in a dormant state as a backyard shed. Naturally, the Museum will work to reduce this ratio in future!

We remain forever grateful to Herb Woodroff for his part in ensuring that the only example of a J class car to survive has ended up in a museum where eventually it can be restored to its former operational glory.



Car 675 on its trolley is winched up onto the boat trailer for the journey to Loftus

Bob Merchant

J Car 675 is hoisted from the trailer and trolley ready to be swung and lowered onto bogies beside the depot building on the right.

Bob Merchant



KUALA LUMPUR'S NEW LRT LINE

By David White

Kuala Lumpur is the capital of Malaysia. Its first light rail system is operated by Star Corporation, the same company that operates the famous Star Ferries in Hong Kong, and the Hong Kong connection is apparent in many facets of the Star Light Rail Transit system. The first stage of the Star LRT opened in December 1996.

The line runs from Ampang, where the company has its headquarters and depot, to Sultan Ismail in the city centre off the Jalan Sultan Ismail. The line is to be extended beyond Sultan Ismail through PWTC (Putra World Trade Centre), Tun Razak, Bandar Baru Sentul (Sentul New Seaport Town), to Sentul Timur (East Sentul). A separate LRT line known as the Putra LRT is under construction. The two LRT lines and a monorail line to be completed by the year 2000 will all be integrated.

In addition, KTM, the Malaysian State Railways, has four 'Kommuter' lines operated by Austrian-built, three-car interurban-type electric multiple-unit trains running at speeds of up to 120 km/h using 25 kV AC overhead traction supply.

From Ampang, the Star LRT line follows the formation of a former KTM goods line through Cahaya, Cempaka, Pandan Indah, Pandan Jaya, Maluri (an overhead station), Miharja, Chan Sow Lin, (junction station for the line to Komanwel, both of which are under construction), Pudu (elevated station), Hang Tuah, Plaza Rakyat (People's Plaza, start of the elevated trackage), Masjid Jamek (Jamek Mosque), and Bandaraya, to Sultan Ismail (all elevated stations).

The second line will junction at Chan Sow Lin and follow another former goods line through Seri Mas, Salak Selatan (South Salak), across the main coast KTM line to Gemas and Singapore on elevated track, then via elevated trackage or a new formation through Mulai, Tasik Selatan (South Tasik), Sungei Besi (Besi River), Sukan Negara (National Sport), to Komanwel.

A view of Ampang station from the top of the access stairs. A Goninan-built LRT train waits at the platform.

David White





A route map and fares board on the platform at Ampang. The fares are shown in the circle next to the station name.
David White

The line currently operating is a mixture of elevated track like that used for Singapore's Mass Rapid Transit system, and conventional ballasted track at ground level. The whole route is double track with colour light signalling, and high level station platforms. Traction supply is 750 volts DC from a third rail and all ground level trackage is fenced.

Ticketing is electronic with reusable tickets retained by the barrier at completion of a journey. However, tickets are purchased over the counter and not from a machine. All station are staffed.

The Goninan-built light rail vehicles are permanently-coupled single-ended articulated tramcars

A view of the low maintenance easy-clean interior of a Kuala Lumpur LRV showing the stainless steel seating. The walls are a blue colour and the hangers for standees are orange. Route maps are provided above the exit doorways.
David White





with outside hung high level doors. Current collection is from a side-mounted third rail. The interiors are spartan, with longitudinal stainless steel seating as in Hong Kong's MTR trains. Signs, such as 'Mind the Platform Gap', are other reminders of the MTR in Hong Kong. Stop announcements are prerecorded and, interestingly, are in English only. Other transport systems use either Malay or Malay and English for their signs.

With all the rail-based transport development in progress or about to start, Kuala Lumpur has become a destination for the transport enthusiast.

(David White visited Kuala Lumpur in March 1997.)

The Star LRT station at Sultan Ismail, the present northern terminus of the line. The LRV on the right is stabled as indicated by the red-on-white destination.

David White

A light rail train approaches Sultan Ismail station, the present northern terminus of the line, on 6 March 1997.

David White





Light rail cars destined for Kuala Lumpur are frequently seen in a storage yard a little to the north of

Brisbane's Gateway Bridge. From here they are transported to shipside by road. Richard Youl

HERE AND THERE

NEWS ITEMS OF INTEREST FROM ALL OVER

News from France

Tram news continues to be good news in France. A full page advertisement in the national newspapers in March and reproduced here announced the start of works on the Bordeaux tramway system. The conversion of a minor railway line to trams should also be complete this year.

Berlin Reko Cars

The three Berlin TZ type trams, 3001, 3002 and 3004, which went to Norway were obtained by the Bergen Technical Institute and have been joined by three matching BZ type trailers, 3702, 3703 and 3607. The trams are being painted in Bergen tramway livery and will commence operating a service between the city centre and the Technical Institute which has original Bergen tram No.10 (Union, 1897) restored to original condition and former Oslo works car 47 (Siemens, 1913) restored to passenger working.

In Britain, Sheffield's South Yorkshire Supertram has obtained Berlin works car 721.039, a former single ended TE 64/2 type Rekowagen originally numbered 5104, and later 217 303. It was converted to a double ended works car in December 1980.

Oui au tramway !

Un mode de transport au service d'un véritable projet urbain pour la métropole bordelaise.

OUI à un tramway comme mode de transport performant. Grâce aux technologies techniques, dans 5 à 10 ans ces dernières années, le tramway garantit la rapidité et la régularité des déplacements. Non polluant et silencieux, il présente aussi des qualités de confort, d'espace et d'accessibilité à tous, grâce à un plancher bas.

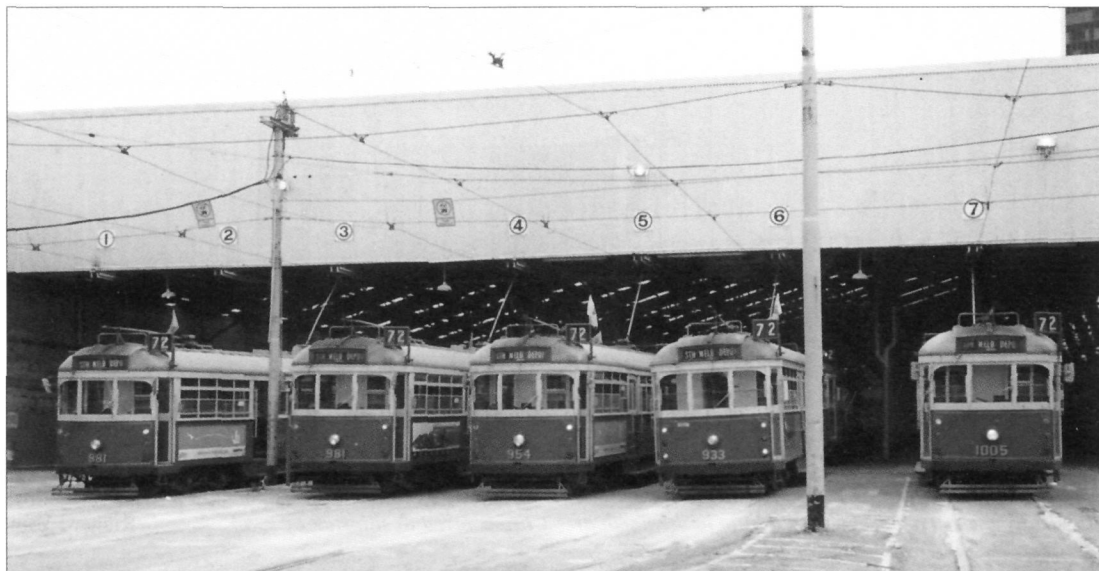
OUI à un projet urbain qui intègre tous les modes de déplacements. La Communauté Urbaine de Bordeaux s'engage dans un projet global d'amélioration des déplacements urbains qui facilitera la mobilité des habitants et l'accès aux différents pôles de l'agglomération. Et c'est l'axe de l'axe de la ville de redonner les transports collectifs tout en jetant les bases d'une métropole mieux structurée et mieux desservie.

OUI à un système de transport organisé au réseau. Le desserte de différents secteurs de l'agglomération est conçue pour faciliter les déplacements des voyageurs grâce à des lignes indépendantes et des correspondances pratiques. En articulation avec l'ensemble des autres modes de transports urbains et périurbains, le tramway sera une solution d'insertion adaptée à la croissance de la ville.

OUI à la métropole de demain. Le tramway contribue à la modernisation des transports collectifs et à la qualité de la ville de l'an 2000. Son arrivée est porteuse d'opportunités d'amélioration et de mise au niveau des espaces publics.

OUI à la concertation publique pour un projet d'envergure. Le tramway est l'élément d'un schéma des déplacements urbains communautaire, qui a fait l'objet d'une large concertation avec toutes les associations et les suggestions de la population en vue de finaliser le projet de tram.

BORDEAUX/METROPOLE

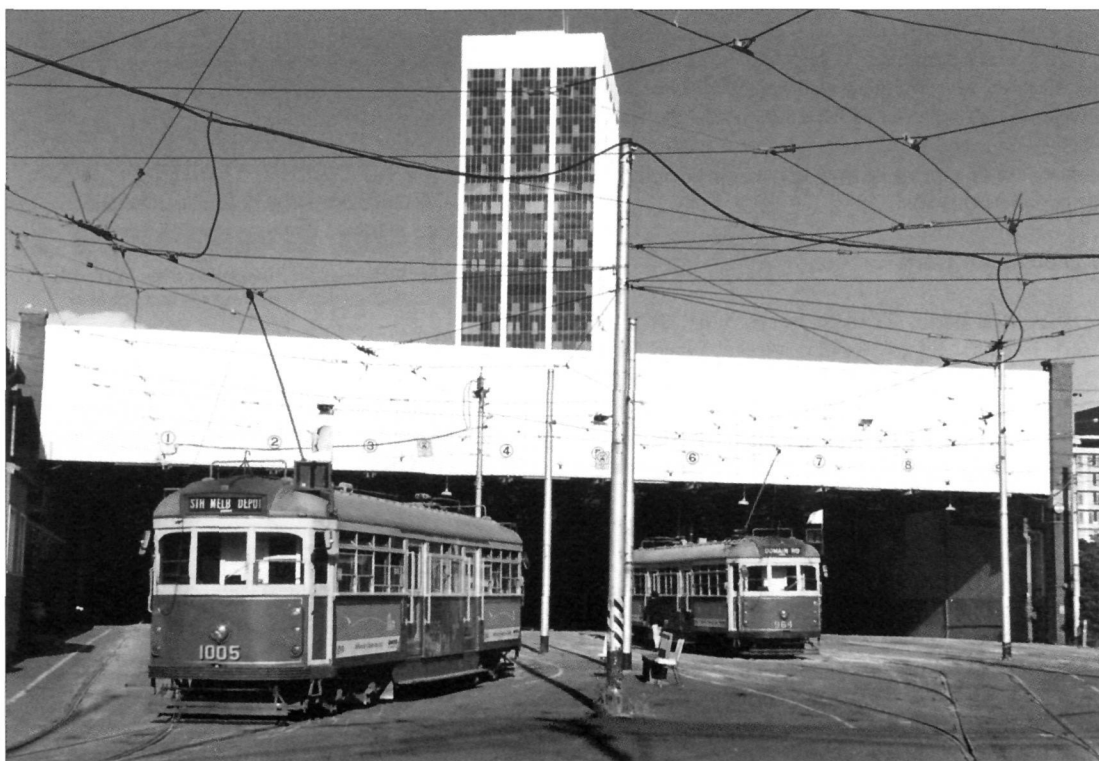


W series trams line up for photographs at South Melbourne Depot on the morning of 9 February 1997. These five trams, and three others, were transferred to Malvern Depot during the day by an AETA tour.

Dale Budd

A few weeks before closure, W series trams run into South Melbourne Depot in late afternoon sunshine.

Dale Budd





The last scheduled tram to leave South Melbourne Depot: SW5 class 843 makes its exit in mid afternoon on 9 February. Trams continued to visit the former depot, as described in the text.

Dale Budd

South Melbourne Depot Closes

South Melbourne Depot closed on the evening of Saturday, 8 February, with operations transferred to Southbank from the following morning.

The date of the transfer was confirmed less than 48 hours in advance, after issues raised by the Public Transport Union in relation to the commencement of operations at Southbank were resolved.

The Australian Electric Traction Association ran a tour on Sunday, 9 February, which involved the transfer of eight W series trams from South Melbourne to Malvern Depot, in four batches of two.

The four tours ran from South Melbourne to Malvern via four different routes. Passengers were returned to South Melbourne between trips by bus. The last trip, using trams 930 and 843, left the depot at 2:30pm, running firstly to the crossover in Market Street, city. The cars then returned to the depot, being the last trams to 'run in'. After posing for photographs in the area previously occupied by an array of permanent way and other special cars over the years,

and more recently by the restaurant trams, the two cars made their final departure from South Melbourne with 843 being the last scheduled tram from the depot at around 3:15pm, after 71 years of operation.

After running via Clarendon Street, the two trams proceeded to Montague crossover, returned to the city end of Southbank depot and, after some negotiation with the surprised starter, ran briefly into the new facility. The trams then proceeded to Malvern Depot via Collins Street, Kew Junction, Cotham Road and Glenferrie Road.

An interesting aspect of the new depot is that the Port Melbourne line is now available for trolley pole cars as far as the new emergency crossover beyond Montague platform. The crossover, which is not concreted, allows access into the new depot from the Port Melbourne end in the event of a derailment or other mishap at the normal entry / exit point at the city end. The running of trolley pole cars to this crossover will be the first operation of such trams with catenary overhead in Melbourne.

It was expected that the last of these transfers would mark the last departure from South Melbourne, but events transpired somewhat differently.

A few days before the transfer, the wheel grinder at Southbank was found to require further work before acceptance. Accordingly, trams requiring wheel grinding continued to visit South Melbourne.



The unusual track layout outside the east gate at Southbank. The track on the left is for incoming trams and allows a B class car to stand clear of both the Port Melbourne line and the depot exit track.

Richard Youl

In addition trams laying over for meal breaks, including the restaurant trams, continued to use the former depot.

When the 'last tram' left South Melbourne in mid afternoon on 9 February, eight trams remained in the depot; two for wheel grinding and six others unserviceable. Those remaining included W, Z and B series cars.

South Melbourne Depot staff arranged a party starting at 5:00pm to mark the closure and in excess of 100 staff past and present attended as the evening progressed.



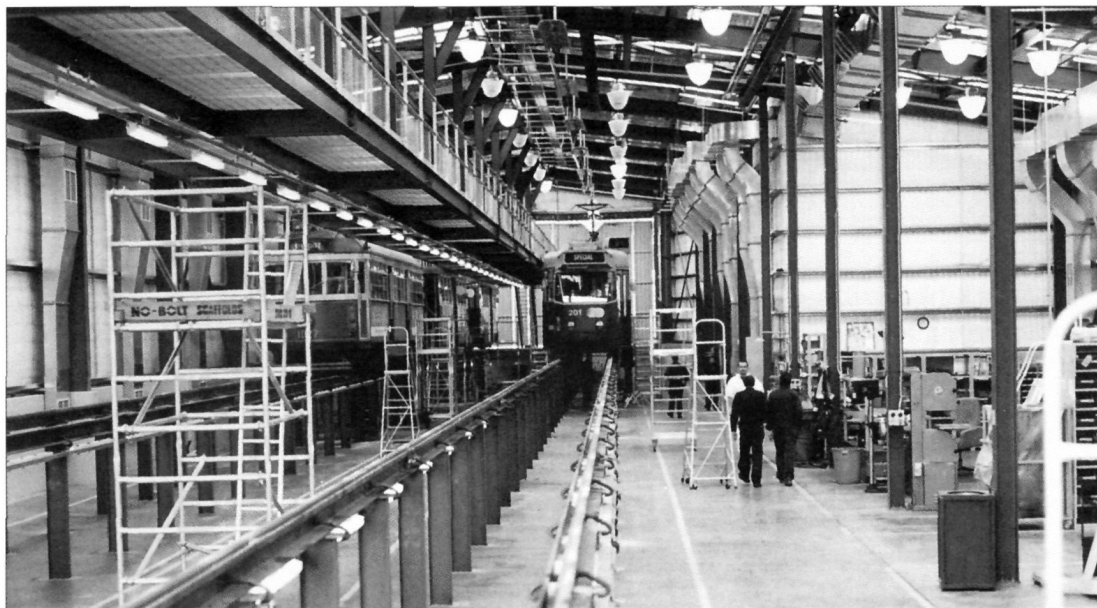
Southbank Depot on its first morning of operation, 9 February 1997. A City Circle tram is about to run out of the depot. The three restaurant trams have a dedicated area, close to the depot gate.

Dale Budd

The tram washing plant at Southbank Depot.

Dennis Bell





An interior view of the new Southbank maintenance facility.

Dennis Bell

Observations ten days after the transfer showed that a number of trams were visiting South Melbourne, during the day and for overnight stays, and were being stabled on a number of roads in the former depot.

Late News: use of South Melbourne for wheel grinding ended with the departure of Z2 class 107 on 11 April. Two B2 cars later visited the depot yard briefly for external mirror replacement. By mid May dismantling of overhead and track in the depot was under way.

Southbank Notes

The new Southbank Depot is located on the northern side of the Port Melbourne line and occupies virtually all the land between the Montague Road bridge to the west and the overhead freeway to the east. At the Port Melbourne end of the complex, a crossover beyond the down end of Montague platform provides turn-back access to the single track into the depot which branches from the main Port Melbourne line at the up end of Montague platform.

At the eastern or main entrance, an unusual double track junction provides access to the depot. Here the track into the depot branches from the main Port Melbourne line well before the outbound track joins the main line. This arrangement provides a short section of right-hand running to allow an incoming tram to stand clear of the main line whilst its driver

seeks instructions from the depot starter before entering the depot. Importantly, the arrangement provides the driver of an outgoing car a clear view of any approaching cars from Port Melbourne.

Two short sidings are provided just inside the main entrance for the restaurant trams. The storage tracks for traffic cars are on the alignment of the former goods railway lines to Port Melbourne. The main depot buildings are to the north of these tracks.

Southbank is to be the routine maintenance depot for all trams and all depots except Preston, whose routine maintenance is carried out at the workshops, and Malvern's W series cars. At present the maintenance on these W cars is still carried out at Malvern. The maintenance building is unusual in that the rails remain at ground level but the entire working area, spare parts store, offices, etc., are at pit floor level. Rails are at around eye level. The building is fully air conditioned, with doors to keep out the wind, heat or cold.

Facilities for tram crews are to a high standard and this building is also fully air conditioned. First impressions of crews are that the place is too sterile and lacks the character of South Melbourne. However, crews are adapting quickly to the better facilities, which are a little crowded at present as it was not planned to have conductors when the depot opened. The basement of the building provides undercover car parking for staff, and access to this and the building itself is by personal electronic key.



The construction of Southbank apparently went smoothly, although it is known that the eastern depot entrance had to be excavated and relaid as the contractors had laid the rails, in concrete, under gauge. Met staff have also adjusted the position of many overhead frogs to suit dual pantograph / trolley pole operation.

Within a week of opening, the 'day in' routine maintenance of trams from other depots had commenced and will be refined with the passage of time and experience with the depot facilities. It is planned to carry out maintenance 24 hours a day.

Services operating from the new depot are route 35 City Circle; route 12 Brunswick to St Kilda / South Melbourne Beach and route 96 East Brunswick to St Kilda Beach via the light rail.

All Night Services Reintroduced

At 11:18pm on 28 February 1997, A2 class tram 277 ran out of Kew Depot to operate the first all night service since 1957. 'Night Link' was launched by Transport Minister Robin Cooper who rode 277 for a short distance. The route 99 'Night Link' services are operated from Kew Depot and run every 20 minutes on Saturday and Sunday mornings only. Normal fares are charged and tickets must be dated for the new day.

A class 272 displays run number 307 and route number 99 as it breaks the banner to inaugurate 'Night Link', Melbourne's first all night tram service since 1957. Transport Minister Robin Cooper is with the driver.

Ray Marsh

The route starts at Melbourne University, along Swanston Street, Batman Avenue, Swan Street, Church Street, Chapel Street to Luna Park, St Kilda. Thence to Fitzroy Street, along the route 96 light rail line to Spencer Street, Collins Street and Brunswick Street to terminate at St Georges Road and Fergie Street.

A class trams from Kew were chosen as the most suitable for the new service with eight cars and a spare 'block' car being rostered, the 'block' car being available to assist a tram running late. However, on the first night serious traffic congestion in the vicinity of the night club area around Chapel Street resulted in trams running up to an hour late by 3:00am. One 'block' car cannot cope with such large delays!

It is understood that 'Night Link' is operating on a five week trial basis.

Melbourne Transport Strike

A four-hour stop work meeting of Victorian railway and tramway workers on 6 March voted to go out on strike following government announcements affecting

transport workers. Tramway employees generally were not in favour of the strike but were outvoted by the large attendance of railway staff. The strike stopped all train and tram services for 48 hours commencing midnight on Friday 7 March. The strike covered the two main days of the Grand Prix car races. The government arranged for private bus operators from all over Victoria to cover the transport of race patrons. On Saturday 450 buses were provided and 600 on Sunday, operating shuttle services from the city and near-city car parks to the Albert Park venue.

State Premier Jeff Kennett blamed the entire substantial drop in race attendance on the public transport strike. Annoyed by the strike, he announced that Footscray Bus Depot would be privatised, and that tram routes were also available for private operators. Subsequently, National Bus announced its interest in Kew Depot, which operates in its territory. West Coast Railway, private operators of the Geelong to Warrnambool rail service has expressed interest in Brunswick Depot. It is too early to say whether these options will be exercised.

Other Melbourne News

To assist visitors to Melbourne for the Grand Prix and Moomba, the City Circle service which normally

A Goninan LRV under construction for Hong Kong at Preston Workshops in February 1997. The body shell is built at Newcastle and finishing work on the 20 car order is carried out at Preston.

Ray Marsh

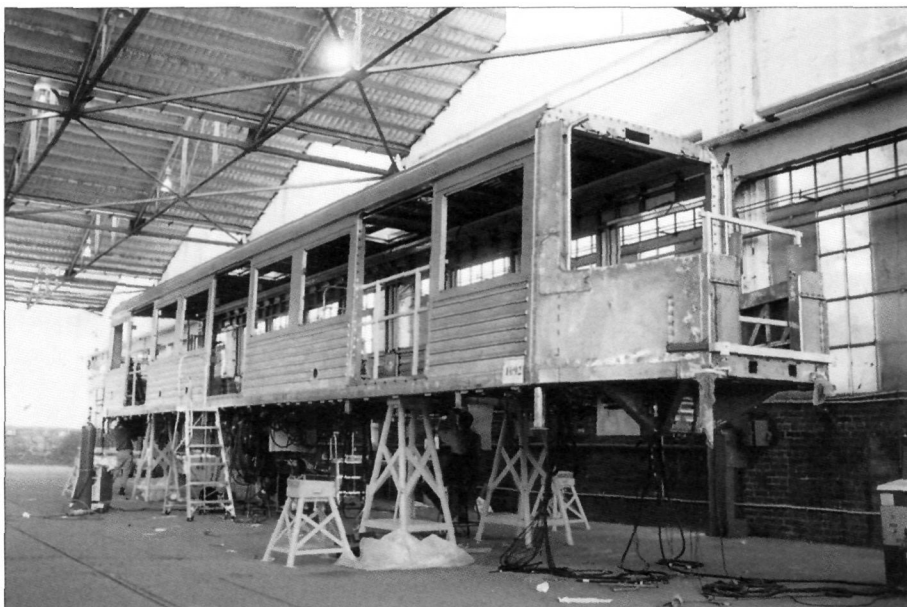
operates between the hours of 10:00am and 6:00pm, ran to extended hours on Friday and Saturday evenings for a period.

It is noted that old Bundy clocks have been installed where none had been before and are showing correct time. They are purely for timekeeping as their use as Bundy clocks has long passed. The widespread use of automatic vehicle monitoring equipment on most trams in traffic has eliminated inspectors monitoring headways in the city and consequently there is little need to display run numbers on the trams. This once familiar aspect of tramway operation is disappearing.

All day tickets, a staple of the tramway enthusiast, cannot be purchased on trams fitted with ticket machines, which at present are limited to route 75. These tickets must be purchased at retail outlets along the route. Also the ticket machines do not accept notes.

A new uniform of mid-blue shirt with dark blue jacket and trousers has been issued to replace the white with narrow striped shirt and grey jacket and trousers, introduced about three years ago.

A. Goninan & Co is fitting out 20 light rail vehicles at Preston Workshops for the Tuen Mun system in Hong Kong. Body shells are delivered to Preston from Goninan's Newcastle, NSW, works. The cars are to be finished in a silver and blue livery and shipped complete to Hong Kong. Three body shells were at Preston Workshops in February.





W7 class 1036 at Dudley Street Siding after its launch as the Calcutta Tramways friendship tram. Ray Marsh

The tramway waiting shed at Frenchmans Road undergoing restoration. Vic Solomons



Sydney's last relic of the steam tram age, the 1891 waiting shed at the Elizabeth and Park Streets corner is undergoing restoration. Vic Solomons



W7 class 1036 has been operating various services as a display car promoting friendship between the staff of the Calcutta Tramways and Melbourne. It is lettered for the CTC as well as the Met and carries an internal picture display of tramway scenes in Calcutta and Melbourne. The tram was launched by the Transport Minister, Robin Cooper. The ABC TV programme 'Foreign Correspondent' also featured a Melbourne tram conductor working on the Calcutta trams and his efforts to ensure the people of that city realise the value of their tramway system. It was stated it is planned to close the Calcutta system on completion of a new Metro.

Sydney News

Restoration work is being carried out on two former tramway waiting sheds, one in the city and the other at Randwick, in the eastern suburbs. The large waiting shed in Elizabeth Street at the Hyde Park corner with Park Street is undergoing a restoration for the Sydney City Council. The shelter was built in 1891 and is the only surviving relic in the city of Sydney's steam tram era. The waiting shed in Frenchmans Road at Avoca Street, Randwick is also undergoing restoration. This structure is on the former Waverley extension line from Bondi Junction to Coogee Beach.

Sydney Light Rail

Major construction work on this project is complete. The overhead wiring on the ramps and colonnade at Sydney Terminal was erected on Wednesday, 5 March and was completed the following day. The overhead wiring along Hay Street was erected just before Easter and final adjustments have been made since that date.

One problem area has been at the western end of the colonnade where a span pole was found to foul the loading gauge. It was removed and repositioned. The skillion canopy at this location has been cut back to provide clearance for pantographs.

What appears to be a short section of catenary on the western ramp is in fact an isolating section in the wire. As the overhead is dual contact wire from the intersection of Hay Street and Darling Drive, where an isolating section is required, it is necessary to provide an isolating switch in one wire and an isolated section in the other wire.

The additional halt provided at the Gateway site is called Pyrmont Bay. This halt will serve the National Maritime Museum as well as the building yet to be constructed on the site.

Now that the wires are up the light rail line is more of a reality. Several favourable items have appeared in the Sydney press lately. But in a letter to the editor of the Sydney Morning Herald, one correspondent complained about the 'visual pollution' of the overhead wires. The writer suggested that technology existed so wires did not have to be erected. Several people racked their brains and the suggestions to eliminating overhead are: cable operation, stud contact, conduit, battery power, LPG/LNG, diesel power or solar panels fitted to the roof. None of these suggestions is feasible.

Accident to New Sydney Tram

The first LRV for Sydney's new light rail line was damaged in an accident on 30 April, on its delivery trip from Melbourne to Sydney.

The tram, No. 2101, was being transported to Sydney on a steerable road trailer, connected by a tow bar to a prime mover.

The delivery trip was planned to leave the ADtranz factory at Dandenong on 28 April, but was delayed for two days by a minor mishap to the trailer at the factory.

The prime mover/trailer combination was near Tarcutta in southern New South Wales on the afternoon of 30 April when the crew of the rig lost control. The trailer with its load began to overtake the prime mover. The force transmitted by the draw bar was sufficient to overturn the prime mover.

The trailer with the LRV on board then continued independently, crossing the south-bound side of the road but fortunately not hitting any on-coming traffic. The trailer and tram then continued into trees on the right hand side of the road. The trailer hit an obstacle which caused it to stop dead - but the tram kept going. The first two units of the five section vehicle ran off the front of the trailer and on to the ground, with the vehicle left hanging from the second articulated connection.

By Friday 2 May the LRV had been separated into its five parts, which were on their way back to Dandenong. The first two units of the vehicle, at least, are understood to have been seriously damaged. The damage to the car is much more severe than indicated in media reports of the accident.

The second car is due on 20 May but is dependent on repair of the trailer.



These two views show the first Sydney LRV in the trees at the accident site near Tarcutta. It has been reported that a weld on the trailer which had been broken and repaired in Melbourne before the tram left the ADtranz

plant at Dandenong, broke again causing the trailer to close up and flip the prime mover.

Andrew Campbell / Sydney Morning Herald



ST KILDA

Australian Electric Transport Museum

GPO Box 2012, Adelaide, South Australia 5001

From Colin Seymour

Kensington and Norwood Day

Sunday, 9 March 1997 saw the AETM celebrate the opening of Adelaide's first electric tram line along the Parade to Norwood and Kensington on 9 March 1909. The event was heavily publicised in the Kensington and Norwood area and on Adelaide radio which ensured very good crowds.

The bodies of A type 15 and E type 115 were brought to the front of the main shed for public display and roped off. Heyne's Nursery, a well known nursery on the Parade at Norwood supplied a large range of pot plants for display in front of car 1 - the first electric tram. Car No.1 was not used for the day as it requires major repairs to a motor. A photographic display and alternative publication sales point was set up in Ballarat 21. The sausage sizzle again proved popular.

Road King Coaches brought two double decker bus loads of passengers from Norwood through the city to the Museum. It seems there is a market for such a service on our special days as there is no public transport to St Kilda. The Museum advertises the special bus service, passengers being encouraged to pre-book.

Eight cars were used in traffic during the day. A 12 minute service was operated for most of the day, motormen being required to follow a written timetable and crossing instructions instead of telephoning the dispatcher from the Beach for 'Up' instructions.

The event was organised by Neville Smith who has been appointed the AETM's Special Events Coordinator. As part of the event, Neville compiled a small booklet entitled *Parade to Kensington*. The booklet is designed for people with an interest in the Kensington and Norwood areas rather than the tramway enthusiast. Consequently it is low on text and has lots of photos. It will be promoted in the Norwood area. If sales are successful, we plan to produce similar booklets for other lines.

The Museum's AEC Regal IV bus 623 heads a display of buses at St Kilda on 9 March 1997. Neville Smith





Descendants of Mrs Price, who drove tram No.1 on 9 March 1909, stand in front of the car on 9 March 1997. Heyne's Nursery at Norwood supplied a range of pot plants for the day.

Neville Smith

Toastrack 42 passes MTT Hercules bus 164 of World War 2 vintage. The two Road King coaches which provided a transport service to St Kilda for the day are seen at right.

Neville Smith





Descendants of Mrs Price who drove Adelaide's first electric tram on 9 March 1909, in the cabin of car 111 with motorman Bev Smith on 9 March 1997.

Neville Smith

Our special guest for the day was Ms Vinnie Ciccarello, the Mayor of Kensington and Norwood who launched the booklet. Other special guests included the grandchildren of Mrs T Price who drove the first electric tram to Kensington on 9 March 1909. Mrs Price deputised for her husband, Tom Price, the Premier of the day.

After the booklet launch, E1 type tram 111 was driven out of Road 2 by Operations Manager Bev Smith. It was car 111's first day back in operation following its refurbishment which was spread over five years. (Car 111 was one of the first cars to be restored at St Kilda and had been in service since the opening of the tramline in March 1974.)

Ms Vinnie Ciccarello, the Mayor of Kensington and Norwood at the controls of car 192. Ms Ciccarello launched the booklet 'Parade to Kensington'.

Neville Smith



As previously described in these pages, the refurbishment involved steel strengthening of the chassis and a repaint. The Mayor drove car 111 to the Beach and Mrs Tingey, a grand-daughter of Mrs Price, drove the tram back to the Museum.

For the first time, the tram service was maintained during the official speeches. This follows some complaints on other special event occasions from passengers stranded at the Beach and Playground end. This service, which was unannounced during the speeches, was maintained by our two Adelaide dropcentre trams, cars 264 and 282. When approaching the Museum, these cars stopped short of the depot fan area.

The event was well supported by TransAdelaide and Serco (the northern suburbs bus operator). TransAdelaide's Mile End Depot supplied bus 1001, the first Volvo B59 and a MAN rigid, Morphettville Depot supplied a MAN gas bus and a Volvo B58 artic., and St Agnes Depot supplied bus 1501, the prototype Mercedes rigid O-Bahn bus. Serco brought out new MAN midi bus No. 111 and a MAN articulated bus. The 1940s MTT Hercules bus No. 164 was also brought from the Birdwood Motor Museum. Our own diesel bus, AEC Regal IV 623 was also put on display with the other buses. Serco bus 111 posed alongside tram 111 on its return to the Museum on its first trip after the re-launch. Car 381, as the last car for the day, re-enacted its role as the last tram to Kensington Gardens on 2 February 1957.

Bodyshop Activities

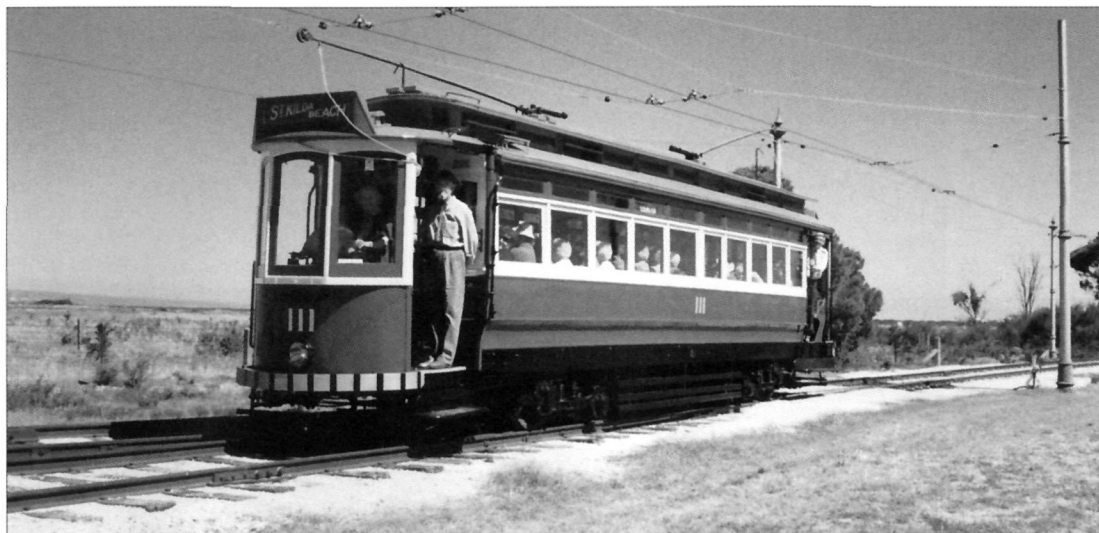
In the weeks before the re-launch of 111, strengthening was carried out on the western end of the chassis in a similar manner to that carried out on the eastern end. The floor was fully fitted and the car was taken for its first trial runs at the start of February 1997.

In the last few weeks, a massive effort was put in to complete the exterior painting and the interior revarnishing (a top coat to brighten it up). The upholstered seats were cleaned and reinstalled. Floor slats were installed in the drop end (eastern end). Floor paint was applied. Minor repairs were carried out to destination boxes and small fittings and sign writing completed.

The main contributors to tram 111 were Kym Smith, John Pennack, Ian Seymour and Colin Wood, assisted by Chris Andrews, Chris Dunbar, John Radcliffe, Peter Letheby and Colin Seymour.

Adelaide E1 type 111 on one of its test runs in February 1997 following its extensive refurbishment. The car numbers are still to be added. Kym Smith





Adelaide E1 type 111 returns to the Museum on its first passenger run on 9 March following its extensive refurbishment.

Neville Smith

Peter Keynes has varnished the eastern saloon ceiling of W2 car 294 following removal of the Colorflec. Colin Wood and Kym Smith have started work on the rusted gutters and side panels and are cutting out timber rot.

Workshop Activities

Work has continued on the Hackney Depot wheel press. The cleaning of the various components has been finished and a start has been made on reassembly.

The pneumatic portions of the wheel lathe, such as the tool post over a gantry and the movable headstock clamp, have been reconnected. The lathe is now mechanically operational but requires electrical repairs.

WHITEMAN PARK

Perth Electric Tramway Society

PO Box 257, Mount Lawley, Western Australia 6050

From Michael Stukely

Operations

The 1997 Classic Car show, organised by the Combined Car Clubs of WA, was held at Whiteman Park on Sunday 23 March. The show was again based around the Mussel Pool area and overall attendance was similar to that of 1996. Although loadings were lighter than expected in the early part of the day, it was a very successful one for the Society. Up to four trams were required, with W4 class 674 commencing services between Village and Mussel Pool at 9:00am

and W2 class 393 at 11:15am. W2 class 329 began running in convoy with 674 at about 1:00pm and SW2 class 426 assisted 393 from about 3:00pm. A flat \$1.00 return fare was charged for all passengers as in 1996 with conductors selling tickets at the stops as well as on board the cars.

Three days' services were lost during December-January due to total fire bans being imposed. Only one day was lost in the corresponding period in 1995-96.



Trams passing at Stockmans Loop on Classic Car Show day, 23 March. W2 class 393 from Village waits on the main line (left), while W4 class 674 and W2 class 329 move through the loop on their way from Mussel Pool to Village.

Michael Stukely

Fremantle 29 waits in the Village Mall on 12 March while guests at the launch of the Whiteman Park Concept Plan enjoy a sausage sizzle under the trees (left). They later took a ride to Mussel Pool and back.

Terry Verney





Fremantle 36 in use as a tearoom at the 'Locomotion' miniature railway at Lower Kalgan in 1993. This tram body has been acquired by PETS as reported in our February issue.
Bill Gilbert

SW2 class 426 experienced a motor failure in traffic in early March, the first such incident which has occurred in over 11 years of operations. Fortunately Noel Blackmore and the Wednesday Team were able to exchange the motor and wheel-set in time for the Classic Car Show.

New tickets were introduced from 1 April in conjunction with a small increase in adult fares (single, from \$1.00 to \$1.50; return, from \$2.00 to \$2.50).

Specimens of PETS new tickets in use from 1 April 1997.

<div>Perth Electric Tramway Society Inc. Operator of WHITEMAN PARK TRAMWAY MUSEUM</div> <div>Not transferable. Must be shown on demand or another fare paid.</div> <div>E V WP 1^D VJ BB MP</div> <div>A portion of this fare is applied to Whiteman Park maintenance</div> <div>BN^o 00003</div>	<div>Perth Electric Tramway Society Inc. Operator of WHITEMAN PARK TRAMWAY MUSEUM</div> <div>Not transferable. Must be shown on demand or another fare paid.</div> <div>E V WP 2^D VJ BB MP</div> <div>A portion of this fare is applied to Whiteman Park maintenance</div> <div>BN^o 00025</div>	<div>Perth Electric Tramway Society Inc. Operator of WHITEMAN PARK TRAMWAY MUSEUM</div> <div>Not transferable. Must be shown on demand or another fare paid.</div> <div>E V WP 3^D VJ BB MP</div> <div>A portion of this fare is applied to Whiteman Park maintenance</div> <div>BN^o 00005</div>	<div>Perth Electric Tramway Society Inc. Operator of WHITEMAN PARK TRAMWAY MUSEUM</div> <div>Not transferable. Must be shown on demand or another fare paid.</div> <div>E V WP 6^D VJ BB MP</div> <div>A portion of this fare is applied to Whiteman Park maintenance</div> <div>BN^o 00108</div>
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The tickets are printed with pre-decimal fare denominations (child single, 1d; return, 2d; adult single, 3d; return 6d), and have boxes for conductors to punch which show clearly where the passenger boarded. Signs displayed in the trams and at stops give details of the actual fares charged. This will avoid the need for any change to ticket stocks when changes are made to fare structures in the future.

Developments at Whiteman Park

A draft Concept Plan for Whiteman Park was launched on 12 March by the Minister for Planning, the Hon. Graham Kierath, MLA. The Plan, developed by the Whiteman Park Board of Management with assistance from consultants, aims to lay the foundations for a Master Plan to take the Park forward to the State's Bicentenary in 2029. It is open to public comment until 16 May.

Volunteer groups and commercial operators in the Park must now enter into formal lease and licence agreements with the State Planning Commission. A lot of time has been spent on details of our Lease over several months, and although negotiations are not yet complete, we have been successful in our application for a term of 20 years (rather than the standard five-year term). This now gives the Society a secure basis for planning our future development at Whiteman Park.



The completed retaining wall alongside the hardstand area in the rear compound in February. Trucks are already occupying the bogie storage road (left) which will form an extension of the pit road. Terry Verney

Charlie Bite, (left) and Geoff Morrison working on the motor on a Melbourne No.1 truck on 20 November 1996. Lindsay Richardson



Special Projects

Further sand has been moved from the Pit Road into the Spare Parts Storage Shed by Lindsay Richardson, Kevin Clarke and Terry Verney, to bring the floor up to the correct level for concreting. It was then levelled and repeatedly watered for consolidation. A quote for the laying of the 100mm thick reinforced pad has been accepted and the work was scheduled to be done immediately after Easter. Quotes were also accepted for laying the reinforced concrete base of the pit, and an extension of the floor of the Perway Shed which is to be re-positioned at 90° to its present alignment. This work will follow the Spare Parts Shed floor. Separate quotes will then be submitted for building the brick side and end walls of the pit, and for concreting the deck around the pit. These projects are funded from the Oketon Geddes Trust.

Sixty tonnes of hardstand material were delivered to the hardstand area on 13 January.

Following completion of the retaining wall alongside the rear compound hardstand, the surface along the top of the wall has been restored with

Early stages in the excavation of sand from the pit road in the Engineering Shed on 16 October 1996.

Lindsay Richardson

roadbase. Two No.9 trucks were moved with the crane from B road to the new bogie storage siding on 18 December.

Motor Vehicles

Good progress has been made on the refurbishment of the Albion truck by Vic Sweetlove's team. The cherry-picker will be mounted on this vehicle for use by the overhead team, in place of our aging ex-WAGT tower wagon. The front wheels have been refitted, a new brake servo unit mounted on the chassis, and the repaired half-shaft refitted. New fuel lines have been made and fitted by Ray Blackmore, the generator overhauled by Noel Blackmore has been fitted, and a new fuel tank made by Gordon Cutler using a 60L drum plus pipework was fitted. The motor has been run successfully. New brake pipes for the rear axle were donated and fitted by Vic Sweetlove; Gordon Cutler has patched the cab; and the driver's seat has been recovered. We are grateful to Southside Engineering for repairing the half-shaft at a substantial discount, and to L&M Radiators for supplying radiator tubes and fins at no cost.

General

During summer, the overhead at Stockmans Crossing was found to be moving out of alignment,



because the backstays supporting the concrete poles were coming loose. It has now been determined that the culprits were the Park's cattle, which apparently decided that the backstays make ideal scratching posts, and this unexpected use resulted in the loosening of the nuts holding the wire clamps. Lock nuts have now been fitted, and the alignment of the contact wire has been maintained. The cattle, we assume, are still scratching!

Track maintenance work has been done at Farmgate Curve, at the Bennett Brook stop, on the grade between Red Dam and the Tractor Museum, and near Village Junction. On 15 March, Lindsay Richardson, Trevor Dennhardt, Kevin Clarke and Ric Francis lifted and packed four panels at Mussel Pool. Gravel and roadbase were added to the ends of the platforms at Mussel Pool and Bennett Brook to provide sufficient length for two cars. Noel Blackmore has progressed with the rebonding of the carbarn fan.

The overhaul of the No.1 truck has received a setback, as a motor and wheelset intended for it had to be used to return SW2 class 426 to service. A No.1 truck was retrieved from under the body of Kalgoorlie 25 on 26 January and replaced with a motorless truck. These motors will now receive attention.

The job of re-upholstering the seats of the operational trams is now complete with car 426 the final car to be treated.

Ric Francis has levelled the western end platform of Perth G class 35 so that the apron uprights can be secured and the roof repaired.

Noel Blackmore has completed the overhaul of the rail drill, which needs to be set and tested.

Robert Pearce has been co-opted to the vacant position on Council.

BENDIGO

The Bendigo Trust

1 Tramways Avenue, Bendigo, Victoria 3550

From Len Millar

February 20 - Keith Kings Day

Some 100 people gathered at the Central Deborah Gold Mine for the launch of the Bendigo Trust's revised edition of *Bendigo's Vintage Talking Trams*. Keith Kings spent a considerable amount of time revising and upgrading this long out-of-print booklet, which provides a valuable supplement to the Talking Tram Tour through the streets of Bendigo.

By any appraisal, Keith is an ornament to the tramway preservation movement in Australasia, having served the movement since the late 'forties, when his interest in trams led him in the direction of written and photographic recording of the then tramway scene. In the early 'sixties, Keith was a leading light in the active preservation of several Victorian trams through the Australian Electric Traction Association and then the Tramway Museum Society of Victoria. Keith spent literally thousands of hours in helping to establish the TMSV's home at Bylands and his financial generosity helped house veteran tram and bus vehicles under cover.

In his retirement years, Keith has been busier than ever, and we at Bendigo have been well served by his kind help at the sharp end of a tram with a tour group, or doing any of the many jobs (large and small) that keep a tramway running. His behind-the-scenes work helping organise and record the 1990 COTMA Conference in Bendigo has been acknowledged in an earlier issue of *Trolley Wire*.

Our booklet has been out of print for too long, and Keith rose to the occasion by undertaking his usual meticulous and thorough research in updating the Sue McKinnon 1981 first edition. Keith has been involved in tramway publishing for a long time, and a hallmark of his work is the authoritativeness of his handiwork. This time round the Talking Tram book has enjoyed a significant improvement in production values, with excellent photographs accompanying the expanded text. Your correspondent is grateful for the printed version of the taped commentary that is actuated off and on during each tram tour. One hears it so often one

tends to forget the minutiae. And it is embarrassing to confess to passengers at the end of the trip, "No, I'm sorry, I've forgotten when the Fountain was erected!" One has no excuse now! "Madam, for only \$7.95 you can buy a copy of the booklet and then you will have a permanent reminder about the Fountain!"

The Tramway Committee had fun drawing up the invitation list for the book launch, and in setting down details of Keith's history for the speeches at the launch. Victoria's new Transport Minister, Robin Cooper came up from Melbourne to perform the book launch, and he was glowing in his comments about Keith, the booklet, and our tourist-attracting operation. In the next day's *Bendigo Advertiser* there was a photo of Mr Cooper sitting on the running board of toastrack car 17 reading the new booklet.

Of course, newspapers always get their facts right, so I pass on the news that 'Mr Kings, 68, has written 12 books'. Keith's many friends and acquaintances around Australasia will have no trouble picturing Keith's discomfort at being the centre of an event, because he is such a modest, quiet achiever. But, Keith, this was your day! Thank you for your scholarship and your hard work over the years. Tramway preservation is the better for it, and we hope you enjoyed the day, too!

Keith Kings speaks at the launch of his book 'Bendigo's Vintage Talking Trams'. From left to right are: James Lerk, Bendigo Trust Education Officer; Keith Kings; Transport Minister Robin Cooper and Daryl McClure, Trust President. Dennis Bell

It Never Rains, But it Pours

Hot on the heels of Keith's valuable treatise arrived *Eaglehawk's Lifeline*, a booklet on the Bendigo-Eaglehawk tram route, 'complied' (sic - that's what the cover says!) by Noelene Wild for the Eaglehawk Heritage Society Inc. It contains quite a few hitherto unpublished photographs and some amusing anecdotes.

Apparently in bygone days, the police were not keen to attend any of the few tram accidents, so the tramway staff were required to take measurements and compile reports, etc. Since chalk would wash off the roads in rainy weather, trams were for a time equipped with hammer and nails for such an eventuality.

And one day a driver was looking in the rear vision mirror and chastising two school boys, and hit the tram in front. Wham! The destination box fell on the driver's head, 'but there was only slight damage to the trams.'

Readers may secure their copies of these two fine publications from the Bendigo Trust, 76 Violet Street, Bendigo 3550. Keith Kings' *Bendigo's Vintage Talking Trams* is priced at \$10 including postage, and the *Eaglehawk* booklet at \$15, again including postage.



Don't Get Off Your Bike!

Each year, Bendigo has a 50 kilometre community cycling event, including an assault of One Tree Hill. To launch this year's event, two participants on a tandem bike were pitted against SW5 car 808.

With cameras popping and bemused spectators gawking, the intrepid duo, Bendigo's Commonwealth medalist Rick Flood and Special Development School's Aaron Pearce set off alongside 808 in Bridge Street. Your correspondent missed the fun, but with Tramway Superintendent Dennis Bell at the controls of the tram, and the staying power of a tram in full parallel, my guess it was a one (hundred and sixty) horse race. Seasick tablets were handed out free afterwards to the rock 'n' rolling tram's passengers.

Edgar Harrison Saluted

At the tram depot on 14 March, friends gathered to formally acknowledge the contribution of Edgar Skill Harrison to the Bendigo Trust, and in particular the formation of the tourist tram service. Edgar was mentioned in our last issue wherein his letter to the *Bendigo Advertiser* way back in 1970 started local people thinking about preserving part of their city's tram system. Former Premier Sir Rupert Hamer revisited us and installed a plaque in summer car 17 after praising Edgar for his far-sighted activities all those years ago. Edgar, of course, still serves on the Tramway Committee, and recently presided over the rehabilitation of the old gas works into a new tourist attraction under the banner of the Bendigo Trust.

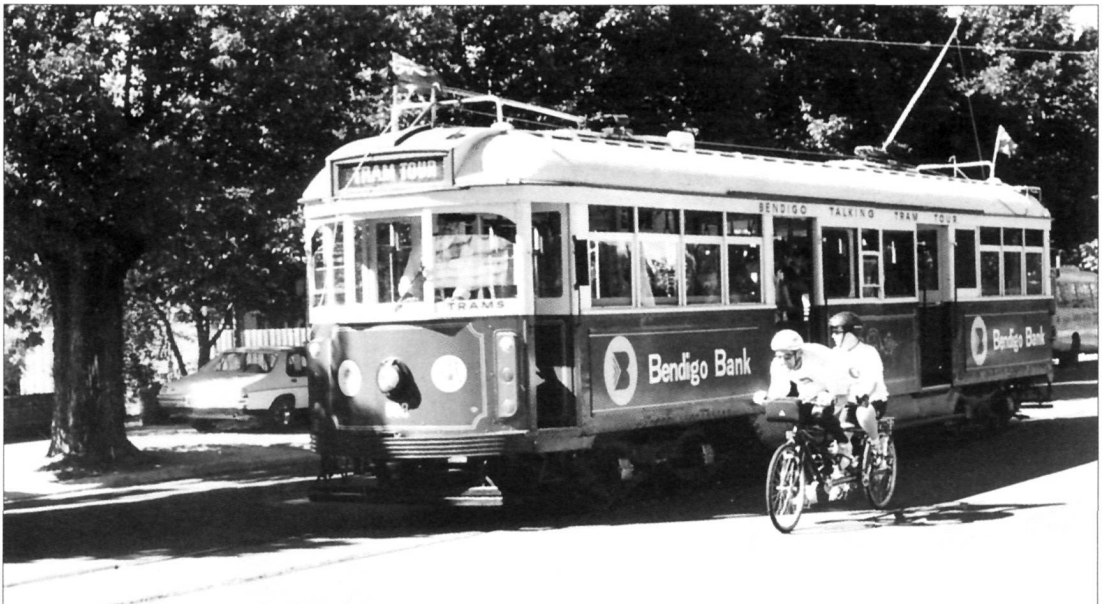
Did You Hear That?

Readers are asked to update their detailed statistics in respect of the weight of Bendigo tram No.26. Henceforth it now weighs a few tonnes more than it did. The poor old girl now has twenty speakers strung along its ceiling. No more complaints will be accepted from any disgruntled passengers about not hearing the commentary tape! Seriously, though, the problem of an acceptable sound level for the tape has bedevilled us from Day One. When the tram is stationary and the compressor isn't chattering its head off, the volume level can be set quite low, but with a spur-gearred tram in full flight along our concrete track, the decibel level needs to be a tad higher. Until someone invents an ambient sound background noise level meter, we seem to need saturation speakers in the trams. But, 20? Look out, car 44, you're next!

New Tower Truck Plan Revealed

Plans for a new tower truck for the Adelaide Tramways have been uncovered in a cupboard in our Depot office. Dennis Bell is going to parcel them up and sent them off to our St Kilda colleagues in South Australia. We hope they are of use. The date on the plans? 1913!

Rick Flood pilots Aaron Pearce on a 'bicycle built for two' along Bridge Street, pitted against 160hp SW5 car 808. Dennis Bell is the tram diver and he also supplied the photo. Clever, isn't he?



BALLARAT

Ballarat Tramway Museum

PO Box 632, Ballarat, Victoria 3353

From Dave Macartney

New Overhead Erected

The first section of the tramway's new trolley wire was run out during the first week of March. The northernmost section, from the Gardens Loop to St Aiden's Drive was selected for replacement. A number of C shaped loops were manufactured from old trolley wire and suspended from the old overhead at regular intervals. The new wire was then fed into the loops, after which it was a relatively straightforward matter to progressively remove the old wire and install the new, ear by ear. Much preliminary work had been done in loosening the various fittings to ensure there would be no undue delays on the day, although the section insulator proved to be particularly stubborn. The wire was progressively tensioned as work proceeded, with the northern wire being replaced on Tuesday, 4 March and the southern wire on the following day.

Each run took about twelve hours to complete, and involved some 460 metres of wire. The cable drum was carried on a reel borrowed from Bendigo sitting in the back of a tandem trailer. The new overhead looks quite massive from the ground, indicating how badly worn the old wire had become. It is planned to renew the opposite end of the line, from Depot Junction to Carlton Street, later in the year, when the days are of sufficient length to make it possible.

Car 27 is paced by a young bicycle rider as it passes the new Wendouree playground during the Begonia Festival.

Bob Merchant

Bungaree Residence

The Museum has purchased the house at Bungaree that it has rented for the past twenty years as well as some of the surrounding land. This had previously been rented from the Public Transport Corporation at a variety of rates, depending on the policy on these matters applying at the time. Originally it had been at the standard railway Departmental Residence rate of \$4.62 per week, then at \$171 per month and later at \$104 per year!

With the Railways no longer maintaining a staff presence at Bungaree, it was decided to sell off the assets, so the Museum was offered the house and land for \$20,000, which is a very favourable price. The satellite towns of Creswick, Buninyong, etc., have flourished in recent years, and land prices there have reflected this. However, Bungaree lies within the watershed of a number of reservoirs serving both Ballarat and Geelong, so there is a conscious policy restricting new development in this area, hence the depressed land values.

Begonia Festival

The Begonia Festival was moved back a week this year, commencing on 7 March, the long weekend, with the street parade on the Sunday of the following week. Traffic control was even tighter than in the last couple of years, with virtually no motor traffic at all in Wendouree Parade. As well as the trams, however, there was a miniature steam wagon towing three trailers shuttling up and down. Good passenger





numbers were recorded, with a one day record of 1729 being posted on Monday 10th, while the full festival period yielded some 5691 passengers. This was closely followed by a good result of 649 over Easter, after a number of poor years.

The long weekend figures are all the more noteworthy as the rostered crewing arrangements went out the window very early on. The Public Transport

The Museum's ex-M&MTB tower wagon was used to erect the new overhead wire. It is seen at work on 4 March 1997.

Carolyn Dean

Rolling out the new wire from the cable drum. The tower wagon can be seen in the distance.

Carolyn Dean



Union called their much publicised strike to coincide with the Grand Prix, thus releasing a number of Museum volunteers who had been expecting to work, while some of the rostered staff were laid low at various times for one reason or another. The full service of trams ran, though, to this day, nobody is quite sure how.

The second weekend saw a different problem, as the contractor hired to erect the public address system for the following day's parade turned up and proceeded to

cause mayhem. His first trick was to erect an aluminium ladder against an overhead pole and head up towards the business end. Fortunately he was spotted before he got too far and urged to desist. Eventually he got one of his speakers attached to a pole with many yards of gaffer tape, only to have a tram arrive and threaten to slice it off with the advertising boards. At this stage the Festival Director was called in to adjudicate, and the sound guru was forced to gaffer tape his equipment to the trees.

LOFTUS

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

From David Cooke

Site Report

The traverser pit in front of the main display building is well advanced, thanks to Greg Sutherland, Tom Tramby, Chris Olsen, Mal McAulay, and our CSO workers. Pouring, screeding and finishing concrete on the hot and humid days of February was no picnic. We were able to traverse the concrete delivery vehicle

sideways as each section of concrete was poured. The first vehicle to traverse the completed pathway was our small forklift driven by Chris Olsen. Chris had to retrieve a heavy cast iron cover surround from near the fence and a forklift was the easiest way to do it. A few weeks later the O series Bedford tower wagon was used to place the road numbers above the doors.

Tom Tramby and Mal Macaulay smooth newly laid concrete between the depot and traverser pit on 25 January 1997.

Greg Sutherland

John McFadden is undertaking the painting of the traverser. John had previously demonstrated his enthusiasm for awkward tasks when he undertook to





A sideways move to the job site was a novel experience for Concrite's driver on 25 January. Concreting of three sides of the traverser pit is now complete and provides an all-weather pathway between workshop and depot.

Greg Sutherland

W2 class 392 is testing clearances on the curve in Cross Street on 1 February 1997. Greg Sutherland





Bob Cowing fixes road numbers above the workshop doors using the Museum's newly restored tower wagon.

Ken Stockdale

clean years of accumulated grime and muck from the bogies of freight car 24s.

The curve in Cross Street is nearing completion under the workmanship of Mike Giddey and whomever else is available to assist, including our CSO workers. As soon as wiring has been erected, this section of track will come into regular use. It is then proposed to relay the present access track to the depot on the western side of the site.

Cleaning and tidying the museum area continues on a regular basis. Much rubbish has been disposed of and this in turn has allowed a shuffling of some items so that they are not visible from the adjacent railway, presenting a better aspect of the museum for those travelling by train.

Pier holes have been bored and concrete poured preparatory to the completion of road 8 in the main depot. This area will become one of the main display sections of the museum and shall contain such items as a track maintenance display, demonstration section of cable tramway track, a hands-on 'how a tram works' display, and an appropriate area for our war memorial boards. Detailed planning is continuing.

Overhead troughing has been erected above the front part of road 4 which, when wired, will allow easier movement of trams within the display hall.

On Friday evening and Saturday 4/5 April, Tom Tramby and Chris Olsen erected a compressed air system throughout the workshop building.

Geoff Olsen continues to provide for our electrical requirements in both depot buildings, the workshop and ancillary structures, particularly in the provision of power outlets. Recently, he installed an in-ground junction box in the picnic area to provide power to four concrete park-type lamp standards erected in this area by Bob Cowing. The standards are to be topped by 'inverted fish-bowl' type light fittings.

Tower Wagon

Our second tower wagon, a formerly derelict looking D series Bedford, is in the workshop having all poor timberwork replaced. Brian Hague and Derek Butler have been utilising offcuts found around the workshop to replace the damaged timber resulting in a restoration at little or no cost. Stripping the old paint on the tower has commenced and will result in another fine specimen for overhead gang use and the display hall.

Car News

Freight Car 24s: Saturday 15 March saw this car emerge from the workshop building in its finished state. It now resides in the display hall, a credit to all those involved. Thanks are due to John Matts, Chris Jacobs, John McFadden, Geoff Spaulding, Joe Kirchberger, Brian Hague and Derek Butler. Brian and Derek were responsible for fitting all the sundry items like the sandboxes and trolley bridge. At a later stage it will be returned to full operating condition.

C class 290: Now that 24s is complete, work on car 290 will be completed. New seats have been made and the inside looks a treat, having been fully stripped and revarnished. Cleaning the wheelsets and Peckham truck, and reassembly of the springing and brake gear is continuing.

Track Tamper: This is a little-mentioned on-and-off project which gets attention when time permits. Bob McKeever has fitted an electric motor to this piece of equipment. A roof, which will support the trolley pole, is to be provided. When complete the Museum will have transformed this item from non-existing diesel to electric power. Previously known as TDX 45, it will probably become ETDX 45 to reflect its change from diesel to electric power.



*Ian Hanson (foreground) and John Matts (far end)
work on repainting R1 class 1979 on 1 February 1997.
Greg Sutherland*

Heritage Council News

Now that the traverser area is nearing completion the Museum's Heritage Council, an advisory body to the Museum's Board, has recommended that a medium height tramway-type picket fence be provided on the eastern side between the main building and the workshop to replace the present paling fence. A fence of this type will allow the public to see what is behind the fence, but at the same time provide security of access to the traverser area.

Heritage Council members are also working on the appearance of Tramway Avenue which, when completed, is intended to represent a section of typical inner suburban Sydney street during the inter-war period. This era was chosen as it will allow the display of most of our Sydney tramcars against a suitable backdrop.

Incidentally, the overhead fittings from the Museum's front gate at Pitt Street to the Railway Square waiting shed are Sydney pattern. These require modification to accept pantograph operation. The majority of fittings from Pitt Street towards Sutherland come from Brisbane while the depot yard is kitted out with Melbourne equipment.

Members of the Heritage Council are also continuing to research the paint schemes used on Sydney's tramcars (it is not at all a simple matter!), continuing research started by Norm Chinn and Ken McCarthy into various aspects of Sydney's tramcars, and assisting research being carried out overseas into George Francis Train's horse cars.

Information Freely Given

A request to Greg Sutherland from our kindred museum, the Seashore Trolley Museum at Kennebunkport in Maine, for details of paint colours for their Sydney P class tramcar 1700 resulted in John Matts sending a vast amount of detail, not only colour samples and about the colours, but also about the P class in general. The response thanking us for our efforts indicates that Seashore now has more information on its Sydney exhibit that it does for many of its US tramcars.

The Edmonton Radial Railway Society in Canada called for information on GE 25 compressors over the Internet and only received two replies, from Sydney and Christchurch. We responded with a parts list and other information.

FERNY GROVE

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

From John Lambert

Workshops

Combination car 47 was lifted off its Peckham truck during December 1996 under the direction of Bevan Burnes, the restoration supervisor. Since then the truck has been undergoing a major overhaul which has involved the following tasks:

- Replacement of all coil springs and retensioning of the outer leaf springs. The new coil springs and the retensioning work was carried out by Donaldson and Son, spring makers;
- Replacement of most of the bolts and spring pins in the entire truck;
- Total refurbishment of the brake rigging;

- Inspection of all axle brasses and the manufacture of new keeps;
- Building up the truck frame in several areas due to corrosion pitting;
- A general clean-up and removal of many years of accumulated grease, road dirt and grime, etc.

New motor mount rubber bushes were required and quotes came to about \$90 each and this was soon rectified by purchasing a boat trailer roller from a ships chandler and cutting off sections to the required length / thickness.

The only task remaining on the truck is the fitting of Raychem thermo-shrink sleeving (rated at 5000 volts) to the motor leads. The conductor size of the motor leads when measured with a micrometer came to fractionally over 16mm square cross sectional area.

Nick Clark and Bevan Burnes tighten the final bolts on car 47's Peckham truck while Mick Topp inspects the motor leads.

John Lambert



These cables mate to the main leads under the tram body itself which are the old imperial 7/64 inch or 16mm.

The body of 47 itself has been fully cleaned. The roof was prepared and given a coat of brilliant white paint. All brasswork has been removed, cleaned, polished and is presently awaiting refitting. Other sections of the body have been prepared for touching up. However, this is the next stage in the refurbishment as most of the work up until the present time has been concentrated on the truck overhaul.

Various members have worked on this project. However, special praise must go to Bevan Burnes, Nicholas Clark, Alex Tafe, Noel West and David Vickery.

Completion of 47's refurbishment is targeted for late May as it is to be relaunched into operational traffic service by the Lord Mayor of Brisbane, Mr Jim Soorley on 21 June, which is the 100th anniversary of the commencement of electric tramways in Brisbane.

Museum Site

As readers will be aware, a large number of the diesel buses stored on site were badly vandalised

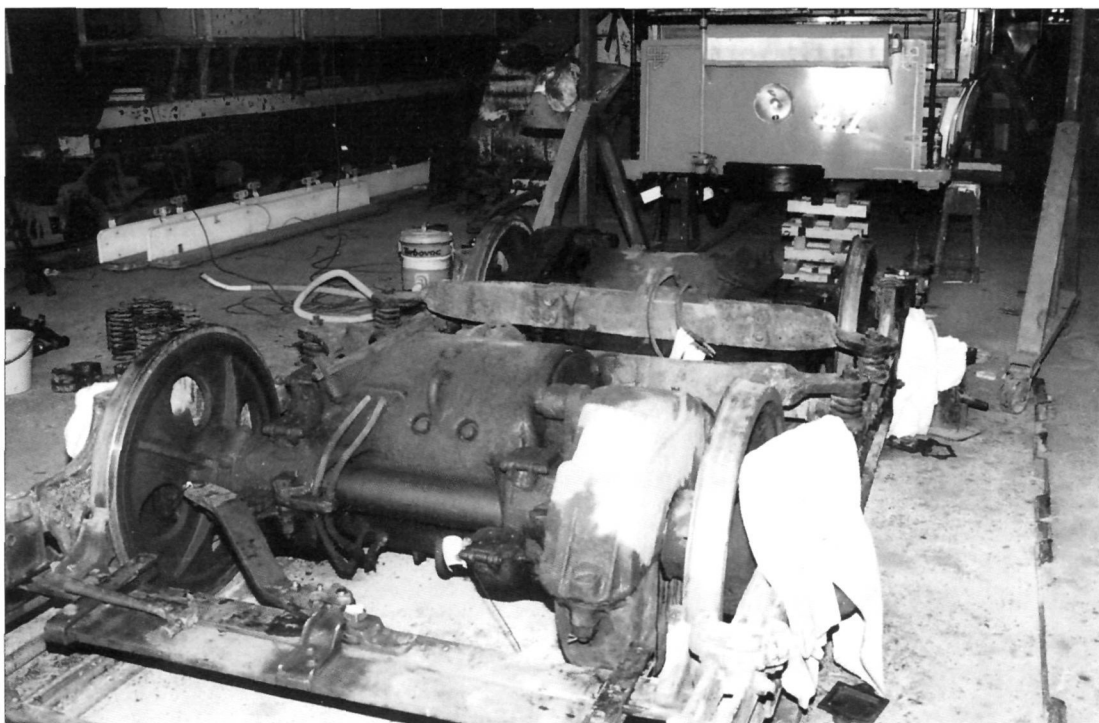
during late 1992 by two school students who were later convicted and sentenced to Community Service. As a direct result of this vandalism, the diesel buses (all of which are in open exposed storage) started to deteriorate faster due to a lack of windows, etc. This made our site look more like a bus graveyard than a tramway museum. The other piles of 'nefarious junk' that all museums seem to acquire helped to exacerbate the untidiness and disarray of the site.

Since January, the site has been undergoing a massive scorched earth type clean-up to make it totally presentable to visitors as a tramway museum, with the completion target for this work being late April.

Archy Gould's crane truck was used on four Sundays to relocate rail, pointwork, steelwork, span poles, tram ends, waiting sheds, trolleybus spare axles and other assorted material to an area at the rear of the Store building. The Scammell recovery vehicle was used to tow and, where necessary, push all the deteriorating buses to an area along the western boundary fence of the museum. A bobcat complete with attachments was used to dress up several areas of the site, particularly the area near the front terminus at the Tramway Street

The Peckham truck from combination car 47 being dismantled for overhaul.

John Lambert



visitors car park and to clear the hardstand area between the Workshops and Store buildings.

Tasks still outstanding are the erection of the Massey Hammer (from Milton Tramway workshops) onto its base, relocation of the body of tram 94 from the bogie storage road to the hardstand area, recovery of five timber span poles from the abandoned Stamford Road trackbed, and the relocation of some other items of equipment that were too heavy for Archy's crane truck. John Lambert is team leader for this project and he is being assisted by Wayne Chaseling and Mick Topp.

Grounds

As part of the site clean-up, the bobcat was used to drill several post holes in preparation for the erection of two-metre high fences in several strategic locations around the site. These fences will then be used to support fast-growing creepers such as Honeysuckle and thereby act as a visual barrier to the storage areas at the rear of the Store building and the buses stored along the western fence of the site. The fencing material was recovered by the Society several years ago during one of its many outings to recover tramway equipment.

Track Extension / Engineering

The bobcat mentioned previously was used to clear the long river grass and some fallen dead trees on the

western side of Cedar Creek so that a clear working area will be available to allow design work on the proposed extension to be undertaken in early May. The river grass in this area regularly grows to two metres in height and the Society's only practical option was to use a bobcat to clear the area.

The Society's consulting engineer, Bill Kingsley will be in Brisbane in early May to assist with the design of the tramline during which discussions regarding construction / design options will be held with Officers and Engineers from the City Council while Bill is in Brisbane. John Lambert is occupying the position of Technical Officer for this project.

Brisbane Tramway Video

Noel West, assisted by fellow members Robert Thomson and Brad Muir, is producing a video on the Brisbane City Council's tramway system.

The video is titled 'Wait Here for Trams' and will run for approximately 175 minutes (yes, almost three hours) and will feature Brisbane's trams and trolleybuses up to the closure of the tramway system on 13 April 1969. Production is well advanced and the video is due for release on 21 June 1997 during the Centenary of Electric Trams in Brisbane celebrations to be held at the Museum.

For further information regarding the purchase of this excellent video, please telephone (07) 3351 1776 (the Museum's telephone/answering machine) after June this year.

A view of the diesel buses stored along the Museum's western boundary fence.
John Lambert



HADDON

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

From Craig Tooke

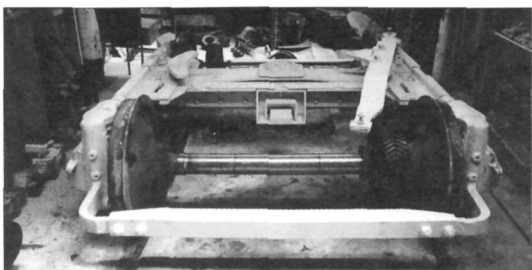
L Class 103

Work continues to progress at a steady pace on the restoration of this tram. Following an initial examination of the internal lined ceiling, it was first thought that we would not have to repaint the ceiling. However, once restoration work commenced it soon became very obvious that the ceiling inside the No.1 end saloon would have to be repainted. The cover straps were removed and the ceiling repainted. The cover straps were replaced on completion of this work. The result has improved the appearance of the ceiling remarkably. The remainder of the internal ceiling has been washed and has come up satisfactorily.

All the screw holes for the external advertising on the end aprons and saloon side panels have been filled using MIG welding techniques by Frank Schroeders, who is a boilermaker by trade. Frank has done a fine job.

Due to a shortage of suitable Westinghouse DH16 air compressors, a Westinghouse DH10 compressor is to be fitted to 103. Tony Smith steam cleaned one of our spare DH10 compressors, disassembled and overhauled it. It has been reassembled and tested ready for fitting under the tram.

The reassembly of the Brill 77E trucks by Noel Gipps and Tony Smith continued at a good pace. The reassembly included using the wheel and axle sets from a pair of MMTB No.1 trucks. New leather axle box seals have been made and replacement nylon bushes manufactured and fitted to the brake shoe hangers which will shortly be refitted to the trucks.



Seen in the workshop is one of the Brill 77E trucks to be used under L class car 103.

Craig Tooke



Tony Smith working on the restoration of L class 103.

Craig Tooke

W2 Class 407

Although restoration work on this tram was completed some years ago, we had not got around to applying the numbers and monograms to the external panels, a task that requires skill and patience. A conversation with Len Millar at the Ballarat Tramway Museum resulted in Len volunteering to carry out this task for us. The numbers and monograms have been applied with great skill and dedication and we would like to thank Len for his time and effort. It is greatly appreciated.

Overhead

Following a recent decision to relocate the car wash plant onto No.2 road, a number of modifications have been made to allow it to be wired. As part of the trolley wire installation over this road, two additional span wires were made to support the frog between No.1 and No.2 roads. A special anchor bracket was made and installed onto the truck shop roof to anchor the trolley wire over No.2 road. This road is now available for tram operation.



W2 class 407 approaching the level crossing following application of numbers and monograms to complete its restoration.

Craig Tooke

Signalling

The recent acquisition of former PTC overhead tram signalling skates, which were used for the operation of traffic lights around the Melbourne system, has enabled us to upgrade the existing wooden type overhead signalling contactors which activate our signalling system as a tram passes underneath.

John Withers, Noel Gipps and Tony Smith overhauled and installed the new fittings which will last far longer as they are made of fibreglass and are far more substantial than the original wooden fittings they replace.

Car Wash Plant

The relocation of the car wash plant will allow trams to be cleaned whilst other vehicles are operating on the main line track. In addition to wiring No.2 road, other works have been necessary in order to relocate the equipment from near the level crossing.

A new 100 litre header tank for the water supply has been acquired and a tank stand made. Although we

have a mains water supply, the tank will give an increase in the water pressure to the spray jets as the tram passes through. Two overhead line contactors have been installed at either end of No.2 road to control the operation of the wash plant equipment.

Work is also under way on the construction of special boxes to house dropping resistors which will drop the 600 volt supply from the overhead line contactors to a suitable lower voltage for use in the operation of the control equipment.

Buildings

The doors on roads 1 and 2 of the workshop building have been removed and rebuilt with new heavy cladding by Con Schroeders and Tony Smith. The new cladding on these doors, which blends with the 'Colorbond' cladding used on the walls of the building, has necessitated the fitting of larger hinges to hold the now heavier doors.

All the doors in the running shed have had special rods fitted to allow the doors to be properly secured when open. This has solved a problem we have encountered for many years whenever the doors were open in windy weather.

Further progress will be reported on our projects, in particular the restoration of L class 103, in the next issue.



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