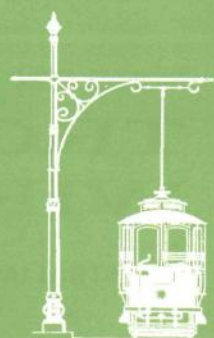


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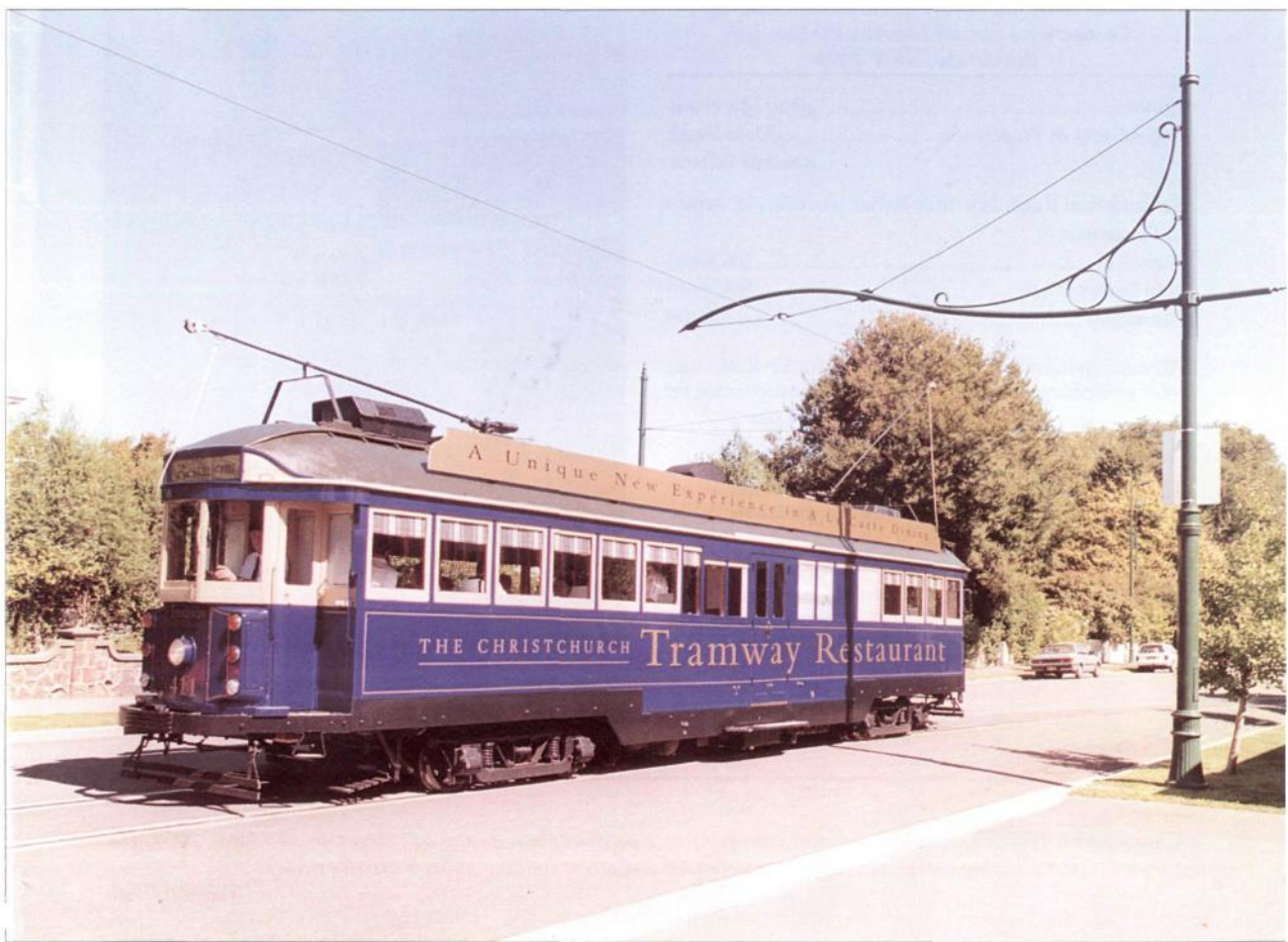


No.281

MAY 2000

\$7.50

Print Post Approved PP245358/00021



INSIDE: TRAM 411 – 'HARRY'S TRAM'

TROLLEY WIRE

AUSTRALIA'S TRAMWAY MUSEUM
MAGAZINE

MAY 2000

No. 281 Vol. 41 No. 2 - ISSN 0155-1264

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

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Sub-editing & Production.....Dale Budd
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Subscription Rates (for four issues per year) to expire
in December.

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

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

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

The opinions expressed in this publication are those of the
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Typesetting and finished art by National Advertising & Design
Studios - Canberra Tel: (02) 6239 6287 Fax: (02) 6239 6693
Printed by National Capital Printing - Canberra
Tel: (02) 6280 7477 Fax: (02) 6280 7817



*A new City Circle tram stop sign is seen at the corner
of La Trobe and Swanston Streets.* Ray Marsh

Front Cover:

Christchurch Tramways' new restaurant car operates a luncheon trip in Armagh Street on 19 March 2000. The simplicity and pleasing design of the replica overhead and street lighting poles is clearly evident.

Howard Clark

Back Page Top:

B2 class 2020 is one of the first cars repainted in Yarra Trams' new livery and is seen on 26 March 2000 at Bundoora.

Ray Marsh

Back Page Bottom:

Melbourne B2 class 2064 has been dressed in an advertising livery for Melbourne Water with the slogan 'Care about the bay, don't throw litter away.' It is seen here turning from Swanston Street into Elgin Street bound for East Coburg on 14 April 2000.

Chris Olsen

TRAM 411 – 'HARRY'S TRAM'

A phoenix by any other name

By Howard R Clark

"It's a beauty, we must acquire it." With these words an excited Harry McKay broke the news in a late night phone call in February 1995, shortly after his hospitalisation. Harry drew my attention to the For Sale advertisement he had read in the Sydney Morning Herald of 5 February 1995, when he was passing the time in bed, headed 'TRAM – Built 1925, Fully Restored. Used as dining area in an eastern suburbs restaurant. Best Offer.' Harry, a former North Sydney driver and subsequent jack of all trades, had inspected the tram during his recuperation phase. He sang its praises and repeated his 'must acquire' for its potential as a restaurant/café at Loftus.

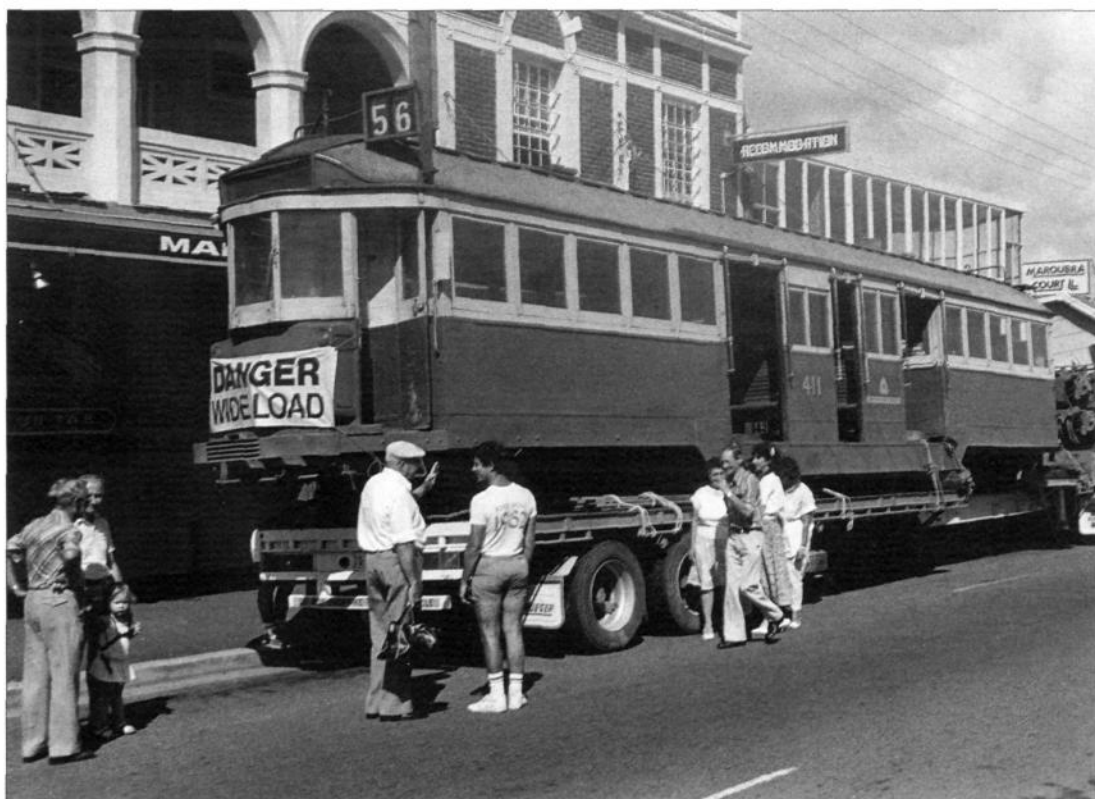
The asking price was not less than the \$25,000 'offered by the Balmain Chamber of Commerce.' An antique shop and Ipoh Gardens (Capitol Theatre

All photographs by the author unless otherwise credited

precinct) were also said to be interested. The tram was complete and the owner informed Harry he had 'spent \$80,000' on its restoration, including removal of the 'colourflek' from the ceiling and its revarnishing.

The tram was located in the Maroubra Junction Hotel amidst poker machines and a bar. It was the key element of the bistro area and was known as the 'trattoria'. Although aware of its existence, this was my first real introduction to Melbourne W2 car 411. I rang the licensee, Jim Gialouris, and made an appointment to visit the hotel after office hours. I met Jim and his manager, Ray Armstrong, and over a glass of Chardonnay learned more of the car's history.

Jim was somewhat sentimental about the tram, which he personally picked on a visit to Melbourne in



Melbourne W2 class 411 arrives at the Maroubra Junction Hotel in 1986, reviving nostalgia for the trams of a bygone era from which the hotel derived its name.

Photographer unknown, HRC Collection

1985. He was shown a number of withdrawn W2 cars at Preston Depot, none of which he considered worthy of selection for his project; particularly those well adorned with pigeon droppings! He was then given the option of inspecting some cars at Hawthorn Depot and selected 411 due to its generally good condition. He wanted a complete tram with bogies and controllers. He succeeded with this objective to a limited degree as the tram was supplied with only this equipment, minus other parts such as poles, air tanks, line breaker and compressor, which were all removed.

Over a period of several months following the car's arrival in Sydney it was stored near the hotel while tradesmen renovated the body and stripped the paint from the ceiling to make it ready for its new role in the hotel as a 'trattoria'. The conversion involved removal of longitudinal seats, infilling of offside doorways, removal of cable and airbrake ducts above floor level, installation of commercial grade carpets and upholstered seating with timber bordered laminated steel grey tables for two or four persons. Half of one saloon had perimeter seating with a large moveable table, for group parties.

The offside of the tram, which was not visible to patrons, was left in original green and cream, while the

front and facing side were painted in a deep navy with gold piping and numerals. Marker lights were removed. The rear driver's cabin was removed at the bulkhead to fit the car into the available space. This modification was however not apparent, due to surrounding brickwork and frosted windows.

Chipboard panelling laminated with Tasmanian oak was installed below window level to match the original ply in the advertising panels, which had been stripped of paint. Brass cover strips were fitted over the joints. The shopfitters took a few shortcuts including the attachment of seats and tables directly through the offside metal panelling. Internal lights, connected to 240v were shaded with moulded glass shades reminiscent of those in old Sydney wooden suburban electric cars. Pull-down laced cotton blinds (using the original fittings) and polished brass grab rail fittings completed the interior scene. An air-conditioner was

Car 411 after refurbishment is ready for its centrepiece role in the Tram 411 Restaurant and Bar. It is seen here being manoeuvred into its new home within the hotel.

Photographer unknown, HRC Collection





The interior of 411 as a bistro dining area in the hotel, later advertised as the 'trattoria.' This view is taken in the dropcentre section.

Photographer unknown, HRC Collection

The tight confines of the hotel are clear in this February 1995 view of 411, by then repainted on the visible end and side in all-over white



access doors. Some time after its installation the visible front and side of the tram were repainted white without numerals.

In its hotel setting the tram presented well and created a favourable first impression in terms of a prospect for preservation. There were however a number of obstacles to its acquisition. These were first, the asking price and more importantly the method of its removal from the building which had been subsequently renovated around the tram. This created major difficulties and an immediate challenge for its removal. The offer to 'cut the building eaves' to allow the car to be lifted through the roof was one method briefly contemplated. A clearance of less than three inches, in old measurement, and the need to lift the tram over the roof of an adjacent building along with accompanying power lines would have required the use of a 200 tonne crane with its attendant costs! Jim ruled out removal of brickwork at the front and a similar exercise at the back was not possible due to the narrow laneway behind the premises. The above logistical problems along with the asking price made the economics unrealistic. Hence we reluctantly indicated an unwillingness to proceed.

Subsequent discussions with Ray saw the asking price halved. Finally the Museum was offered the tram without charge subject to its immediate removal and our meeting the cost thereof. After further thought and examination of various options with Geoff Spaulding, it seemed the only feasible way was the painstaking dismantling of the car body to enable it to be removed in sections. Geoff had done this once before when removing our C car 29 from the Old Spaghetti Factory. Quotes from crane companies were sought and steps taken to engage the services of Geoff Spaulding and Joe Kirchberger to carry out the major dismantling tasks, with assistance from volunteers. Geoff advised that dismantling the car would first require raising the roof to enable the car sides to be removed.

The bulkheads presented a major task as the roof boards were attached from above. Regrettably this required the removal of canvas from an otherwise perfect roof in order to access the screws.

Over a two-week period Geoff and Joe, with Harry's help, then progressively dismantled the car. Each afternoon I drove from the city to inspect progress, help with the removal and load my car with small parts, then have a finishing drink with Joe and Geoff, courtesy of the publican. The driver's end canopy, side panels, bulkheads and other parts were removed to

Loftus by truck or in Harry's van, leaving the roof propped up by holding beams. The props were gradually reduced in height until the roof sat on the underframe. Due to the confined space it was necessary to remove the bogies, roof and underframe in the vertical position as the passageway and glass doors were narrower than the car body.

The underframe first was jacked up so that the bogies could be winched out one by one to the front of the car. A derrick was erected and the bogie was slowly winched into the vertical position before gradual movement towards the door. In turn each bogie was attached to the extended jib of the crane for retraction

A bogie is moved on its side from the bistro area using a specially constructed 'crane rail' device and chain blocks down a narrow corridor to the street. Geoff Spaulding and the roof of 411 can be seen in the background in this view taken on 17 June 1995.

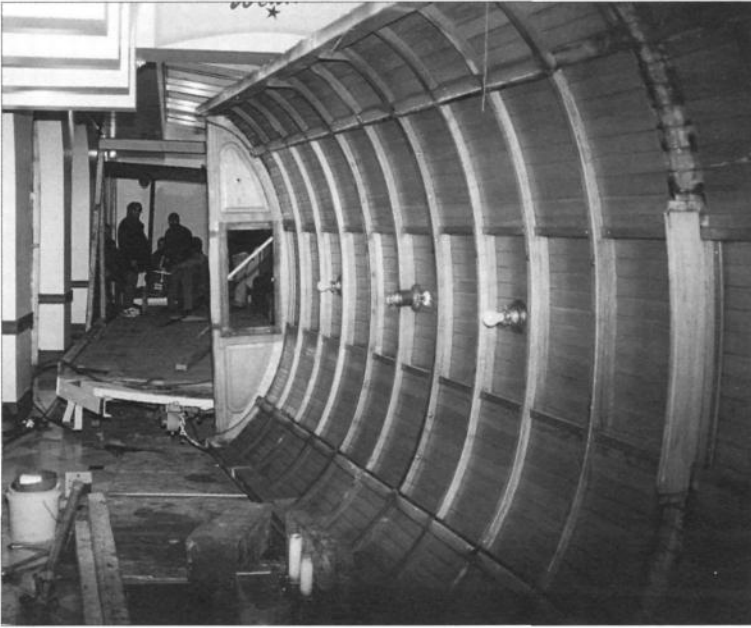


With all bodywork dismantled and removed, the hotel's licensee, Jim Gialouris watches Joe Kirchberger and Geoff Spaulding lowering the roof of 411 to the underframe. The orange plastic sheeting at left hides the dismantling work from the hotel's patrons.



When the roof was down (centre) it was tipped towards the outer wall of the building. The roof was moved on its side using specially constructed rollers.





The roof was moved on its side towards the hotel entrance using specially designed rollers.

to the street, leaving some oil spots from the axle boxes in its wake.

Joe fabricated two steel frames to hold the roof section vertical for the operation of slowly skating it to the front door. These tasks occupied the Friday into the evening through until Saturday.

The roof was left in the street until the underframe was removed and loaded onto the truck. The full façade of the hotel can be seen in this 18 June 1995 view, which also shows two of the three traffic lanes closed for this operation. The tram was removed via the doorway opposite the truck's cab.



To complete the tasks of removing the roof and underframe a Sunday morning road closure was required.

At five o'clock on a freezing June morning the task of removing the roof recommenced. Once the roof was safely located on the road the derrick frames were relocated and the underframe tilted vertically for movement with some difficulty to the doorway. Care was also required not to damage a young pine tree Jim was cultivating on the road verge!

By noon the removal task was completed, the truck was brought in under the frame and finally the roof was repositioned on the frame for the trip to Loftus. In the hotel a large void remained to be filled in time with a battery of poker machines. Some old menus, a poster, a salt shaker, beer cans and some table numbers were located in the void. The table number '42' conjured up the name 'Table for two' as a future restaurant name to consider for possible use at Loftus.

Thus ended the second chapter of the 411 story. Unknown to us the hotel was up for sale. A condition imposed by the prospective purchasers was the removal of the tram, which explained the urgency for its removal and Jim's concern for 411 to receive a good home.

The missing end of 411 presented another challenge. Our publican friend advised us that he had disposed of this in a clean up only some three months before he advertised the car for disposal. Fortunately, our good friends at the Tramway Museum Society of Victoria came to our aid (see *Trolley Wire*, May 1996). Rod Atkins advised us that two cars at an abandoned school

in Coburg, W2 class 582 and W3 class 665 minus one driver's cabin each, could be made available to us as they were to be broken up. (Car 665 is now stored at Bylands.)

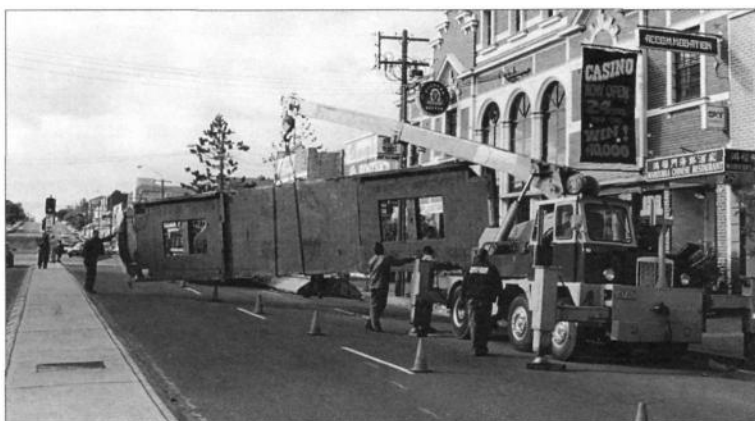
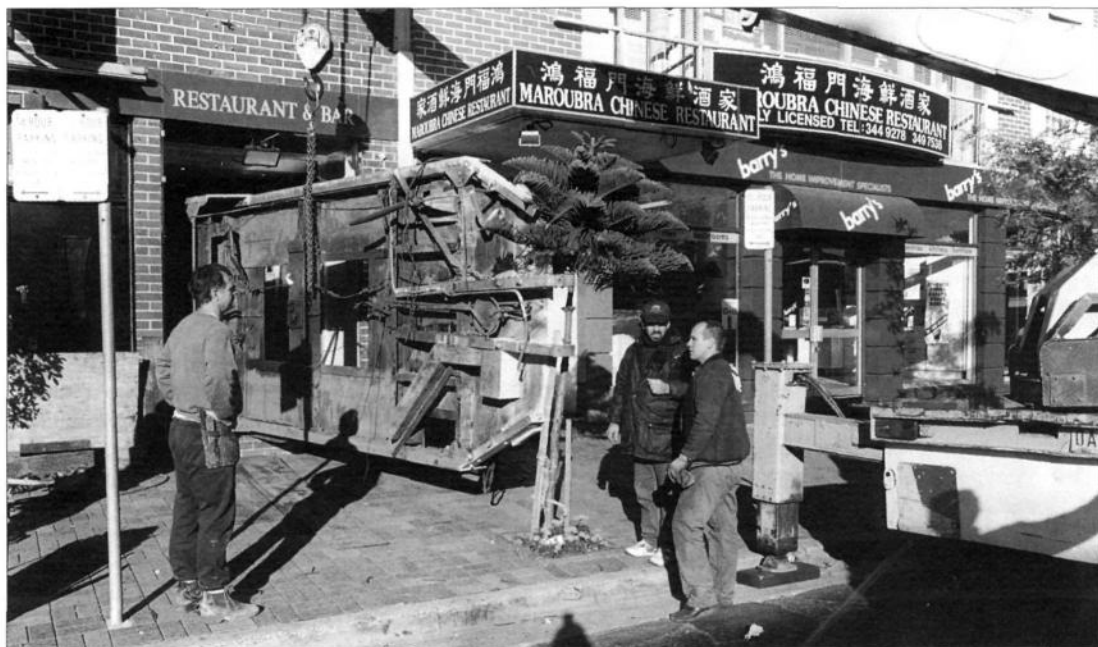
The remaining end of 582, and the dropcentre side panels destined for 244, were removed by staff at the school premises and delivered by truck to Loftus on 14 October 1995, the same day 244 arrived from Rutherford for its restoration for Christchurch!

At that stage there were no firm plans for the future use of 411; the most likely thought then being for its end use as a 'table for two' static kiosk at Loftus. Martin Mongan, the chief executive of Christchurch Tramways Ltd, during an inspection visit for 244 had noted the fine condition of 411's ceiling enhanced by the ceiling lights, which were plugged in for his inspection. Little did he or we at that time envisage 411's ultimate destiny! Nevertheless the germ of the idea was sown in our minds. The other irony is that both 244 and 411 would not be complete cars without those major body components from 582, and that in December 1999 cars 244 and 411 would be reunited in Christchurch!

With no particular timetable, the task of reassembling 411 following its arrival was not particularly urgent. The roof and body remained in the open on the traverser for some months until the arrival of 244, when 411 was placed out of the way in the recently completed top shed. Over ensuing months Geoff Spaulding, Tom Tramby and others reversed the dismantling process and rejacked the roof for the car's reassembly. By July of 1996 the side panels and one bulkhead had been loosely repositioned, which enabled

The underframe was also tipped on its side for the move towards the street entrance. The roof, in the background, is still being manoeuvred out of the hotel in this view on 18 June 1995.





Geoff Spaulding stands by as Jim Gialouris, the hotel licensee, discusses with the crane operator the fate of the young pine tree on the footpath. The underframe moved to the left of the tree, which was bent out of the way and remained unharmed.

All three traffic lanes were closed for the loading operation. Here the underframe is swung clear of the footpath.

the car to be moved to the front of the road in the top shed and towed around the site. Geoff and Joe trimmed the end of 582 and separated the underframe component from the roof and apron section.

On 19 October 1996, a team led by Geoff and Joe repositioned the underframe section to the end of 411. Only minor adjustment was needed to line up the holding bolts for the two central bearers and Joe then set about the task of welding the steel sections to the frame. Geoff subsequently joined up the plywood roof section of 582 at the bulkhead with the tongue and groove roof of 411. Geoff attached fibreglass to seal the joints under the canvas. Advice on a number of W2 matters was sought from former Preston Workshops guru, Graham Jones. He indicated that the M&MTB

had carried out numerous major body repairs on accident cars involving rebuilding and replacement of driver's ends. He was aware of two cars being spliced together near the dropcentre bulkhead. However, from his recollection the 411 / 582 driver's end splice was a first. He subsequently inspected the body and declared it a fine job! In July 1998 I was in Melbourne with three of my partners and along with Graham and TMSV's Rod Atkins we enjoyed a healthy lunch on board restaurant car 937 which promoted further interest in a use for 411.

Apart from minor works and the reglazing of some windows with safety glass, over the ensuing two years from 1996 the car remained dormant in the top shed.



The roof and underframe leave Maroubra Junction bound for the Sydney Tramway Museum at Loftus on 18 June 1995.

In the latter half of 1998 Martin Mongan again raised the question of a dedicated restaurant tram for Christchurch. This followed the success of 244 on special charters as a 'carry on' restaurant car (see *Trolley Wire*, February 1998). Naturally 411 came to mind.

Through Graham Jones we were put in touch with the shopfitters responsible for the conversion of Melbourne's first restaurant car, W2 car 442 and one of the other two cars. The initial response was helpful, subject to receiving the blessing of the current operators. As the 411 project was in another marketplace and the Museum was a key participant, no problems were envisaged. This however turned out to be a naive view as we were categorically denied any information without at least an initial significant payment. Thus we had no option but to go it alone.

Consequently, Geoff and I took some initial measurements within 411, which was still minus one bulkhead. We had the advantage of using tables from 411 and some surplus W5 seat frames from 762 and 825. Thus an overall sketch plan evolved, although this changed several times subsequently.

In February 1999 Martin and his company chairman, Jim Boulton arranged a visit to Australia. Dale Budd and I met them in Melbourne over dinner on one of the restaurant cars, despite a mix-up with our bookings which nearly saw us eating elsewhere that evening! No conspiracy theories intended! The environment on board further confirmed the prospects for a similarly dedicated car in Christchurch and in-principle agreement for planning with 411 was reached.

Martin and I then visited Bendigo to check on their plans and progress with proposed café car 976 and we were suitably impressed. A broad general budget for our project was prepared and agreed to by Christchurch, although in hindsight this was optimistic in so many respects as raw experience showed.

Bendigo Tramways made the offer of John Bullen's services to assist the Museum with 411 and this was readily agreed, with John to be in Sydney for a three-month period from the end of July. This timetable envisaged a four-month programme scheduled for completion by the end of November, with much pre-planning beforehand. Our workshop team was prepared for the task, joined by Tom Buckley who had previous experience at rolling stock manufacturers, Comeng in Sydney. A timetable for both coachbuilder Geoff Spaulding and master boilermaker Joe Kirchberger on the project was also roughed out. House of Convict Cove at Sutherland and Alfred Ray & Sons supplied specialty timber.

As the inverter supplied for the Bendigo project to step power down from 600V dc to domestic supply was a specially tailored unit built to order, it was determined that for future servicing and spares needs we should attempt to find a major commercial manufacturer. This turned out to be quite a challenge. A lead to a Queensland company met with a referral to South Australia. Whilst initially very promising it also proved fruitless. Finally a referral from Siemens led us to Transtechnic, a German owned company whose parent supplied the rail industry, including the Karlsruhe restaurant cars. At last we were in business and their local managing director, William Wacksman, enthusiastically supported the project.

Specifications were agreed between our chief engineer, Richard Clarke and Christchurch, and an

order was placed. The problem was a three-month factory delivery schedule, which meant a despatch date from Germany of late October. Sea freight was therefore out of the question and airfreight was agreed upon, along with the extension of John Bullen's time in Sydney by another five weeks to ensure installation. New safety line breaker and compressor switches were ordered from Transtech Melbourne, the Bendigo inverter supplier, in order to meet current safety requirements. This was just one of the budget overruns as the original switches had become redundant in today's environment.

The search for suppliers and answers for the galley equipment, air conditioning and toilet requirements were especially challenging and time consuming.

Coach manufacturers were approached and were helpful with leads. John Bullen and I then visited ship's chandlers and caravan industry suppliers, and based upon Bendigo experience, the air conditioning units were soon bedded down. The main challenge remained with the toilet, as the requirements were for a 'full flushing toilet system', 'no plastic toilets' and 'no blue chemicals'.

We had previously made contact with Qantas to investigate the source (or the availability of used ones) of the vacuum style of toilets used in newer aircraft. The potential expense and the lack of availability of used equipment then ruled this out. More leads ended up with the dry chemical style mainly used in coaches or the smaller foot pedal style used in the confines of boats. The latter were ruled out as while suitable for boat enthusiasts our advice indicated they were susceptible to frequent breakdowns and blockages when used by the general public (ie: 'non-yachties').

The early weeks in July saw Brian Hague, Jim Jowett, Vic Solomons, Chris Jacobs, Allan Marshall,



The reconstruction of 411 commenced in the top shed at Loftus. On 26 January 1996, the roof is positioned above the underframe ready to refit the side panels and bulkheads. Use was made of the 240V wiring provided for its hotel role to supply additional illumination during the reconstruction work.

Car 411 is shunted by Sydney O class 1111 back into the top shed on 20 July 1996 to be fitted with the driver's cab from W2 class 582.

Dale Budd





The remnants of W2 class 582's driver's apron, canopy and underframe seen in the top shed at Loftus on 21 September 1996.

After some tidying up on 19 October 1996, the underframe end section of 582 is turned over ready for joining to the underframe of 411.



The driver's protection and canopy portion of 582 is positioned on the underframe on 30 November 1996.

Derek Butler, Hans Marksmann and his German shepherd, and others clearing out the car and readying it. John was busy underneath and Tom was immersed in wiring diagrams. Joe required the side panels to be removed from the untouched side, as it was more efficient to replace the panels with new material than to weld up the holes left by the previous users. Joe and Hans dutifully completed this task one step ahead of the painters.

Tom, during his planning phase, introduced us to a Qantas engineer friend who informed us that Qantas could supply a used toilet housing (without the bowl) from Avalon, Victoria, where Qantas were reconfiguring and overhauling two recently acquired 747-400 aircraft ex Malaysian Airlines. An inspection tour of the Qantas jet base at Mascot followed. The curvature from the back of the housing had to be removed to meet our size limits. We still needed to find a suitable toilet for installation within. Nevertheless, the familiarity of airline toilets and their simplicity of design proved compelling. Thus John Bullen recommended we accept the kind offer and the following week Brian collected two housings from Mascot.



The toilet housing from a Boeing 747-400 awaits positioning in the dropcentre of 411 at right on 24 September 1999.

Below: John Bullen and Joe Kirchberger lower the 485kg mass of the inverter into place through the floor of the dropcentre.

Christchurch advised that the galley was to be sufficient to supply two sittings of 'a la carte' menu dining for 36 patrons at each sitting.

Advice from Carlo Huber of European Caterers was sought and enthusiastically given. He helped with the galley configuration and advice on the type, style and supplier source of appliances best suited for use in confined areas and the most durable. Universal Commercial Kitchens proved a helpful source for

many of these items. These recommendations were checked with the hotel chefs in Christchurch and broad agreement obtained. Interestingly the oven recommended by Carlo was of Christchurch manufacture.

The arrival of the toilet housing and the need to provide wheelchair access to the dining area caused some further redrafting of the service areas. Steve Lea in Christchurch built mock-up layouts. In early October I visited Christchurch to meet with Steve and the health authorities. We finally settled on a service layout which met all the criteria, although minor adjustments were required up to the last minute.



Under the car, work was proceeding apace with the reinstallation by John and Tom of air piping, new brake cables and electricals. The dilapidated wreck of W2 car 560, the worst of the three cars (370, 560 and 577) acquired in August from the Port Kembla Chamber of Commerce, was brought to Loftus as a source of spare parts for 411. Along with parts purchased from both the TMSV and Bendigo Tramways, most of the operational equipment for 411 was then available. Various new steel air-pipe fittings were purchased along with two new air tanks, which took almost forever to arrive from the manufacturers.

Some layout variations under the car were necessary to accommodate the inverter, additional emergency braking equipment specified by the New Zealand authorities and the clear water and waste water tanks. Joe's friendly stainless steel suppliers, Malzard Bros,



provided the clear water tank at a very competitive price whilst John obtained a heavy-duty marine fibreglass tank for the waste.

Again, another protracted search for a supplier ensued in order to locate a suitable vacuum toilet system. After frustrating attempts, finally we located the Auckland agents of a U.S. based supplier. With the supplier's name in hand further enquiries in Sydney revealed an agency located in Sydney's northern suburbs at Brookvale.

With Sydney's sprawl and its traffic, the trip from Loftus was a tourist day's outing with John Bullen away from the project activity. We were well received by the managing director of the Camec group, Mr Brian Hunter, who arranged for the demonstration of the Sealand equipment. As many of the fittings were interchangeable, John soon developed a hybrid system combining one type of base with a different top, which neatly met our requirements.



Above: John Bullen (on roof) and Brian Hague attend to a trolley bridge on 8 November 1999. Sydney L/P class car 154 is undergoing an overhaul and repaint at right and the Manly starter's cabin is in the foreground.

Joe Kirchberger modifies the sandboxes on 19 October 1999 for refitting to 411.

With the arrival of the inverter on 9 November 1999, Joe was required to make up the special holding brackets for welding to the car frame. With the engineers' and suppliers' agreement some minor modifications were made to this 'black box' to enable its installation in the car. At 485kg this was a task in itself. John Bullen was now the focus of several major tasks including installation of the inverter and air conditioners, and modifications to the toilet housing. His innovative skills were clear to all and he worked with good humour under extreme pressure in those last four weeks with never a complaint to ensure these tasks were bedded down. There is no doubt that without John's particular efforts the restaurant tram project would have been much more prolonged in its fruition.

Once the inverter was installed, Geoff Spaulding was able to complete the reflooring of the drop centre section. Meanwhile, Tom remained occupied with the rewiring and the switchboard. Brian, Vic, Jim and the rest of their team beavered away on the interior, fitting the jarrah ply panels to the side walls, cutting the ply seat bases and backing panels to size for supply to the upholsterers and fabricating the tables using jarrah ply with a Victorian ash edge moulding. Hans installed new brass cover strips over all joints in these panels, and Jim the windowsills and other timber cover strips.

Initially sandboxes retrieved from W5 car 762 at Cessnock were selected as being more suitable for fitting under the seats, as these were built to fit under

transverse seats. Joe discarded these in favour of modifying original W2 sandboxes, as these required less work to fit into original cavities and under the seat frames.

Whilst the original W5 seat frames selected were suitable for use for the back to back double seats, Joe had to fit new pedestals inboard of the seat ends to avoid the hatch covers. He was required to manufacture new frames for the single back to back seats and pedestals and frames for all bulkhead seats as well as make frames for the two free standing seats adjacent to the bar area. Joe was the first to toast the car with a glass of red on 25 November, at the end of a hard day's work.



Joe was the first to toast the progress of work on 411 on 24 November 1999. The modified sand boxes are visible and the saloon is ready for carpet laying.



Brian Hague positions a bar top in the small saloon of 411 during the week of 15 November 1999.



Gordon Fogarty fits glass partition panels while Jim Jowett fixes seats to the floor.

The recanvassing of the vented roof proved to be a hugely time consuming task relative to the arch roof of 244. It was necessary to seek Graham Jones' advice on the secrets involved. We learned that the M&MTB, when recanvassing such cars removed the edge boards from the vented section and then cut each rib part way along the rib under the board. The outer sides were then recanvassed and canvas lipped up for additional weather protection, the rib ends were refitted and edge boards replaced to enable the vented section to be completed. We found that indeed the ribs had been cut in this fashion on 411. These were unscrewed, numbered and subsequently refastened once Geoff and his helpers had completed the task of fixing muslin and navy dressing (Sydney style) beneath the canvas to provide better weather protection internally and longer life for the canvas. (This practice was not followed by the M&MTB on its W type cars nor by Sydney on its corridor cars.) Many of the rib ends were too damaged to reuse and these had to be made up. Jim and Vic fitted filler blocks between the ribs on both the outer and inner edges of the vented section to assist the air

conditioning and prevent dust and vermin access to any cavities.

Sydney O type advertising brackets were cast up and fitted six per side to the roof by Brian and his team at the same spacing intervals as those fitted to 244.

All glass in the tram was required to be safety glass or toughened glass. Gordon Fogarty of Fogarty Glass measured up all the windows, including end bulkheads which, whilst originally safety glass, had been replaced during its 'trattoria' days with patterned sandblasted plate glass. The patterns were acceptable and were adopted for use as required in the replacement bulkhead glass. The sandblasting proved more time consuming and expensive than expected and at one stage we were concerned whether it would be carried out in time for fitting.

On the subject of glass, Gordon also supplied and fitted opaque toughened glass to the partitions dividing the bar area from the seating in the small saloon and privacy panels on seat tops, very similar to those adopted by Bendigo in their café car 976. Gordon was a keen supporter of the project. He went out of his way to ensure his tasks were completed in a timely and professional manner. Whilst on site he also supplied and fitted offcuts of coloured glass to our Manly starter's cabin free of charge. It was a generous gesture.

The gallery area was a major exercise and in effect it was like fitting the pieces of a large jigsaw together, when some of the pieces had gone missing! Nothing could be finalised until after the arrival and installation of the inverter and the finishing of the floor. Once this was done the next task was to arrange for the vinyl to be laid which in turn enabled the toilet housing to be fitted in its permanent position. Only at this point could Geoff make templates for supply by Joe to the shelving and bench top manufacturers, giving them a turnaround time of less than two weeks. Geoff could not frame up the supports until the bench tops were supplied.

The under counter galley fridge was to be manufactured in Christchurch so exact specifications were necessary, firstly from our end to the manufacturers of the available space, then their advice of the final size, along with the dimensions of the upright bar fridge for installation in the saloon. Joe made up the brackets to support the microwave oven above bench height in the galley.

Roller shutters were required to be fitted under the bar and galley benches. The search for a supplier was frustrating until Brian weighed in with a contact.

necessary product, powder coated in a suitable navy blue shade, was delivered in brisk time shortly before departure of 411 leaving Steve and his team to complete our temporary installation, along with under bench railing, after arrival in Christchurch. The racking, neatly fitted in the galley recess doorway, would facilitate easier servicing at the depot.

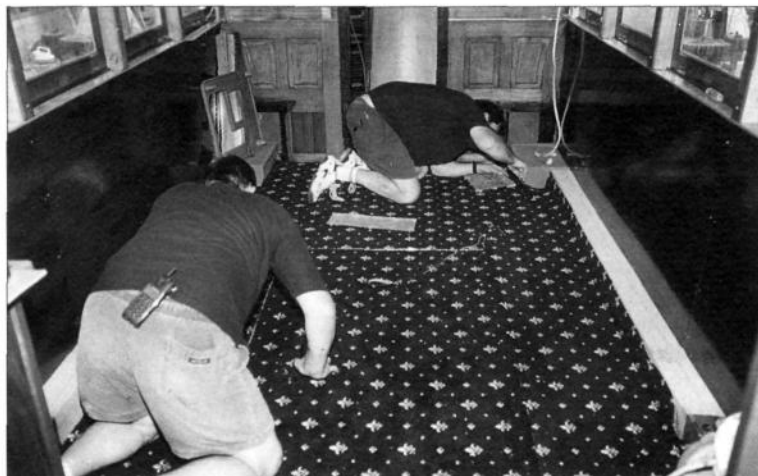
The side doorway infill in the extended saloon area was built in to take an additional standard window and a fixed pane adjusted to the existing dropcentre fixed panes. Our friend Ross Traeger of Traeger Joinery manufactured the three additional windows necessary along with four Tasmanian oak solid doors for the centre saloon entry and galley access points. Geoff Spaulding had earlier completed the installation and fit out of the bulkhead in the extended saloon and Ross reworked the above door panelwork to the reduced width in that saloon end.

With time running against us and with Martin requesting an earlier shipping date of 10 December 1999, we agreed it would be necessary for Steve Lea to fly over from Christchurch for the last week or so. The additional requirements for stop lights and blinkers together with the emergency braking had put too much pressure on our technical team along with the rewiring and other mechanical tasks. Steve rolled his sleeves up, fitted in with everyone and 'burned the midnight oil' on numerous finishing jobs, particularly finalisation of the toilet operating system and the traction supply for the car. The low voltage elements were completed in Christchurch. Joe and Hans manufactured lifeguard equipment as necessary. However, apart from one gate this remained unfitted as another task for Steve and his team on arrival in Christchurch.

The colour scheme was another question which needed bedding down. The colour consultants in Christchurch had prepared promotional material with an overall deep blue ('Epiglass Royal Blue') theme with oyster shade (Pantone 465c) window frames. We toyed with several alternatives for a variant trim sketched on paper and our master painters, Althouse & Geiger tested different combinations, particularly with the underframe to break the one colour domination. The oyster did not sit well nor did a deep Brunswick green darkened with black. Finally all was agreed upon. An underframe employing the blue mixed with black was finished off with an extension of the oyster above waist level to the drivers' cabins and drip rails. Distinctive numerals '411' employing the traditional US style as found on the original Christchurch 'Yank' trams and on our San Francisco PCC 1014 were deployed by the signwriter on both ends. These looked quite smart. However, regrettably, due to Tasman weather conditions (see below) they were shortlived.

The sourcing of small components was also time-consuming. Martin had specified light fittings similar to those which came with the car from Maroubra. Various electrical retailers attempted to fulfill this need. However, in the end an inferior shade was initially accepted as the nearest alternative.

The quest for brass door locks and stainless steel hinges led us to a specialty hardware retailer in Alexandria. They were unable to assist in all areas and recommended The Restoration Centre in Cleveland Street about two hundred metres from my old school where my interest in trams was first fired so many years before! This place proved to be a veritable Aladdin's Cave. I was overwhelmed by the brass light brackets and the other components we were seeking.



The carpet layers at work in the saloon of 411 on 25 November 1999.



This view shows 411 with the short-lived oyster colour on the underframe and the air conditioning units being fitted on the roof.

Even more exciting was the ready supply of specialty glass lampshades for the brass brackets identical to those originally specified. Needless to say this was another contributor to the cost over-runs, but the result was worth it! Another bonus was found in this treasure house: wine racks were also required, and two of the brass coated replica NSWGR luggage racks were perfect for 411 for fitting above the small saloon entry bulkhead.

The upholstery for the seats and floor coverings were also left in the hands of the New Zealand colour consultants. We had earlier visited Feltex Carpets, a New Zealand company with offices in Sydney and received helpful advice and numerous samples. Finally, the NZ consultants selected their top of the range wool product, and this was duly delivered to Loftus. Finding a carpet layer at short notice in Sydney just before Christmas proved a mammoth task as most were involved in major projects and exhibits. The Yellow Pages assisted with a local who turned out to be a closet supporter of the museum, Jim Purcell of J & V

Carpet Laying, who listened to our plight and came at short notice to lay the carpet. This was done on the same day the vinyl galley floor was laid and clear glass in the galley was tinted with opaque material. The transformation was stunning.

The upholstery was also selected from New Zealand. It was of English manufacture and was airfreighted to Sydney. Again the delivery date was uncertain until the last minute. Our upholsterer for earlier projects, Rodney Earnshaw, again came to the party at short notice, provided essential advice on the type and quality of cushion material and delivered a first class product for installation with less than a week to go before shipment.

The bogies for the car were sent to an outside company, Garnock Engineering of Port Kembla for overhaul and rebuilding of the brake hangers. Garnocks had also kindly agreed to store the somewhat derelict bodies of W2 cars 360 and 577 pending possible opportunities for their future. The bogies were transported in both directions by large tilt tray truck, which avoided the need for cranes and thus reduced costs involved. One of the bogies was found to have an oversize motor bearing on the axle which was replaced by Mal Macaulay and Bill Parkinson, along with other



Steve Lea attends to the light fittings in the saloon of 411.

work on the motors and bogies. On return to Loftus the bogies were cleaned and spray painted by two of our Work for the Dole staff seconded to the workshop from landscaping duties. They happily involved themselves with several other tasks, including repair and repainting of lifeguards and cleaning and painting the bodywork under the tram. Both were successful at job interviews and we lost their services before the completion of the project!

A quaint piece of Preston Workshops practice was turned up with the removal of plywood advertising panelling within the car. One panel had chalked upon the reverse the initials 'RWG' and the date 'Feb 19, 67'. Another small wall panel in the dropcentre section below the fixed pane windows was similarly initialled with a date some two weeks earlier. Graham Jones advised that some M&MTB employees did this as routine during the overhaul phase. The same panel now has adorned to it 'Sydney Tramway Museum for Christchurch Tramways Ltd 27th November 1999' initialled by Geoff and me.

With the carpets installed, the painters, to keep the exposure to dust low, put finishing coats of varnish to the interior of the car as their first jobs at 5:00am each morning, before returning to their exterior paintwork tasks later in the morning before the other workers arrived.

A sample of the stereo speakers was provided by Steve, which enabled positioning holes to be cut in the plywood panelling for Geoff to complete the installation. The stereo system was later installed in Christchurch at a significant saving to the supplier's quotes received in Sydney.

Luke Cowing turned up mounting blocks for the light fittings from Australian red cedar panelling retrieved from the remnants of O car 1065, collected by the museum courtesy of Mr and Mrs Pye at Windsor only the month before. Similar timber pieces from this car and N car 641 dismantled at Helensburgh in January 1998 were used as seat frame ends and light and cable ducting near the switch panel and in the galley area. The old side destination box in the saloon was used as the switch panel for all the internal wiring and Tom had this all but completed except for 'Mickey Mouse stuff' when the car was ready for roll out.

Hans Marksmann, Geoff Spaulding and Tom Buckley at work in the saloon on 1 December 1999.



Brian and his team swung into action installing seat frames and tables in the small end saloon. Steve completed the wiring of the light fittings to enable this section of the car to be showcased when we paused on the evening of 1 December for cocktails courtesy of European Catering for the team of workers, their families and special supporters. This was a welcome break with less than one week to go and masses to do.

In this last week Brian, Jim, Vic and the team completed installation of seat frames and some tables. Brian had to make up a larger replacement table for two to fit under the switchboard due to the positioning of the cable ducting in the bulkhead corner. The tapered corners on this table were also made smaller to provide more table area.

Geoff, Joe and Hans continued with the fit-out work in the galley and saloon areas, while John, before his return to Victoria, spent his last day with Steve connecting up the toilet and completing the traction wiring. Meanwhile Tom beavered away with the switchboard wiring.

Brian Hague and Tom Buckley watch as Bob Cowing drives 411 out of the workshop on 8 December 1999. Adam Greaves is handling the wandering lead.

Roland Joder

Several air leaks in the braking had still to be plugged and this along with final adjustment of the handbrake was added to the list of many tasks for Steve and his team to undertake when the car reached Christchurch. John had also completed the installation of the air conditioning units on the roof, mounted forward of the trolley bases. This necessitated the raising of the trolley bases for clearance purposes and to cater for the greater overhead height in Christchurch. Two air conditioning units were deemed sufficient based on advice from Bendigo, despite Melbourne restaurant cars having three. With hindsight backed by Bendigo experience in their hot 1999/2000 summer, three may ultimately prove necessary. Despite the raising of the trolley pole bases, lengthening of the poles was still required in Christchurch due to a couple of exceptionally high spots. New steel hold-down pole brackets were made in Christchurch to protect the air conditioning units.

By this stage the project was taking on a decidedly completed look, particularly after the painters had put their final touches to the panels. Some of the sceptics agreed at this time that 'the impossible we do at once, miracles take a little longer.' A checklist drawn up at this time of jobs to complete was, however, still in excess of four pages long. This was subsequently faxed



to Steve in Christchurch with deletions for items checked off in the last twenty-four hours in the countdown to pickup.

Shenker International was handling the shipment and their representative, Roland Joder arranged for cranes and truck to collect the car on 8 December 1999. It was necessary for the car to be driven onto the traverser and into the main street for lifting onto the truck. The 'smoke test' in the workshop confirmed that the car could be powered up, although the controller at one end was suspect and air leaks remained prevalent everywhere. Nevertheless, Bob Cowing organised his time to be on hand for the drive out which took place at 3:00pm on 8 December 1999. He intended to test the controller first, so a number of us were on board expecting to disembark before any move onto the traverser. Once the wandering lead was attached and power attained, Bob had other ideas as he notched up and kept going, trapping us inside as the car moved under its own power for the first time in about 15 years.

Those few outside the workshop witnessed a smooth runout onto the traverser. With a reversal of ends a smooth run was made through the yard to the south points to reverse again and return to Cross Street for loading. At this point one tram was positioned either end of 411 as a towing / support vehicle, with the car on the downhill side being attached as a further precaution. With Peter Kahn in the front cabin of 1971, Bob propelled 411 downhill to the point where it was uncoupled and its wheels chocked ready for lifting.

The workshop crew worked on, as many items required 'attention and many spare parts required loading on the tram for transport. This task was made more difficult as once the tram was loaded the truck driver impatiently set off for the Pitt Street gate to detach his prime mover. He then headed off for a break, to return at 1:00am next morning for the trip to Glebe Island container terminal.

The work on 411 is a great credit to the whole team involved. At one stage there were 17 people working on, in, under or around the car without interfering with one another, getting their jobs done and in good humour. Truly a testimony to the spirit of cooperation and a great tribute to the people in our museum or associated with it.

Conduits were to be fitted to the roof of the tram to assist with cable snags. However, the truck driver put off this task, to be performed upon his return. We were reliably informed that the driver declined to fit the

conduits that night as he intended to rely on the agent's advice that the overall heights were within clearances required. As expected, Murphy's Law took over and near Gynea, within about three kilometres of Loftus, the leading air conditioner was snagged and destroyed by a low slung tensioned communications cable. Naturally, Sydney weather turned on its best that night and the next day as the heavens opened. The interior of the car was flooded through the gaping hole in the roof where the air conditioning unit was missing. Our air conditioning contractors, Carvan Supplies, very quickly sourced a replacement unit from Adelaide which was airfreighted direct to Christchurch and arrived there ahead of the tram, giving Steve yet another headache job to complete.

Car 411 is lifted onto the flatbed container on 8 December 1999 ready for the journey to the White Bay container terminal.



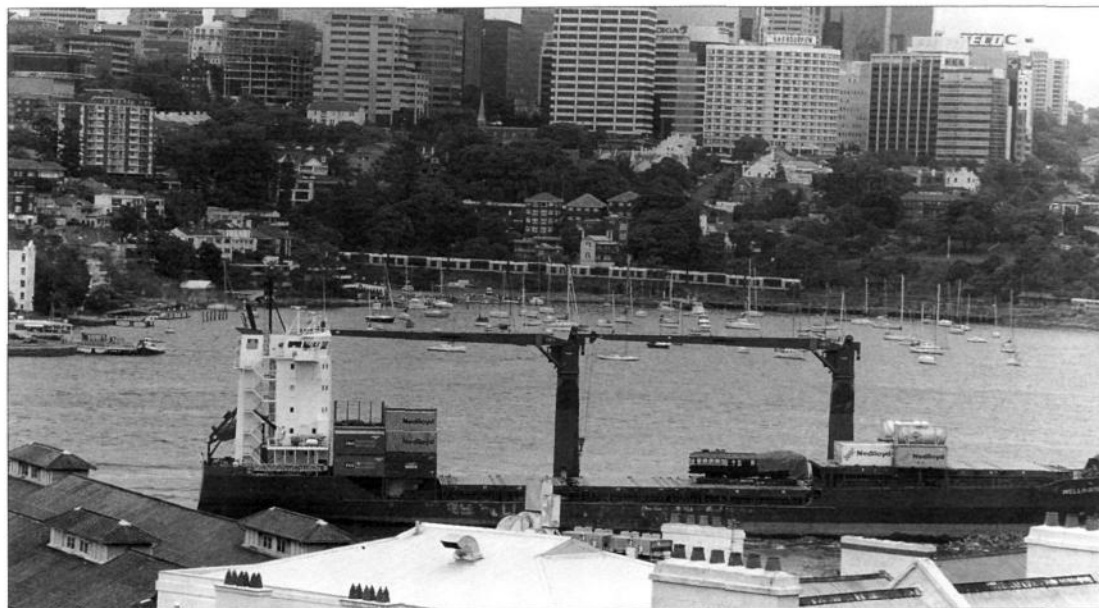


Car 411 is lifted by container crane beside the Wellington Express at White Bay container terminal.



A view from the bridge of the Wellington Express showing 411 on deck. The three crew members are about to cover the end with the damaged air conditioner with a tarpaulin.

P&O Nedlloyd kindly allowed access on 10 December to the *Wellington Express* to witness the loading of 411. The master of the vessel, Steve, very kindly arranged tarpaulin coverage for the sea voyage and gave us the hospitality of the bridge. During the loading his first officer recalled a story of some late night long walks back to Port Botany after dinner and drinks 'on a tram at Maroubra Junction Hotel.' He was amazed to learn that 411 was in fact the very same tram! As the tram was to be temporarily off-loaded by ship's crane during the port stopover in Melbourne, it was necessary for Roland Joder to arrange speedy transport as ship's stores of special spreaders for delivery from Homebush and loading within the remaining two hours before sailing time. Full tarpaulin coverage was to be arranged from Melbourne to Lyttleton. Regrettably heavy seas and storms in the



South Tasman Sea along with the strong winds inflicted a toll on the car which added a repaint of panelling to the list of tasks for Steve Lea and his team in Christchurch. This was principally caused by tarpaulin rope friction, which took off several coats of paint in places back to the original green. Salt water damage also caused swelling of timbers and blistering of paint, particularly around the window frames. The classic numerals painted by our signwriter were also in tatters and to my great disappointment were replaced by numerals without the same degree of style and skill.

The ship arrived in Christchurch on 19 December and the car was on the rails in the city during the following evening. Steve and his team then worked around the clock for the next two weeks (with only a brief break for Christmas) to eliminate the incomplete tasks on the checklist, the 'Mickey Mouse' work on the switchboard and many more tasks.

The bar fridge required adjustment underneath with the motor and compressor having to be removed and relocated to a remote position under the adjacent seat to give the walkway clearances specified. A small box containing the brass light fittings had gone missing and Steve sent an urgent request for replacements. Due to the holiday period, the suppliers did not reopen until 4 January, so these became a last minute addition to a number of items taken aboard flight QF45 to Christchurch as hand luggage by Tom Tramby and me the next day. They were fitted in time for the two dinner trials that evening.

The Wellington Express departing Sydney viewed from the approach to the Harbour Bridge. The North Sydney skyline and a suburban Tangara set departing the Lavender Bay car sidings are in the background.

A project of this magnitude could not have been achieved without a partnership of ideas and trust between the various parties involved from both the Sydney Tramway Museum and Christchurch Tramways. To this extent the credibility of the STM was largely established through our earlier efforts with car 244. The task here with 411 was naturally more challenging as so many unforeseen obstacles presented themselves along the way and this in itself almost daily threatened our credibility.

Again the critical path schedules drawn up at the start acted only as a rough guide and could not be maintained for numerous sound reasons. Similarly, the budget drawn up in the early planning days proved academic as so many things associated with a restaurant project cropped up.

Furthermore, unlike 244, almost all of the operational equipment (and one driver's cabin) was missing or needing replacement and both the cost and the time involved went well beyond expectations. The installation of the inverter, designing and locating a switchboard along with provision of domestic power and extra demands for low voltage cabling for entertainment systems and safety equipment also

The first crew for the first sitting of dinner on 5 January 2000. The two drivers flank the three waiting staff with the two chefs at the rear.



The interior of the twelve-seat end showing the bar fridge and luggage rack for wine. The bar is obscured behind the glass panel on the right. This view was taken on the first trial evening of 5 January 2000.



exceeded all expectations. There is no doubt it required a great act of faith particularly on Martin Mongan's part as moneys were periodically advanced across the Tasman to assist with the bills as they flowed in.

The design aspects, particularly with the toilet and galley areas, involved numerous changes as time progressed. This was achieved in the adverse climate of distance and consequent overnight delays caused by inability to deal on the spot with an issue as it arose. The practical abilities of John Bullen on one side and Steve Lea on the other side of the Tasman were the principal reasons for success in these areas. The early design mock-up work carried out with input from

Geoff, Joe and Brian proved a bonus as this translated largely to the final product, apart from the cardboard galley mock-ups built to full size by Steve in Christchurch. Numerous completion items were required in Christchurch by Steve and his team. The car was towed around the circuit by 244 in the dead of night to check clearances. This necessitated the raising of body height on the bogies to give a safer underside clearance for the waste water tank on the Avon River bridge and the lengthening of the poles to cover a couple of high spots. Minor changes to the galley were made to accommodate chef's needs. The replacement air conditioning unit was hastily fitted as was waterproofing of the light ducting. These items proved

a troublesome task. The 'Mickey Mouse' items in the switchboard were finally tracked and rectified by Steve. The signwriters completed the car signage in accordance with the advisor's specifications and replacement 'Restaurant' signs for the end destination boxes were needed as the lighting showed unevenly on the originals supplied by the STM.

Finally all was ready for the first dress rehearsal with diners on 5 January. There were two sittings, one at 5:30pm and the second at 8:00pm. Hotel and Tramways staff made up the customers and for these trials two chefs were aboard with three waiting staff, although the normal complement is one and two. As Martin was on leave, Steve, David Hinman, Tom and I were invited by management as observers at the first sitting whilst we were participants at the second. All on board were expected to provide feedback to the operators. A water urn was hastily installed for tea and coffee service to be replaced in due course by a smaller panel-mounted unit. The conversation was lively and numerous ideas were canvassed and refinements suggested. Ventilation and steam in the galley proved a headache for Steve and his team over the ensuing weeks. The car now sports a large arrow shaped 'chimney' on the roof containing the fan motor unit.

The table for two under the switchboard proved a winner with its smaller tapered corners, more elbow room on the window side and marginally greater length. Consequently the carpentry team progressively retrofitted tables throughout the tram using identical materials for the six large tables whilst the smaller tables for two were made by cutting down the original larger tables.



Another problem encountered on the first night was movement in the seat backs, which caused in turn some loosening of the glass privacy screens away from the window pillars. Once the seat backs were packed and bolted to the frames this problem was eased, although further refinements are still being undertaken as it is intended to move all single seats some two inches from the wall panelling to provide greater elbow room.



Above: The storage areas above and below the workbench in the former dropcentre with the under bench oven on the left.

Joanne serves pre-dinner drinks during an evening meal trip on 17 March 2000. This view shows the curtains fitted after the car's arrival in Christchurch.

The meal offered on the tram is a full 'a la carte' menu with limited choice of entrees, main course and sweets with a fine selection of beverages and wines. All the patrons had a thoroughly enjoyable meal and the tram was declared a success on the evening. A further evening meal trial the next night proved equally popular for those on board.

Tom, David and I were eating elsewhere on the second evening when Steve received a call from the tram driver. Initially Steve thought it was a 'wind-up'. However, he was soon convinced otherwise and the toilet was deemed out of order for the night as it began to flood from a blockage. At close to midnight when the car returned to the tramshed, Steve worked for more than an hour to clear the obstruction and allow the pump to again do its job. Not an enjoyable task and one Steve does not want to repeat, although now he knows the source, solving a similar problem should be quicker in future! The late night urgency was necessary, as the car was required for its first commercial booking the next morning, 7 January; a breakfast sitting for 16 Japanese tourists. This went well and with plenty of leftovers the staff, Tom and I were invited to enjoy a double up of bacon and eggs with juices, tea and coffee at the end of the sitting. Regular dinner service commenced the same night.

Reports from Martin after two weeks operation were very positive with the car operating more than two thirds full every night including some early sittings.

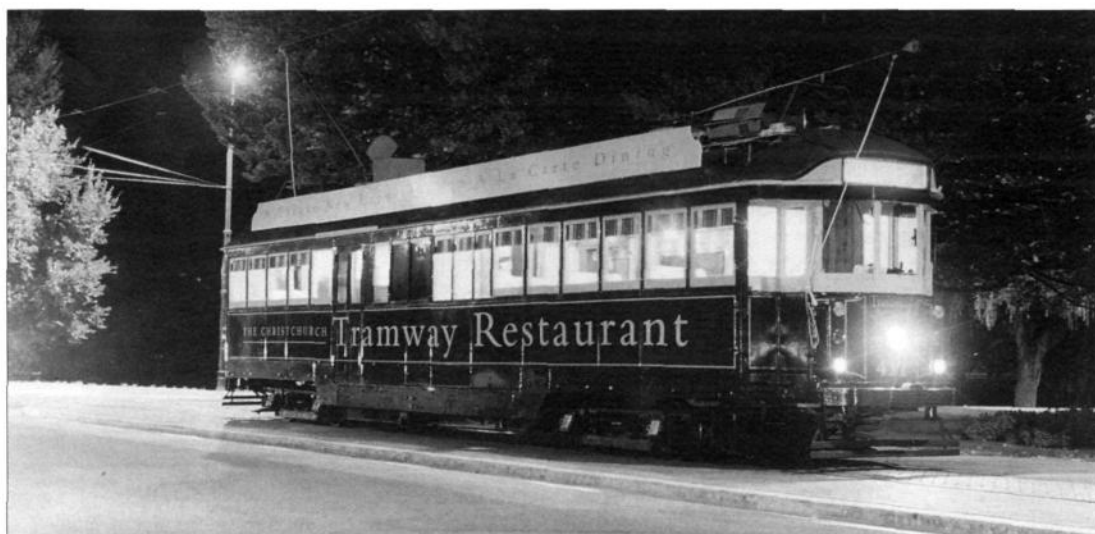
A night scene showing 411 during a pause in Armagh Street on 17 March 2000.

The response from patrons was great and the formula for offering an 'a la carte' menu rather than an all-inclusive price had proved popular. On the downside, steam in the galley was still a problem, the chefs were still wishing for more space, water leaked around some light fittings and the air conditioning units were exposed during a storm. The a/c units were removed and waterproofed on 31 January. Further work still needs to be done to fully waterproof the plastic framed roof ducts used instead of the traditional method. At some expense, a ventilation expert recommended the changes mentioned above in the galley area, along with a small panel infill in the saloon bulkheads.

In Christchurch, a jarrah ply half bulkhead was installed adjacent to the door entry to allow for the hot water unit to be fitted above the sink, and the glass pane in the doorway bulkhead was panelled over to permit the cash register to be fitted. Some further refinements were made to the shelving and power point locations in the galley and the underbench cupboard for garbage disposal, as galley staff made efficiency suggestions. The bar service top was also extended to provide more service space for cups and glasses. It is expected that the glazed sections of the galley will also be panelled over to improve the galley area and remove visible streaking on the frosted glass.

In mid March tasteful navy and gold fringe curtains were installed in the windows. Small railway style luggage racks will be installed in saloons between the light fittings to accommodate handbags, etc.

To cater for larger patrons, Steve purchased a car seat with moveable tracks from a wrecker's yard. The





Car 411 waits for a tour group at the Cranmer Square waiting shelter in Armagh Street on 18 March 2000.

tracks have been fitted to the seat frame adjacent to the bar, which enables the seat to be set back about 15-20cm, giving much needed breathing space. This seat can be fully removed if necessary to allow for wheelchair usage at that table.

Due to the step height some elderly patrons were having difficulty, particularly when leaving the car. Boxes were made up to make entry and exit easier. Steve sent an SOS to the Museum for Dale Budd and me to bring over on our visit on 17 March some left-over vinyl for covering the boxes. Accordingly, a one metre roll was carried aboard QF45 to Christchurch which the Qantas staff stood up in the coat cupboard for the trip, along with an overnight bag tagged 'Heavy' containing a replacement air brake valve unit wrapped in old clothes. Such a personal courier service was considered more efficient than using conventional couriers. However, it was not possible to carry a compressor governor unit as a replacement for the unit wrecked when a catering service trolley strayed under the tram and was crushed when the tram was moved in the shed. A replacement unit was obtained on loan from nearby Ferrymead to ensure no disruptions to the service occurred.

It was pleasing to see 411 so well patronised during our visit. Tramway manager Sarah Hannan informed us that inbound tour operators are greatly attracted to the service with one or two providing bookings 18 months ahead. Very often two dinner sittings are offered as US groups generally prefer an earlier 5:30pm sitting whilst others prefer the second 8:00pm sitting. On our two nights there, 68 and 71 settings out of a maximum of 72 were utilised and the car was near fully booked for both sittings for the ensuing week. This is not surprising seeing that visitors using the regular tourist cars learn during the commentary from the well-trained drivers when the restaurant tram service operates. This also helps top up vacancies. The Heritage hotel group, which performs the restaurant car operation, naturally also promotes the service to its guests. The telephone number for information and bookings is, dialling from Australia, 0011 64 3 366 7511.

The staff on the tram are well equipped to deal with restaurant patrons' needs and from my experience provide service equal to or better than top rating restaurants, with top quality international cuisine at

well below world tourist pricing. In particular Sarah, Joanne and Stephen were with the tram on its first dress rehearsal trip back in January and are now very experienced tram restaurant service staff, well versed in looking after the personal whims of tourists. The restaurant tram also operates for casual lunch diners each day during tourist months and for breakfasts on a group-booking basis.

At the end of March, after less than three months service, 411 is operating at revenue and profit contribution levels well in excess of budget. This augers well for the operators and justifies the confidence of all those involved in development of the project. It should also ensure a reasonable cash flow into the future for the Sydney Tramway Museum to help with other projects and make the success of the Christchurch Tramway so much more assured in the future.

Car 411 now commences the third chapter in its history. For the record, it was built by the Melbourne and Metropolitan Tramways Board at Preston Workshops, entered service from Hanna Street (later South Melbourne) Depot on 3 February 1927 as a W class car. It was converted to a W2 during July 1930 and painted green and cream the following month.

Self-lapping brakes were fitted on 1 July 1940. Later in its career it operated from a number of depots, including Camberwell, Brunswick, Kew and Preston. Its last overhaul was an O3 in May 1971 and marker lights were fitted in July 1972. Car 411 was withdrawn from service at South Melbourne Depot and was stored at Hawthorn on 28 April 1982. Maroubra Junction Hotel in Sydney purchased the car on 4 March 1986 for its 'trattoria'. In June 1995 it was obtained by the Sydney Tramway Museum and converted by the Museum to a dedicated operational restaurant car between July and December 1999. Car 411 arrived in Christchurch, New Zealand on 19 December 1999 and commenced revenue operation on 7 January 2000 on the Christchurch Tramway.

Car 582, parts of which were used on 244 and 411, entered service on 18 September 1929 and was sold to the Coburg Technical School on 6 April 1982.

Christchurch Tramways can be found on the Internet at <http://www.tram.co.nz>

Melbourne W2 class 411 in Victoria Parade at Smith Street on 20 December 1965. David Keenan



HERE AND THERE

NEWS ITEMS OF INTEREST FROM ALL OVER

Sydney Light Rail

Tram 2107 was redecorated in Russell Athletic advertising during February, and 2104 had its 2UE advertising replaced with Apple iMac during March.

Melbourne – Yarra Trams

Yarra Trams unveiled their new tram livery on 1 March. The predominant colour is white with green and dark blue and a grey skirt. The green and blue are said to represent the City's parks and gardens nestled against the blue of Port Philip Bay. A1 class 246 and 262, and B2 class 2020 and 2115 have appeared in the new livery. There have been changes to the interiors of the re-liveried vehicles, including new panelling and seat coverings. Internal hand rails are now green, replacing the yellow previously used.

Route 86 Bundoora RMIT to City has been extended from its former terminus at Bourke and Spencer Streets to a new terminus at La Trobe Street and Footscray Road. The new line along Footscray Road (to be renamed Harbour Boulevard) to Colonial

Stadium was available for traffic on 1 March but did not see passenger service until after 8:00pm on 9 March when trams were rostered to clear the football traffic. The connection between Footscray Road and the Route 70 terminus in Flinders Street West will not be completed until later this year.

Melbourne – Swanston Trams

Swanston Trams has placed an order for 59 trams of European design for delivery from 2002. The new cars are off-the-shelf standard low-floor articulated Combino models and will be constructed by Siemens at their factory in Uerdingen, Germany.

B2 class 2041 is arriving at the new Route 86 terminus in La Trobe Street at Footscray Road on 14 April 2000. The new Colonial Stadium can be seen at right.

Chris Olsen



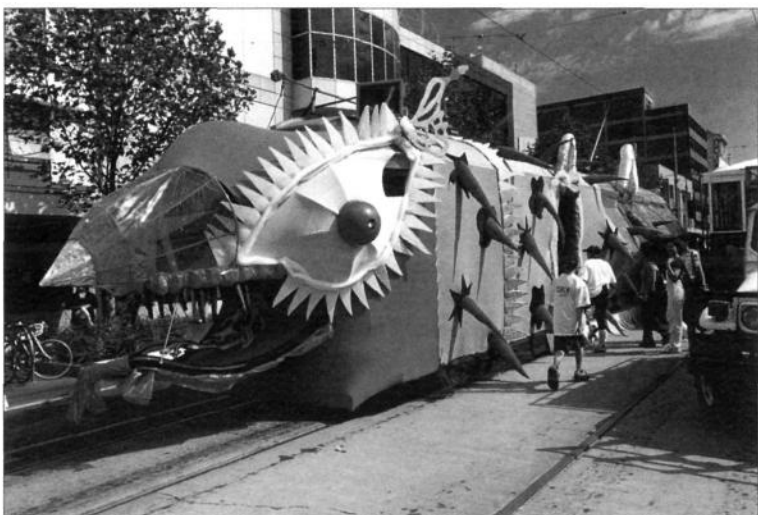
Moomba Parade SW6 class 885 was dressed in fake grass as the 'Hallowed Turf Tram', representing Australian Rules football. It was used by Channel 7 TV for interviews with celebrities.

Steven Altham



SW6 class 900 lost its identity as a tram for Moomba to represent 'Locomoptik', containing interactive technology for children. Front and rear views of 900 are shown here.

Steven Altham



Melbourne's Moomba Festival

Melbourne's annual Moomba festival this year took the theme 'Trams on Parade' and was held on Monday, 13 March between the hours of 11:00am and 3:00pm in Swanston Street between Bourke and Flinders Streets. The trams were moved into position at 12:30pm for the two and a half hour street party.

The trams used, in order of appearance on the street, were W2 class 421 from Bendigo, Hawthorn 8 from the heritage fleet, W6 class 984, W2 class 456 from Bendigo, V214 from the heritage fleet, SW6 class 899, W7 class 1008, W1 class 431 from the heritage fleet, SW6 class 885, Bendigo 6, SW6 class 900, W7 class 1018, and Bendigo 17.

Details of the Bendigo trams and the alterations made to them for the occasion can be found in the Bendigo news on page 56.

San Francisco's F line opens to the Wharf

'Muni did something right' is the catchcry around San Francisco since the extension of the F line from Market Street along the Embarcadero to Fisherman's Wharf was opened for traffic. On Saturday, 4 March 2000 a long awaited dream became a reality. For almost three decades, San Franciscans longed for a direct rail link between downtown and the Fisherman's Wharf area. That dream was realised with the start of the Municipal Railway's regular service on the F-Market historic streetcar line from Market and Castro, through the downtown and along the northern waterfront all the way to Fisherman's Wharf at Jones and Beach Streets.

The extended F-Market line bypasses the Transbay Terminal, turning right on Steuart Street before reaching the Embarcadero, where it stops for passengers getting on or off at the Ferry Building – the first time a streetcar has served San Francisco's famous landmark since 1949.

Ex-Philadelphia PCC cars and Peter Witt cars from Milan are being used on the F-line. The 17 PCC cars were rebuilt for Muni at the cost of about \$600,000 per car. The Milan cars were purchased by Muni for \$30,000 each. They were transported to San Francisco and refurbished for about \$90,000 more apiece.

Both types of car require only one operator – which explains why Muni is not also using on the F-line other historic streetcars that plied Market Street in 1983-87 and from 1995 to the present. Those cars require two operators. Labour costs were the deciding factor.

The debut of the Milan cars was delayed when Muni discovered the trams' wheels rubbed holes in the air pipes on the Castro-Market curve, which is sharper than any curve in Milan. The cars were therefore not available for traffic during the first week of operation on the new line. As a result, Melbourne W2 car 496, which had been standing by for VIP tours, was brought into service. *Inside Track*, journal of the Market Street Railway, an enthusiast group supporting San Francisco's historic tramcar fleet, reported that 496 'loaded mobs through its wide doorways from the Ferry Building all the way to the Wharf. The crowds seemed delighted. Some leaned against the railings in the open center section, unaffected by the chilly winter weather. Others quickly retreated to the enclosed ends.'

During the first week of extension service, 496 was joined by Muni cars No.1 and 130, and by Muni's original Milan car 1834, which was not affected by the air pipe problem. All four historic fleet cars operated the service without any mechanical problems.

The former service along Market Street between Castro and the Transbay Terminal carried about 10,000 passengers a day. This is expected to increase to 30,000 a day, with workers in the Wharf area using the new service as regular transport. Tourists now have the opportunity of travelling by cable car over the hill in one direction and by streetcar along the waterfront in the other from approximately 6am to 1am daily.

Video Review

The Wonderful Tramways of Mr Parker and Mr Jinks

VHS/PAL; black and white and colour; running time 2 hours. RRP \$43.95

Produced by Efftech Pty Ltd, PO Box 4034, Doncaster Heights Victoria 3109. Phone/fax (03) 9842 0859

The Hobart tramways had a number of distinctive features, notably the use of double-deck cars until after the Second World War, and the use of bow collectors, rather than trolley poles, throughout the life of the system.

The tramways of Hobart and Launceston are brought to life in this interesting video, compiled by Roger Greenwood. The initial basis of the video was film taken by Geoff Nowell and his brother David in 1936-37. (Geoff Nowell has contributed some articles

to *Trolley Wire*, the most recent being 'Hobart Memories' in February 1987). Intensive research uncovered additional film material (including some in colour) from a variety of sources, including newsreel and television news footage. The film content has been very substantially supplemented by still photos.

The video is presented as a series of self-contained segments. The two cities, Hobart and Launceston, are dealt with in turn. For each city, there is a brief historical overview, followed by segments which focus strongly on technical aspects, including detailed information on the differences between tram types or even the differences between individual vehicles.

Apart from the pleasure of seeing double-deck cars in operation in Hobart, and seeing footage taken from the top deck, highlights include a classic commercial film of the opening day of the Launceston tramways; coverage of the unusual practice of a tram towing a trolley bus out of its depot in Hobart prior to taking up running; and scenes of the ceremonial last tram in Hobart, whose operation was monitored by an early-model Holden police vehicle.

This is altogether a most informative production. And who were Mr Parker and Mr Jinks? The answer to this question is known to those who watch the video...

-DB

FERNY GROVE

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

From John Lambert

Northpoint Tafe Annex / Tramway Workshops

As mentioned in the 'Here and There' section of the August 1999 issue of *Trolley Wire*, \$2.5 million is to be spent on a TAFE Annex at the Museum. The project has formally been given the go ahead and the first of a number of project meetings was held on 27 March 2000. A steering committee has been formed which includes all relevant parties to the agreement. Peter Hyde and John Lambert are the Museum's representatives. Due to new government planning legislation (Integrated Planning Act), it will be late July / early August before building work commences at the museum site. The first task will be the demolition of the existing workshops building.

The Museum is continuing to empty the existing building by placing all small items and equipment into trams which, after being fully loaded, are then returned to storage in the two depot buildings. It is absolutely amazing how much equipment can be found in a workshop after many years. Needless to say, there is not much room to move in some of the other buildings on the museum site. Quick! There's a spare spot, we can stick something there for the duration of the new works!

Museum Closure

Due to the scope of the building works and the associated infrastructure, the Museum will be closed

for the duration of the approximately 22-week construction period. The closure is necessary for public and Society member safety and the legalities of the Workplace Health and Safety Act. The entire museum will be a construction site and only authorised persons may enter. Depending on final timelines that have yet to be determined, closure of the Museum will occur about three weeks prior to the demolition of the existing building, in order to permit the final removal of equipment, trams and vehicles from within the building.

It should be noted that visitors to Brisbane during this time unfortunately will not be permitted access to the Museum for safety reasons. Delegates to the 1992 COTMA Conference will remember that this type of safety issue also prevented us from leaving the Transperth bus during an inspection of the construction of the Northern Suburbs Railway in Perth.

Northpoint TAFE Open Day

During late October a 'Jobs Expo' open day was held at the Museum to promote the new TAFE courses being offered as part of the TAFE Annex at the Museum. TAFE provided a suitable display, which was accommodated in the front of Depot 1, along with a display by the Brisbane Light Rail section of Queensland Transport. The Museum bookshop was

converted into a display for the Department of Industrial Relations and Employment. The day was inaugurated by the Hon. Paul Braddy, Minister for Employment, with Geoff Wilson, State Member for Ferny Grove assisting. Murray Lawrence acted as MC for the speeches. Patronage was good for the day and admission was by gold coin donation. The only problem was a power failure in the afternoon but fortunately this was after the official party had departed the Museum.

Traction Power Failure

During the Northpoint TAFE open day, two of the 11kV fuses feeding the substation failed, causing traffic operations to be suspended. Energex attended the museum promptly and the fuses were replaced, allowing traffic operations to resume. The next day, Ian Martin noticed the top of the pole near the substation was making 'hissing and popping' noises. He immediately contacted John Lambert as Mick Topp was unavailable, and John arranged with Energex to again visit the site. Unfortunately, the 11kV cable feeding the substation had failed and Energex was required to totally disconnect supply at the dropout fuses. Following discussions between John and Energex, the Museum was informed that as the cable

concerned was on its side of the metering transformer, it was our property and our responsibility to repair.

An electrical contractor with high voltage cable expertise was engaged to test and effect repairs as required. The existing PILC cable was found to be unrepairable as water had penetrated up to 4 metres inside the cable from the top end. A new XLPE cable was installed from the top of the Energex pole to the incoming 11kV switchgear inside the substation. A small delay occurred when the switchgear in the substation failed an insulation test. Mick Topp and Glen Aspinall tested the switchgear with a 10kV tester and it passes all tests. Following this, John arranged with Daryl Ringuet of Network Power Services to formally test the switchgear and ascertain if it is fit for connection to supply. These tests were done, including the required 'pressure test' of 21kV for one minute.

Master of Ceremonies, Murray Lawrence stands on the platform of open car 65 with the State Member for Ferny Grove, Geoff Wilson (centre). Minister for Employment, Paul Braddy is on the left.

John Lambert





The 11kV failed PILC cable has been replaced with an XLPE cable. The cable is visible on the left side of the pole. The metering transformer and dropout fuses are clearly visible.

John Lambert

The switchgear passed and has been formally certified. The electrical contractor connected the new cable as soon as staff was available and arranged with Energex to replace the 11kV fuses. The total cost for this cable replacement plus associated testing was \$5,400. Interestingly, the original cable was installed with a twenty-year life expectancy. It failed after twenty years and four months. The new cable has a life expectancy of at least 30 years.

Track Design

The Museum was recently contacted by the City Council regarding the proposed construction of a SQID in the open storm drain in the parkland near No 29 Arbor Street. SQID stands for Stormwater Quality Improvement Device and this particular type is

designed to trap up to 96% of rubbish that is washed into the stormwater system. SQIDs should not be confused with GPTs (Gross Pollutant Traps) similar to the one in Bulimba Creek near Carindale Shopping Centre. John Lambert and Peter Hyde attended a site meeting with the Council's engineers to discuss the SQID's impact on the design and location of our tram line. The SQID was to be installed in the open section of the drain in Arbor Street. However, it has now been repositioned into the parkland due to the large group of Telstra conduits and a sewer main under and near the open drain. The SQID is completely underground except for two access manholes that are used for maintenance and cleaning of the accumulated rubbish.

The engineer attending the site meeting knew of our tram line design plans via the BCC's Local Assets Officer, John Twentyman, with whom we regularly keep in touch regarding all matters concerning the Museum. The City Council is designing the SQID so that it will be possible for the tram line to pass over the stormwater pipes, just inside the parkland property line. The present proposed alignment of the line will now have to be altered to bring it closer to and more parallel with Arbor Street. The design of the tram line crossing for the Arbor Street drain was the biggest engineering problem to have been overcome in this whole project. With the construction of the SQID, the alignment can be altered to fit in with the City Council's plans, thereby saving the Museum considerable expense by obviating the need to build a bridge. Photos of this area appeared in the November 1996 issue of *Trolley Wire*.

It will be necessary to realign the proposed tram line between the curves 5 and 6 to bring the alignment out onto Arbor Street property alignment near the top of the 'hill'. From this point at the top of the 'hill', the track will parallel Arbor Street towards the railway line and descend at a constant grade in order to cross the area near the SQID at the existing surface level. After crossing the drain at grade, the track will rise into the proposed terminus in the parkland across the railway line from the BP service station. The possibility of a balloon loop terminus is to be investigated and, if feasible, would eliminate the need for a triangle to turn the trams to equalise the wear on the underfloor running equipment.

Design on the realigned section of the tram line from 'Hyde's Hollow', the area immediately beyond curve 5 ('Kingsley's Kink') will take place in the future as resources permit. Whilst this project is important, all resources are presently being directed towards preparation for the upcoming TAFE project.



It is interesting to note that in all of the official BCC paperwork, etc, the area opposite the Museum is referred to as 'Tramway Reserve' whilst the area directly adjacent to the Museum and the Bowls Club is the Ferny Grove Recreation Reserve.

Ferny Grove Railway Station Interchange

Peter Hyde has been contacted by Queensland Railways regarding proposals for the construction of a full interchange/car parking/business precinct at Ferny Grove Railway Station and is interested in the Museum's proposal for the construction of a tram line in the parkland near the railway station. The present proposal has the line terminating in the park across the railway line from the BP Service Station and not crossing Arbor Street or the railway line. The Main Roads Department has cancelled plans to extend Gordon Road directly across Ferny Way and down to a new intersection at Samford Road. The current plan is for the existing Ferny Way/Samford Road 'T' intersection to be upgraded and made into a full cross, with the new part of the cross being the entrance to the station carpark and interchange precinct. This will assist greatly to reduce the amount of traffic in Arbor Street entering and leaving the present station carpark. Ferny Grove is the sixth busiest station in QR's Citytrain area and this is the reason behind the future upgrading of facilities.

There was originally discussion about extending the tram line to the Australian Woolshed and picking up

On the Open Day, the TAFE display was set up in the front of depot 1, while the Brisbane light rail display is further back in front of scrubber car 14.

John Lambert

some of the tourist trade. This possibility has been abandoned as the Woolshed is closing and the land is to be redeveloped for townhouses.

Fleet Maintenance

Mick Topp and Glen Aspinall have installed special coverings on the motor leads of FM 554 to prevent further damage from chafing as the bogies swivel on curves. The temporary repairs made to these motor leads several weeks ago have now been made permanent with the use of special sleeving from CABAC.

Bevan Burnes has completed repairs to the sanding equipment on 554. A quantity of parts was purchased from Westinghouse Brake and Signal to enable the maintenance repairs to be completed. Mick, Wayne and Bevan also continue to check each service tram as part of the routine monthly maintenance.

Donations

John Lambert has organised the donation of a quantity of steel frames that will be useful during

future construction and maintenance projects around the museum site. They will be used primarily to protect work sites such as open trenches and other non-public areas. Danny Sheehan has obtained four bays of deep Brownbuilt steel shelving for the museum. Special thanks are due to Danny for the shelving and to Bob Deskins for delivering it to the museum.

Bus Fleet

Following on from our last report (August 1999 *Trolley Wire*), there have been extensive negotiations between the Museum and the Queensland Omnibus and Coach Society regarding the future of the fleet. As a direct result of these negotiations, a motion was e-mailed to all Museum councillors and passed unanimously, and formally ratified at the Society's council meeting on 16 March 2000.

The motion recognised the QO&CS, as being an appropriate body for the preservation of the diesel omnibus heritage of the City of Brisbane. The motion 'donates to QO&CS, the diesel omnibuses owned by the BTMS, together with all associated spare parts. Should QO&CS decline the donation of any particular item, then that item shall be offered to any other organisation or individual interested in accepting or purchasing said item. All items encompassed by the above two clauses shall be removed from the Tramway Museum at least 21 days before commencement of work on the TAFE Annex/Tramway Workshop or any preparatory works in connection with this project such as demolition of existing buildings, installation or relocation of museum infrastructure. The logistics, details and timing of any donations of omnibuses to QO&CS shall be determined through joint discussions between the BTMS and QO&CS.'

The Museum directors are pleased to advise readers that QO&CS have accepted the donation of the entire diesel bus fleet to their organisation. Some of these buses will be retained by QO&CS for preservation as QO&CS vehicles, whilst other buses are being forwarded onto individual QO&CS members for preservation. Individual QO&CS members taking buses for preservation are required to sign preservation agreements with the QO&CS management committee.

The first bus to leave the site was Leyland National 725 on Saturday, 4 March and it is to be preserved privately. Several other buses left the museum site during late March and early April. With the exception of 10 and 343, the Museum will be devoid of diesel buses by the end of May. Due to the present location of buses 10 and 343 in the far south west corner of the site

behind depot 1, the BTMS directors have granted an extension of time in which they are to be removed from the museum. This relates primarily to the difficulty experienced in removing bus 263, which was located behind 343. Unfortunately, 263 suffered extensive damage whilst being towed (with difficulty) out of this hard to get at area and it was decided to leave 10 and 343 as is for the present time. These two buses will be removed once better access to them can be provided by reorganising the open area behind the store building.

John Lambert operated the Scammell with assistance from Sel Churchward and Wayne Chaseling. The Scammell was utilised during two First Saturday workdays to relocate a large number of buses into areas where the QO&CS team can gain access to vital components to perform minor repairs before the buses leave the museum site. Some buses will be towed from site by a professional towing service whilst others are having minor repairs done, after which they will be driven from the museum under their own power. Sam Sherman has been very active recently, pumping up bus tyres with the workshop airline and changing bus wheels to enable buses to leave the site. Sam has also spent time cleaning all the rubbish and broken glass from the buses in preparation for their departure and assisting some QO&CS members with transport of bus spares and equipment. A special happy birthday must be recorded for Sam, who spent his 80th birthday at the Museum – changing bus wheels!

Archives and Records

Concurrent with the donation of our diesel bus fleet to the QO&CS, the Museum is also donating the associated service manuals for these vehicles. Sel Churchward has commenced 'boxing up' these books in preparation for handover to the QO&CS. Cataloguing of the entire tramway records is to be undertaken as tram manuals and plans will be required for the TAFE project. Robert Thomson and Dennis Campbell have expressed an interest in doing this task - thanks to them both. It is envisaged that this task will be carried out during the shutdown of the museum.

Annual General Meeting

Two minutes silence was observed for the passing of Denis Crump and Jim Campbell, two of the Museum's dedicated volunteers who regularly attended the site. Their passing is a loss to the Museum that will require other regular volunteers to fill the gaps. The meeting was advised that the unfinished garden started by Denis near the workshops track layout is to be completed in association with the TAFE project. A

special plaque is to be installed in the garden to honour Denis and his commitment to the Museum's grounds and gardens.

The election results are:

President: P.F. Hyde
Vice Presidents: M.J. Topp and M.C. Lawrence
Secretary: S.C. Churchward
Treasurer: J.A. Lambert
Councillor: W.A. Chaseling

Peter Hyde, chairman of the meeting, thanked Murray Lawrence for his work as Secretary and looked forward to working with him as Vice President. Peter then formally welcomed Sel Churchward onto the Society Council as the new Secretary.

Electronic Directors' Meetings

All Museum directors have access to e-mail and many items are discussed electronically prior to the directors' meeting each month. The end result is that the matters raised are formally ratified/voted on, etc at the meetings, which rarely extend beyond one hour.

LAUNCESTON

Launceston Tramway Museum Society
PO Box 889, Launceston, Tasmania 7250

From *Back on Track*

Annual Meeting

The sixth annual general meeting of the Society was held at the tram depot, Inveresk, on Tuesday 15 February. Office bearers were re-elected en bloc and remain as follows:

President: Ralph Proctor
Chairman: John Binns
Treasurer: Mike Oakley
Secretary: Philip Archer
Publicity Officer: Graeme Davis

Around the Depot

The biggest event of the year was the announcement in July 1999 that our Society had been awarded a major grant from the Federal Government's Centenary of Federation funding for heritage community projects. The \$60,000 goes towards the costs of obtaining bogies, control equipment, brake gear, electrical wiring, etc to make car 29 a fully operational tramcar. Our members Karlana Lockett and John Binns put in a lot of time in presenting the case for No. 29.

Our Saturday workdays at the old Launceston Municipal Tramways Inveresk depot building are well attended by our faithful regulars who can now see the

results of hundreds of hours of volunteer work taking shape.

Once again the Royal Launceston Show was held at the Inveresk site, providing us with another opportunity to display tram 29 to the many visitors. They were also able to inspect a most interesting display of tramway photos inside the saloon set up by Graeme Davis, our publicity officer, and Brian Barrett. Members Philip Archer, Terry Post, Nick Moore, Graeme Davis, Jo Houbauer and Garth Leighton dressed up in old LMT uniforms, answered the many questions and sold raffle tickets. We express our appreciation to Mike Leslie for the loan of the uniforms.

An ex-Emu Bay Railway gang motor is now housed in the depot. It is on loan from Craig Webb of Tassie Rail and Sleepers. Thanks to our professional Buck Rigby for the painting and maintenance work that has since been carried out on this unit. We hope that it will prove to be a good tram shunter and save straining the older members who are required at times to push No. 29 outside the depot.

Deputy Mayor Annette Waddle of the Launceston City Council and David Denman of the Inveresk

Railyard Authority continue to provide interest and support. A major part played by the LCC in preserving our city's tramway heritage is by the ongoing supply of materials, etc., for the bodywork of tram 29.

Around the Fleet

Tram No. 8

Single truck tram No. 8 was acquired from Campbell Town in Tasmania's midlands where it had been used as a playhouse since its retirement in 1951.

Tram No. 8 has received further attention during the year. The removal by Angela Post, Garth Leighton and Graeme Davis of more old paint and varnish from the interior of the saloon is tedious work but is rewarding as its original blackwood and Huon pine panelling is exposed. Recently some of its old gold-lined maroon was uncovered.

The City Lions Club has also granted further financial assistance to the ongoing work on No. 8 and we thank them for their support.

Tram No. 12

Single truck tram No. 12 is just an underframe only and was acquired for the Society by Philip Archer. The body of this tram was destroyed in a fire some years ago. It may be rebuilt sometime in the future as a crossbench open car of a type briefly trialled by the LMT.

Tram No. 14

Tram 14 remains where found, close to an inhabited house. It has been made a little more weather-resistant.

Tram No. 26

Tram 26 is accommodated in the former Tasmanian Government Railways locomotive weighbridge, courtesy of the Queen Victoria Museum.

Tram No. 29

Tram No. 29 is really looking great. Recent work carried out included the fitting to the roof of the two trolley poles and bases, which are mounted on two new trolley bridges constructed by John Binns. Also both drivers' cabins now have operating handbrake assemblies fitted. Sincere thanks are expressed to the

Australian Electric Transport Museum at St. Kilda for their generous donation of these items and to Kevin Watkins for transporting them to our depot. The roof of No. 29 has been painted in Cumberland Stone, which greatly adds to the general appearance.

The Don River Railway has kindly donated two 3ft 6in gauge ex-Tasmanian Government Railways carriage bogies on which the body of No. 29 can be readily moved in or out of the depot building as restoration work requires.

Sincere thanks are also expressed to the local firm, Accent Signs, for completing their donation of the lining out of the tram body. It gives it a truly professional finish. The driver's cabin doors and the front windows of the No. 2 end also were fitted with safety glass during the year. Thanks are expressed to Peter McCormack for his quality workmanship.

By the end of February, sealing of the destination hoods was complete, while the fitting of new timber guttering has finished off the external restoration. Four-fifths of the grant money has been received, which has enabled us to negotiate for standard-gauge running gear. If it is mechanically impossible to adapt it, we shall just have to regauge to standard. In either case, some pretty solid work lies ahead.

Tram Shelter

A former Launceston Municipal Tramways shelter from Mary Street was moved alongside the depot and under the guidance of member Dave Rigby has been stripped and undercoated by Work for the Dole labour. It looks much more promising.

Other Events

To mark the handing over of the former railway yards to our local authority, the Launceston City Council and Queen Victoria Museum presented an expo entitled *What's Happening at Inveresk?* on Friday and Saturday, 17-18 March. It featured stalls, stands and guided tours of the area, and our depot was open, staffed once again by members in authentic LMT uniforms.

Her Majesty the Queen visited the rail yards in March. We received no bookings for royal trolley rides, but our flagship was most certainly visible!

The Society can be found on the Internet at <http://www.scofa.muse.com.au/tram/>

BALLARAT

Ballarat Tramway Museum

PO Box 632, Ballarat, Victoria 3353

From Dave Macartney

Begonia Festival

Begonia Festival time saw fine weather and good crowds on most days. The total carded from 3-13 March was 4283, well up on last year. The busiest day was Sunday 12 March, with 1145 tickets pulled. The bogie cars provided the bulk of the service, with single truckers appearing during weekdays and as third car on the weekends.

Royal Visit

Her Majesty Queen Elizabeth II visited Ballarat on 24 March, the first time since 1954. As she was due to be in the Gardens from 3:10pm to 3:45pm, it was decided to open the depot to cater for the influx of spectators, and a steady stream of people passed through the museum during the course of the day, boosting sales by a satisfactory amount. As there was to be a demonstration by SES personnel leaping out of helicopters on the end of ropes, it was necessary for the power to be turned off and the substation key to be held by a nominated responsible person. There were telephone calls from Authority to confirm that this had been done.

Eventually the Queen arrived from the Carlton Street end – we did but see her passing by, as she was sitting on the far side of her car, missing out on seeing No. 14 at the bottom of the access track but getting a good view of the condition of the track in Wendouree Parade. The Duke arrived from the opposite direction and they met up at the loop for the SES demonstration, one via Sturt Street West and one via Drummond Street North, quite like old times!

Storage Sheds

Meanwhile, out at Bungaree, the framework of the new storage sheds was erected over the weekend of 25 and 26 March. The eighteen holes necessary had been dug and inspected on the previous day, so over the weekend the steelwork went up, with frequent reference to the instruction manual. One shed frame was completed each day, and on the Monday the concrete truck arrived to finish off this section of the job. April 8 and 9 have been set down as the days the cladding is to be applied – more details next time.

Car News

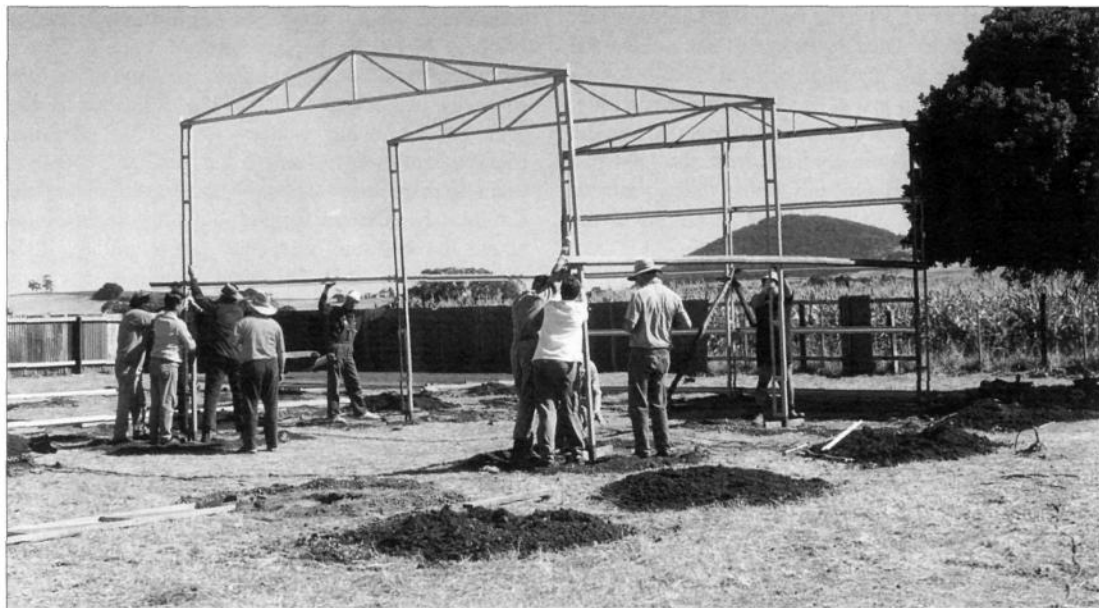
At the depot work on ESCo No. 12 is concentrated on the roof area, with slats and ribs being individually removed, cleaned down and refurbished where necessary, and returned whence they came. Work on No. 28 has slowed down due to the defection of half the restoration team to Bendigo! Once Easter is behind us and the demands of cleaning and routine maintenance lessen during the quieter months, there will be more time to devote to finishing this job off. The truck has been reassembled with motors installed, and tested in Wendouree Parade without anything running hot, so now the brake rigging is being brought up to standard and hung back on the car.

No. 33 is now on the lifting jacks to enable the top half of the motor cases to be attended to. The good armature out of 33 and one from 32 have been sent off to Bendigo to be dipped and baked by a local firm. With the brunt of the traffic duties being covered by Nos. 13, 14 and 18 with some help from 27, it will be a very welcome return to active service by 28 and 33 over the next few months.

Broken Rail

On the Sunday of the Begonia Festival weekend a broken rail was detected on the hill near Carlton Street. The rail had cracked across some 140mm from an existing joint. A 5km/h speed restriction was imposed until the situation could be rectified. It was decided to cut the rail either side of the problem area and install a new section. A one-metre length of matching rail was dug out of the assorted ironmongery under 6 road, and the date of Monday, 20 March set for the replacement.

Glen Parkhill was able to supply his welding/power generating trailer, an electric jackhammer was hired, and we were ready to go. Alan Snowball commandeered the jackhammer, and looked every inch the part of a Council road employee. It was necessary to excavate a wider section of roadway opposite the two saw cuts, as the manual rail saw was making a comeback after some years of idleness. It was decided to use this, as it gives a clean square cut, despite being very slow in operation. Oxy equipment



The Ballarat Tramway Museum work crew enjoys the sunshine and the adjacent corn field while positioning the first frame for the new off-site storage sheds at Bungaree on 25 March 2000. Actually, they are working out how to hold the whole thing up in the air and not have it fall over!

Carolyn Dean

was used to make the final cut through the foot of the rail, as it would have required even more excavation to accommodate the swing of the saw at the end of the cut. As was so often the case with this saw, the blade jammed in the cut at the finish, not helped by the clamp being loosened prematurely and the other end of the cut section being heated, causing minor expansion. Another broken blade resulted.

The offending section of rail was removed with the sun well over the yardarm, and it was a great relief to find that the replacement section lined up perfectly;

The two sheds framed up and ready for concrete on the following day – 26 March 2000.

Carolyn Dean



even the level of wear on the head and flangeway was virtually identical. Glen base-plated and welded the new section in, and the gaping hole in Wendouree Parade was filled in just as the sun was disappearing. Inspection of the failed section of rail revealed that the web had split longitudinally back from the joint just above fishplate level probably some thirty years or more ago, then had slowly worked its way up to the surface over a long period of time.

Puss Deceased

The depot cat is no more. Some time on the night of 27/28 January she was crossing Gillies Street, no doubt to raid the rubbish bins at Begonia Park School, which had resumed that day, when she was skittled by a passing car. Puss had been resident in the shed for some twelve years or so, and had in recent times shown some sign of slowing down, which may have

contributed to her demise. She was formally known as Princess Margaret, as her lifestyle bore a certain resemblance to that Royal personage, though she was generally just referred to as Puss. Motherhood had been her lot in her younger days – her offspring, Meadowbank, was resident in the shed for a couple of years. In more recent times she had the run of the shed, a ruthlessly efficient mouser, but often to be found where the cushions were the softest and the food supply close to hand. She spent many hours sleeping on any clothing carelessly left lying about in the mess room and would climb all over anybody who was incautious enough to sit down while using the telephone. Now it can be revealed that the main reason that the maintenance staff so often parked No. 26 at the bottom of 2 Road is because Puss liked to sit on the crossbench seats and watch what was going on inside the mess room. A creature of charm and personality, she will be fondly remembered.

BYLANDS

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

From Running Journal

Exhibition Goods Shed

With the onset of fine weather from January, work proceeded at a rapid pace. By the end of February the concrete slab floor was complete. The rails for the four tracks in this building have been laid and concreted into position. The impressive sight of the floor with its mass concrete track indicates the standard and quality of the workmanship being applied to this project. Work has commenced on the restoration and strengthening of the timber uprights and trusses, whilst off-site work has concentrated on the fabrication of new replacement steelwork.

The realisation of this project is now evident. If work continues at the current rate, it is expected to have this building completed by the end of May.

Vehicle Repair Shed

The proposed track-bed, which will link this facility with the main line, has been measured and pegged out. Material such as sleepers, rail and special work has

been selected and marked. A contractor will be engaged shortly to excavate and prepare the roadbed so that tracklaying can commence.

Museum Work

Repainting and repairs to W3 class 667 are now complete. The gold lining of all panels and the application of numerals and monograms have transformed this car into a showpiece. The sight of this vehicle glistening in the sunshine at Bylands is a sight to behold. The next tram to be given the treatment will be W4 class 673.

A start has been made on remedial repairs to tank car 7W. New timber has been prepared to the trolley decking and base supports. Several stored motor vehicles on the site have been repositioned, thus giving a better appearance to the area. Sleeper replacement on the main line has continued as required.

Repairs have been carried out to the external cladding adjacent to the doors at the front (north end)

of No.1 road. Roof repairs have also been carried out on the vehicle storage shed. The overhead wire above the depot fan has been adjusted and retensioned in readiness for the installation of wire over the remaining unwired depot tracks.

The new motor installed in AEC Mk VI bus No. 759 has been tested. Further bodywork is required before

this vehicle is again ready for the road. Engine repairs are currently being carried out on our other AEC Mk VI No. 776. The Society bus fleet have been involved in recent vehicle displays, these being on Australia Day in the Fitzroy Gardens, Melbourne, and the Macedon Ranges Car Club's display in February. By attending such events the Society and the Museum gain valuable public attention and advertising.

ST KILDA

Australian Electric Transport Museum

GPO Box 2012, Adelaide, South Australia 5001

From Colin Seymour

Glenelg Tram 360

The Museum's refurbished 1929-style H type tram 360 returned to the Museum from the Glenelg line on Christmas Eve 1999. It entered Museum service using two motors only on 16 January 2000. The old motor connector leads were cut at Glengowrie and replaced by new style leads. A shortage of these leads at Glengowrie resulted in sufficient leads being available to the Museum for two motors only. As the Museum will use the new style leads, we are waiting for further leads from Glengowrie when they become available. In the meantime, 360 is performing very well on two motors on the Museum's line.

Celebrate at St Kilda Day

Sunday, 19 March 2000 saw the AETM participate in Celebrate at St Kilda Day. The day was a Salisbury Council initiative and saw the Museum work closely with the Council and St Kilda residents to promote St Kilda. The event took the format of a community market with most of the stalls being located at the Museum and some in the St Kilda township. Events included concert and brass bands, displays of marching, amusement rides and carnival sideshows, a cavalcade of vintage Morris cars by the Morris Car Club, wildlife displays, a painting and art exhibition, and additional food and drink stalls.

Tram operations started at 10am and the day was inaugurated at 11am by His Excellency, the Governor

of South Australia, Sir Eric Neale. Other guests included the Federal Member for Port Adelaide, Rod Sawford and the Mayor of Salisbury, Tony Zappia. As the crow flies across the water, St Kilda is close to the Port Adelaide district, although by car it is some distance away. It appears that those drawing up electoral boundaries followed the path of the crow!

The Governor was given the opportunity to drive 'toastrack' 42 and Rod Sawford drove W2 car 294. Guests inspected the trams and workshop facilities.

At 3:30pm a tree planting ceremony in memory of former Adelaide radio announcer, Christopher Cordeaux, a tram enthusiast who passed away in 1999, was conducted by his brother, Adelaide radio identity, Jeremy Cordeaux.

In departure from normal practice, a different ticketing system was used on the day. In place of the usual admission fares, tickets were issued for tram rides and were \$1 per return trip. Old State Transport Authority \$1 tickets were used. To assist conductors collecting fares, two additional ticket sellers were rostered. Ballarat 21 was stationed at the terminus as an information tram, and provided a base for one additional ticket seller, while the other additional ticket seller was in the car park near the Museum entrance building.

His Excellency, the Governor of South Australia, Sir Eric Neale, at the controls of 'toastrack' 42 on Celebrate at St Kilda Day, Sunday, 19 March 2000.

Neville Smith

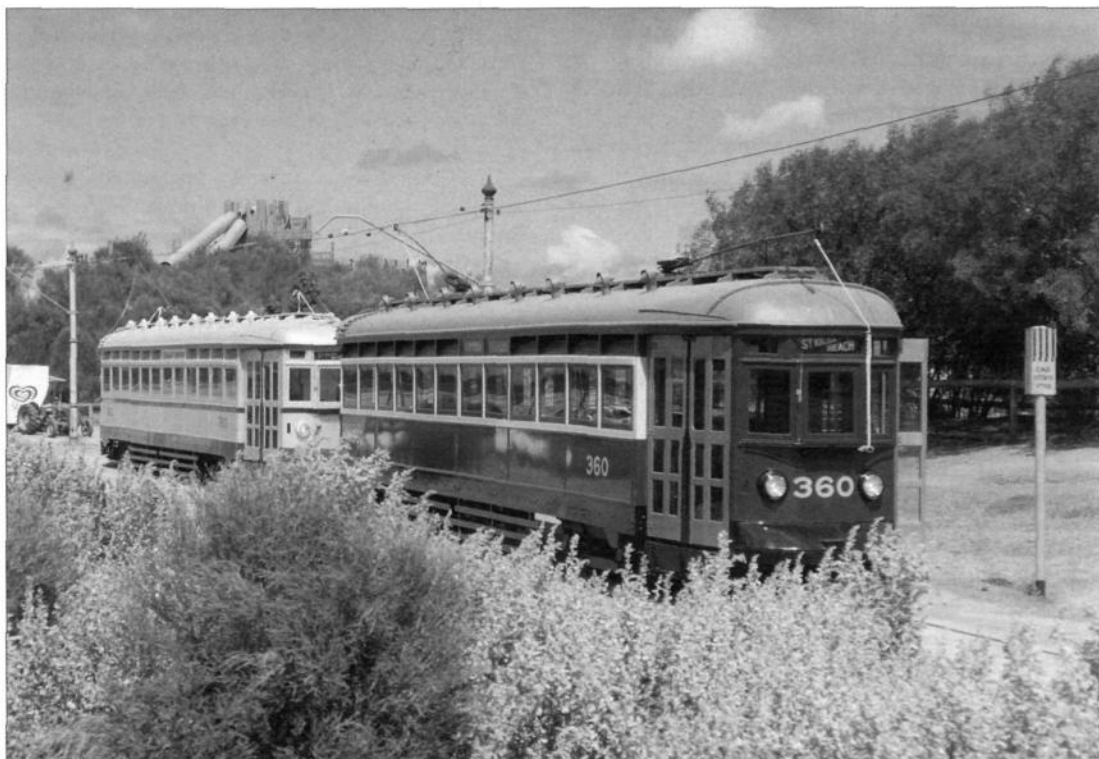
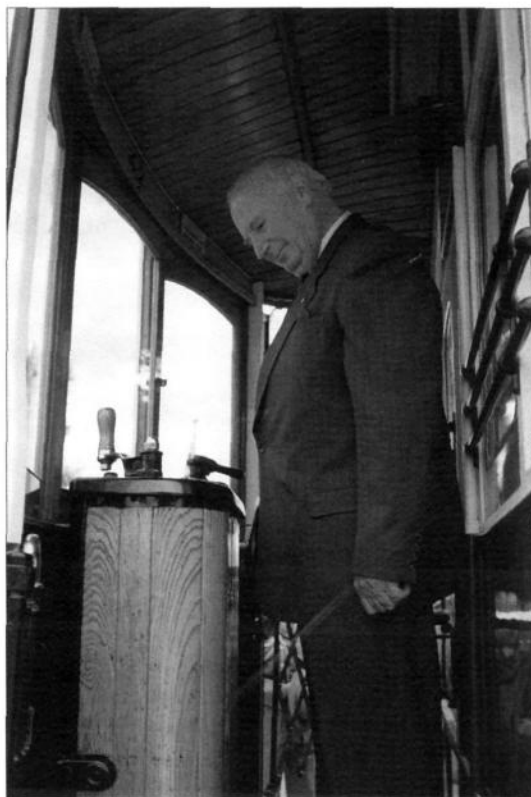
The Big Clean Up

The completion of car 360 has given the work team time to focus on other site activities. Many stores items throughout the site are being tidied and surplus items and junk (ie. irrelevant items and those in poor condition) are being disposed of. The stores shed has been completely sorted out.

Concrete sills are being poured around the Tram Storage Shed. The inside sill is wide enough to

The AETM's two operational Glenelg tram cars: newly refurbished H 360 in 1929 tuscan livery followed by H 362 in 1950s silver livery are at the St Kilda Playground stop, shortly after 360's entry into Museum service in January 2000.

Neville Smith





A line up of cars from the Morris Car Club is seen at the Museum on Celebrate at St Kilda Day.

Neville Smith

The Playford Show Band entertains the crowd from 'toastrack' 42 on Celebrate at St Kilda Day.

Neville Smith





accommodate many of our spare tram parts. Sorted parts have also been neatly stacked in F car 244 in the Tram Storage Shed. The result of the cleanup to date is a safer and tidier workplace.

Adelaide radio identity, Jeremy Cordeaux plants a tree in memory of his brother Christopher, a tram enthusiast, on Celebrate at St Kilda Day.

Neville Smith

Around the Workshops

The area in the workshop where the electric locomotive was previously located has been concreted. This has allowed the re-positioning and setting up of the workshop machines in an orderly way.

Foundations for the wheel press and Butler shaper have been completed. Nine-inch lengths of a tramway overhead pole were cast into the pour, and were held to the machine bolt hole patterns by threaded rod. Plastic bags were used to plug these when the foundations were poured, and with the machines in position, the pull-down bolts for the machines were grouted in. To provide a cavity in the concrete for the counterweight of the wheel press, a galvanised rubbish bin was concreted in, its top flush with the foundation top.

H1 car 381 is out of service because of a thin flange on one wheel. It is intended to remove the trucks, turn the wheels and overhaul the trucks. The brake adjusters and nearby rigging have been exposed to our salt foam problem and will need heavy cleaning.

Other News

A number of improvements have been carried out to the Bouncing Billy Tea Rooms. A new wash basin has been installed to enable staff to wash their hands before food preparation in accordance with health requirements. The walls and floor behind the counter have been repainted and there has been a general tidy up.

A start has been made to re-organise all the exhibits in the Trolley Bus Shed. All wall-mounted displays and most of the rolling stock exhibits were removed on Saturday, 1 April 2000 to enable the shed to be cleaned prior to painting of the lower walls and provision of improved flooring and displays. Most of the rolling stock items were given temporary under cover storage in other sheds. Twelve members participated on the day.

The AETM received a History Trust of SA grant of \$4,500 towards the reconstruction of E car 118. Our

Ruby the Roo entertains some young visitors on Celebrate at St Kilda Day.

Neville Smith



local state member, Trish White, handed the cheque to the Museum on 16 January 2000 (the day car 360 entered Museum service) on behalf of the Minister for the Arts, Diana Laidlaw.

Car 360 about to enter Mangrove Loop followed by car 362 on their return to the Museum from St Kilda Beach.
Neville Smith

The AETM hosted 27 members of the Passenger Transport Group of the Chartered Institute of Transport (Victoria) on Saturday, 5 February 2000. They were given conducted tours and several tram rides, including our Melbourne W2 class 294 and D car 192 (formerly P&MTT & HTT). As part of the visit, AETM President Colin Seymour gave a brief history of the Museum and related our success factors.



LOFTUS

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

From David Cooke

Heritage Week

Our Leyland Tiger half-cab bus again took part in the Ryde Heritage Festival running a free shuttle with Historic Commercial Vehicle Association buses to historic points from West Ryde railway station on 1 April.

The Sutherland Tramway Festival, held in conjunction with Heritage Week took place on Saturday, 8 April. Stalls were operating in Eton Street, part of which was closed to traffic for the day. Organisers were disappointed to discover at the last minute that many booked stall holders would not be

attending due to the holding of a parallel heritage week function (more profitable for the stall holders) at Darling Harbour.

A free shuttle bus service between the museum and Sutherland operated using our Leyland Tiger half-cab 1275. Reduced fees were offered for entry to the museum and tram rides. There was entertainment provided at Sutherland and the Sutherland Shire Silver Band provided music at the museum. Despite the lack of stalls at Sutherland, the number of local residents visiting the museum was quite satisfactory.



Archives

More storage space has been obtained thanks to Peter Kahn. Three heavy-duty filing cabinets were delivered on 30 March and these are now in place. A number of office desks were also obtained and these are now in our archives area and in the Museum's office.

Works

John Matts has almost completed a repaint of the Railway Square Waiting Shed. Most of this work was carried out during the heat of February. It was the first use of our refurbished ex-Sydney County Council Bedford bucket truck, which made John's job of repainting the roof and walls of the signal box on top of the waiting shed much easier. The bucket's hydraulics are very much better than on the one we hired to paint the signal box some years ago. The vehicle is to be repainted in its former owner's corporate colour and Ian Hansen has mixed an almost perfect paint match.

More work is being carried out in preparation for concreting between 7 and 8 roads and between 8 road and the external wall on the eastern side. It is expected that concrete will be poured during May.

The first use of our newly acquired bucket truck was to enable John Matts to repaint the signal box on top of the Railway Square waiting shed, seen here in February. The bucket's hydraulics have been overhauled but the truck, although operable, still requires some work to bring it up to a satisfactory museum standard.

Chris Olsen

Additional storage shelving has been acquired, thanks to the efforts of Bob McKeever.

Our Work for the Dole people have been active in grounds maintenance. The site is looking a great deal tidier and new planting is taking place along the Pitt Street boundary fence. This will soften the appearance of the buildings and make the area more attractive for visitors and passers by.

Work on sleeper replacement is scheduled to commence during the cooler months.

Disabled Facilities

Our Work for the Dole people are working on construction of a disabled people's platform. This



R class car 1808, ex-Waverley Council, and still covered by its custom-made tarpaulin, is being unloaded at Lotus on 3 February. A set of W2 trucks is being pushed under the tram before it is lowered.

Bob Merchant

Our completed 'cable' trackage in the display hall extension on 29 January. Dummy inspection hatches are also being provided to complete the scene. Preparations for concreting the remaining areas are being undertaken and should be completed during May. Ballast motor 93U is standing over a short section of sleeper track, also to be part of the final display.

Bob Merchant





Our electrically operated tamper undertook some packing and levelling on the main line on 19 February. It is seen here carrying out some sleeper packing near the TAFE level crossing.

Bob Merchant

structure is to be located behind the park garden on the depot main line. It is proposed that a tram be specially altered for wheelchair bound passengers. These facilities are now necessary as an increasing number of disabled people wish to visit the Museum, especially on special charter trips.

Car News

L/P class 154 has been receiving workshop attention in preparation for its 50th birthday with the Museum. Chris Olsen and Glen Killham have been slowly working on the electrics, whilst Mal Macauley and Bill

Jim Jowett and Brian Hague are carrying out roof repairs to R class 1740 to seal the water leaks experienced in wet weather.

Bob Merchant





'Dad's Army' is hard at work on L/P class 154 in the workshop on 29 February 2000. From the left are Vic Solomons, Brian Hague, Chris Jacobs and Jim Jowett.
Howard Clark

Parkinson have been attending to the bogies. A couple of our Work for the Dole people have also been co-opted to assist and they have been cheerfully cleaning the underframe of 60 or more years of accumulated dirt and grime. One commented before Christmas that "if the Museum was a paid job it would be a great place to work". His mother visited the museum recently and thanked Brian Hague, our weekday workshop manager, for sending her son home each day happy. This lad has since been successful in obtaining a job and unfortunately (for us) we have lost his services.

Perhaps the most important event is that the car has been repainted into the green and cream colour scheme, and what a picture it presents. Instead of a rather drab looking car it now sparkles in its new colours, which suit this car. The former olive, fawn and grey livery last used in Newcastle was known officially as the 'drab' scheme. Our 'Dad's Army' of weekday

workers carried out the repainting. The more intricate bits were painted by John Burgess who forsook traffic and while still in his traffic uniform picked up a paintbrush to help out. John trained as a painter at Randwick before transferring to traffic staff. Forty odd years later he returned to his trade. His advice was invaluable and he was responsible for all the black lining and handrails. The gold leaf numerals appropriate for its former livery have been retained. To achieve this, the tricks of the trade as they applied at Randwick have been used on this car. The numbers were placed slightly lower when painted green and cream but they have not been repositioned as the car is to be retained in green for only twelve months or so.

F class 393 is now in workshops having some repair work carried out. Damage to the throwover seats in the open sections is being repaired, the sandboxes are being made operable and other necessary work is being carried out, including correcting the chocolate brown to purple brown.

Prior to the F car coming into shops, R1 class 1979 received some attention to its roof drainage. One of the drainage pipes was so corroded that it was causing water ingress into the car. The offending fitting has been replaced with plastic sections.

WHITEMAN PARK

Perth Electric Tramway Society

PO Box 257, Mount Lawley, Western Australia 6050

From Michael Stukely

Level Crossings Replaced and Concreted

Major reconstruction works on the two public road crossings at Bennett Brook were completed in January-February with assistance from the Work for the Dole project. This followed the successful concreting of the Village road crossing in December (see *Trolley Wire* February 2000).

Great credit and thanks are due to members Lindsay Richardson and Trevor Dennhardt, who spent both of the two periods of reconstruction at the Park full time (each crossing took 4-5 days), and who carried out much of the heavy work themselves in very hot and trying conditions.

Both of the Bennett Brook crossings had originally been laid with ex-tramway grooved rail, and both had been causing increasing problems for both road users and the trams due to subsidence and poor alignment. The decision was therefore taken, in consultation with Park Management, to dismantle and completely replace these crossings with our standard 60-63 lb/yd rail, to improve the alignment of crossings and approaches where necessary, and to concrete the new crossings.

Two 40-foot lengths of ex-NSWGR 60 lb/yd rail for the western crossing had been dragged from the hardstand area to the site with the tractor by Trevor, Lindsay and John Shaw prior to the work starting. Two good lengths of 63 lb/yd rail for the eastern crossing were salvaged from the disused Bennett Brook siding which, apart from the points, has now been removed.

The work on the No.1 (western) crossing was carried out between 17 and 21 January, and the No.2 (eastern) crossing from 6 to 11 February. It was necessary to do the work during the week so as to avoid major inconvenience to larger numbers of Park patrons on the weekends. Our weekday tram services were cancelled during these periods. Park Management constructed road deviations and temporary crossings of the tramway at each site.

'Many hands...' – members of the Work for the Dole team lift the first length of grooved rail from the old No.1 (western) road crossing at Bennett Brook on 18 January. Trevor Dennhardt (nearest camera) prepares the other rail. Lindsay Richardson

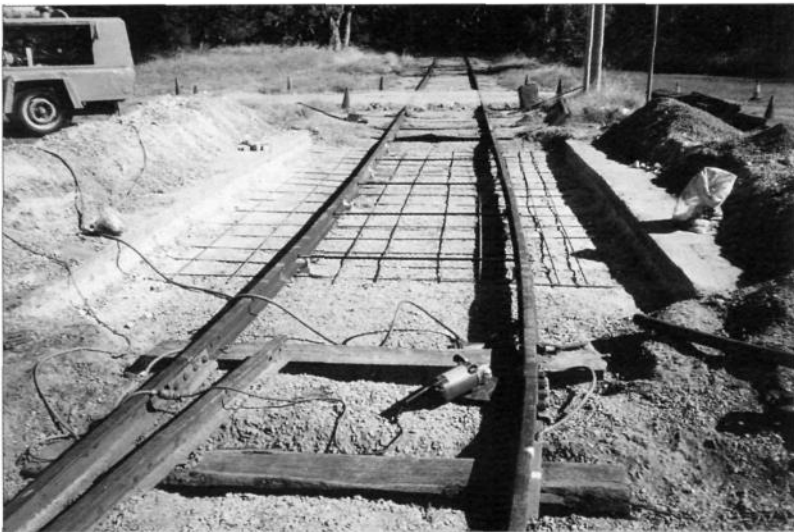


Lindsay Richardson operates the rail saw to cut the new rail to length at the No.1 road crossing at Bennett Brook on 19 January. The temporary crossing is behind him. Courtesy Lindsay Richardson



The No.1 (western) road crossing at Bennett Brook with new rails, gauge ties and steel mesh installed ready for the concrete pour on 20 January.

Lindsay Richardson



Looking westward over the newly reconstructed and concreted eastern road crossing at Bennett Brook on 11 February. Rail for the crossing was taken from the disused siding at the former tram stop beyond the steel pole. The curve in the foreground has been realigned to give a much-improved ride.

Lindsay Richardson





During testing, W2 class 329 approaches from the east side of the newly reconstructed and concreted western road crossing at Bennett Brook on 21 January. The disused siding at the former tram stop can be seen behind the tram.

Lindsay Richardson

At each crossing the bitumen seal, old grooved rail and wooden sleepers were removed and the trench was excavated for the full length and width of the crossing. Checkrails on the approach curves were unbolted as necessary for re-alignment. The new rail was placed in position, trimmed, crowed and drilled for fishplate bolt holes as required, and plated up. A great deal more crowing was needed at the eastern crossing and its approaches and this allowed for a bad kink to be removed from the curve to the east. Gauge ties were fitted after more drilling and steel mesh was placed in the trench ready for the concrete pour. In each case the concrete had to be poured on the Thursday to enable the road crossing to be re-opened late on Friday. Testing and any necessary adjustments were then completed and the sites cleaned up, including packing of new sleepers, installing rail bonds and filling the crossing ends adjacent to the concrete with roadbase.

At the western crossing, four metres of checkrail were added to the curve on the eastern approach to

Trevor Dennhardt attaches the final clip to the trial steel sleeper installed on the main line just east of the Car barn precinct on 27 February. A major order for steel sleepers has now been placed.

Lindsay Richardson





Western Australian Premier, Richard Court (left), with Lindsay Richardson on the step of Fremantle 29 on the Car barn fan on 20 February.

Courtesy Lindsay Richardson

meet up with the narrowed concrete crossing. Some of our new aluminium spacer blocks were used here. The opportunity was also taken to replace 13 sleepers on this curve. At the eastern crossing, 12 sleepers were replaced on the approaches.

The end result is a great credit to all involved, with the trams now gliding very smoothly through the new crossings – a huge improvement. Our thanks are due to all members who assisted Lindsay and Trevor at various times, and also to Park Engineer, Simon Mead.

General

On Sunday, 20 February, the Premier of WA, the Hon. Richard Court MLA, the Minister for Heritage and Planning, Graham Kierath, and several other Members of Parliament visited the Museum after riding from the Village on Fremantle 29. They were shown various aspects of our activities and had useful talks with Councillors Lindsay Richardson and John Shaw.

Council has resolved to discontinue using the operating name 'Whiteman Park Tramway Museum' for the Society; instead the title 'Western Australia's Heritage Tramway' will be used. It is believed that this more accurately reflects our tramway heritage and operational focus.

Prior to finalising a major order for steel sleepers to be used in our ongoing track improvement programme, a sample sleeper with clips and spacers was installed on the main line just east of the carbarn fans. It was installed on 27 February by Lindsay Richardson, Trevor Dennhardt and Martin Grant and tested successfully. The following Wednesday, Lindsay and Trevor replaced six more sleepers in this section, five with steel sleepers salvaged from the earlier Park Entrance terminal reconstruction, and one with wood. The team reports that they were pleasantly surprised at the relative ease of the installation and packing of the steel sleepers.

Severe electrical storms in January caused some damage to our electrical equipment. The main 0-700A panel meter was burnt out, a lightning surge arrester

required replacement and the office phone extension bell was burnt out. Regarding the latter item, Noel Blackmore reports that he will see if he can make one working unit from what is left of it plus another burnt-out specimen!

Noel is currently investigating suitable methods of activation of level crossing warning lights for future use at our three public crossings.

Eddie Vagg is progressing with the No.1 truck motor and wheel set refurbishment.

Fremantle 29 has recently required repairs to the manual lap brake valves with new piston valve seat material being installed; the anti-sway buffers on the trucks have been reset.

Our well-used McDonald ballast packer has reached the end of the road – as it is now an obsolete unit, parts are no longer available. A new unit must be purchased. The radiator of the post-hole auger, thought to have needed replacement, has been repaired by the Motor Vehicles team by cutting and blocking a small number of tubes. Dave McCormack has made a new canopy frame for the Toyota.

Rail Safety Accreditation

Our application for accreditation, the Safety Management Plan and associated documentation were completed by Michael Stukely with valuable assistance from the Safety Management Committee (Lindsay Richardson, John Shaw and David Brown) and major technical input and advice from our Electrical and Mechanical Engineering Supervisor, Noel Blackmore. It was submitted to the WA Department of Transport in January, and as a result we are permitted to continue operating under interim accreditation after the deadline of February 2 while the



Bill Gilbert with one of the heavy-duty covers he has constructed to protect the points connecting rods on the L C Richardson Car barn fan, in February.

Lindsay Richardson

application is processed. Office of Rail Safety staff made their site inspection on 23 February and their response was very encouraging.

To upgrade our safety arrangements, an emergency evacuation procedure has been developed and a siren has been installed in the Car barn. Safety Officer, John Shaw has arranged the purchase of Exit and First Aid signs, which have been installed by Martin Grant and Bill Gilbert.

BENDIGO

The Bendigo Trust

1 Tramways Avenue, Bendigo, Victoria 3550

From Len Millar

Our 1903 Car

Out of a pile of old timber and cast iron bits, a Phoenix is rising! After languishing behind the depot,

this valuable collection of bits has finally started to take form.

In 1903, Duncan and Fraser built 12 single-truck,

straight-sill, California combination cars for the Electricity Supply Company of Victoria for its Bendigo Tramways. Apparently they were the first electric trams built by Duncan and Fraser, who went on to build many trams for Australia's then-burgeoning electric tramway systems.

Car No.7 of ESCo's Bendigo fleet remained a two-man car on the Eaglehawk - Quarry Hill route, unlike some others that were converted to one-man operation for the Golden Square - Lake Weeroona route. Car 7 was sold in the 1930s and became a bungalow behind a house near the Gas Works. It came into the Trust's care in December 1988.

Now, with the help of money and labour, No.7 is becoming a real tram again. The saloon and one end are being fully restored and will be installed in the

newly expanded reception area at the Central Deborah Goldmine building. The varnish on the new window frames gleams, the eye is blinded from the brasswork of the Westinghouse T1F oval-topped controllers, and the new joinery is a credit to the depot staff. Soon it will be running again, but we think we will keep it 'for best'. We are half way through the rebuild, but already it is attracting enthusiasm from those who are working on it.

... And a Battery Car?

In 1888, the Sandhurst and Eaglehawk Tramway Company purchased six battery-powered cars. They were not a success. Hills, tight curves and indifferent track thwarted the cars, and horses were often required to haul them home. Steam trams took over.

One hundred and twelve years later, Phillip Bertram has undertaken extensive research that could result in plans to construct a replica vehicle. Stay tuned, work has started!

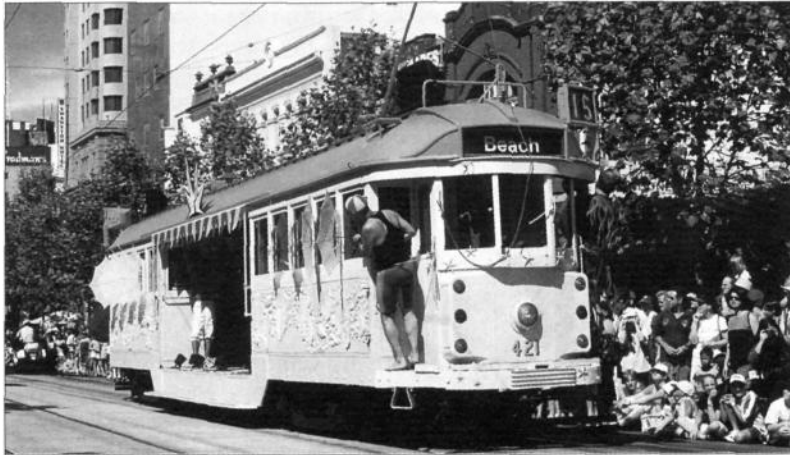
9W Takes On Extra Duties

After the thrill generated from its arrival a few months ago, and after most drivers had tried their hand

Bendigo No.7 of 1903 is on display in the enlarged reception area/souvenir shop at the Gold Mine Terminus. It is seen here on 18 April 2000 being moved into its new display area.

Dennis O'Hoy





W2 class 421 represented the 'Something Fishy Tram' in a sandy coloured repaint complete with fish tails and lifesaver, and a sky blue roof. It is seen here moving into position in Swanston Walk for the street party.

Ray Marsh



Bendigo single truck car No.6 represented the 'Scary Dairy' with children dressed as cows prancing about. Beside it in this view is the 'Love Tram', W7 class 1018, in bridal white for a children's tram painting activity.

Steven Altham

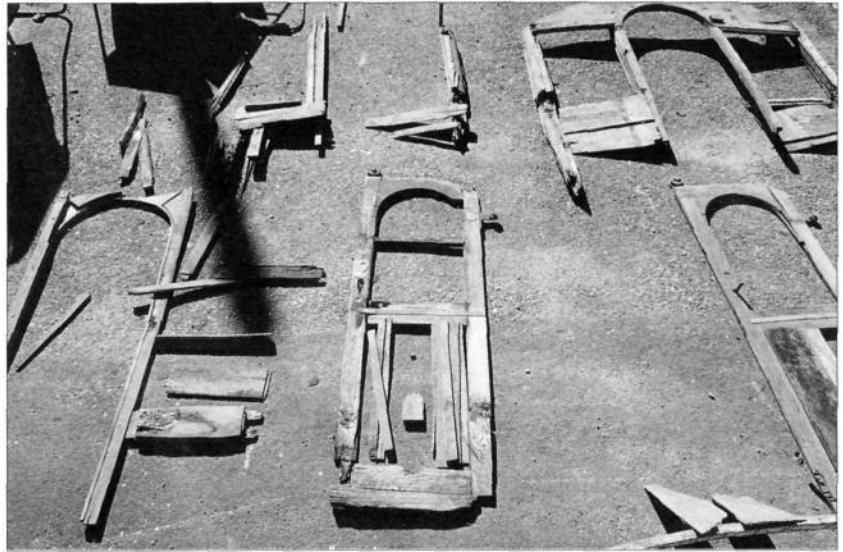


Musicians are using as a stage toastrack car No. 17, with all seats between the bulkheads removed.

Steven Altham

These pieces of timber are parts of the jigsaw making up the 1890 vintage battery tram No.2 which was later converted to steam trailer No.3

Dennis O'Hoy



at driving the former Melbourne scrubber, 9W has been relegated to the back of the depot. We needed new carborundum scrubbing blocks, and how better to pay for them but by advertising? After 9W receives a general body overhaul, and new abrasive blocks and suction gear have been fitted, it will receive all-over advertising. 9W may not be good at carrying passengers, but the advertising income will enable it to earn its keep for the Trust.

Moomba

Our last report alerted readers to our participation in this year's Moomba festival. It happened!

As reported in 'Here and There', one of the themes of the 2000 festival was 'Trams on Parade', in which trams from Melbourne and Bendigo were presented as mobile stands for a series of curious displays. Bendigo's Summer toastrack car 17 (with seats removed), single trucker No.6 (with drop-end panels, seats, surplus track blowing compressors and hoses removed), W2 class 421 (with drop-centre panels and seats removed) and W2 class 456 (unmodified) were there in all their glory. Sundry imitation cows, line dancers, etc disported themselves in the spaces provided on the trams, and a fun time was had by all.

We finished up with No.421 sporting a pastel blue roof, but with the drop-centre ready for the installation of the two long tip-over seats that will take it back to its original W1 class form. It is sure to be popular in its Talking Tram Tour role on Bendigo's warmer days. Car 456 is now black and has been returned to storage,

while No.17 gets a quick touch-up.

Easter Service

Bendigo has traditionally been a popular destination on the Victorian Easter calendar. Apart from its famous Easter street parade, firecrackers and Chinese dragon (100 metres or so long called Sun Loong), the trams are flat chat! Our 'Easter Man', Michael McGowan produced the rosters and timetables, organised crews, trams and expectations in his usual efficient manner. This year we operated a 20-minute service using three trams. Our drivers quickly came to terms with passing other trams at very different places from the usual service.

Other Business

Our enthusiastic Superintendent, Tim Borchers, has grasped the nettle and has been quoting for extra business. Tram restoration business, that is!

In order to generate income for the Trust, for restoration and maintenance of our operating and museum fleet, Tim has submitted competitive quotes for railway carriage re-painting (Victorian Goldfields Railway at Maldon) and tram restoration (both interstate and local).

The first item to be tackled is former Melbourne X1 class No.466, the body of which has been on a farm at Lancefield for many years. It was hoisted onto a low loader and was transported to our newly re-created workshop in early April. Two local tram enthusiasts



own the tram and accepted Tim's quote for restoration. Work has commenced to transform the body of 466 into an as-new, saleable item for the owners. The X1 class was always viewed as being an Australian version of the famous Birney but with doors at all four corners of the body.

Our café tram 976 has won first prize in the new business category of WIN-TV's goldfields region tourism awards. So chuffed was our General Manager, James Thompson, at the award that he brought two

Privately owned X1 class 466 from Lancefield near Bylands has been unloaded in Tramways Avenue in preparation for transfer to the Bendigo Tramways workshop for restoration.

Denis O'Hoy

bottles of champagne down to the depot on the next morning to share with staff. Regretfully the staff had to tell James that they could not imbibe whilst on duty because Victorian tram maintenance staff must be ZBA – zero blood alcohol level – while on duty.

VALLEY HEIGHTS

Steam Tram and Railway Preservation Society
PO Box 3179, Parramatta NSW 2124

From Peter Stock

Accreditation and Certification Matters

The Society began the accreditation of its steam tram operations whilst still in Parramatta Park. The fire of June 1993 saw an end to the process whilst the Society considered its future. The NSW Department of Transport, with wisdom, foresight and confidence in the Society's future, held our application for accreditation in abeyance until we were back in business.

As recorded in the pages of this journal, the Society re-located to the Valley Heights Locomotive Depot

Heritage Museum (VHLDHM) and our operating name was changed to reflect the new circumstances. The Society began the task of rebuilding its rail-borne assets to eventually operate steam trams in conjunction with the Museum's activities. Finally, locomotives stored at the NSW Rail Transport Museum at Thirlmere were taken to Valley Heights. The VHLDHM is operated by the Blue Mountains Division of the Rail Transport Museum.

Accreditation procedures re-commenced with the Department of Transport in earnest. Negotiations

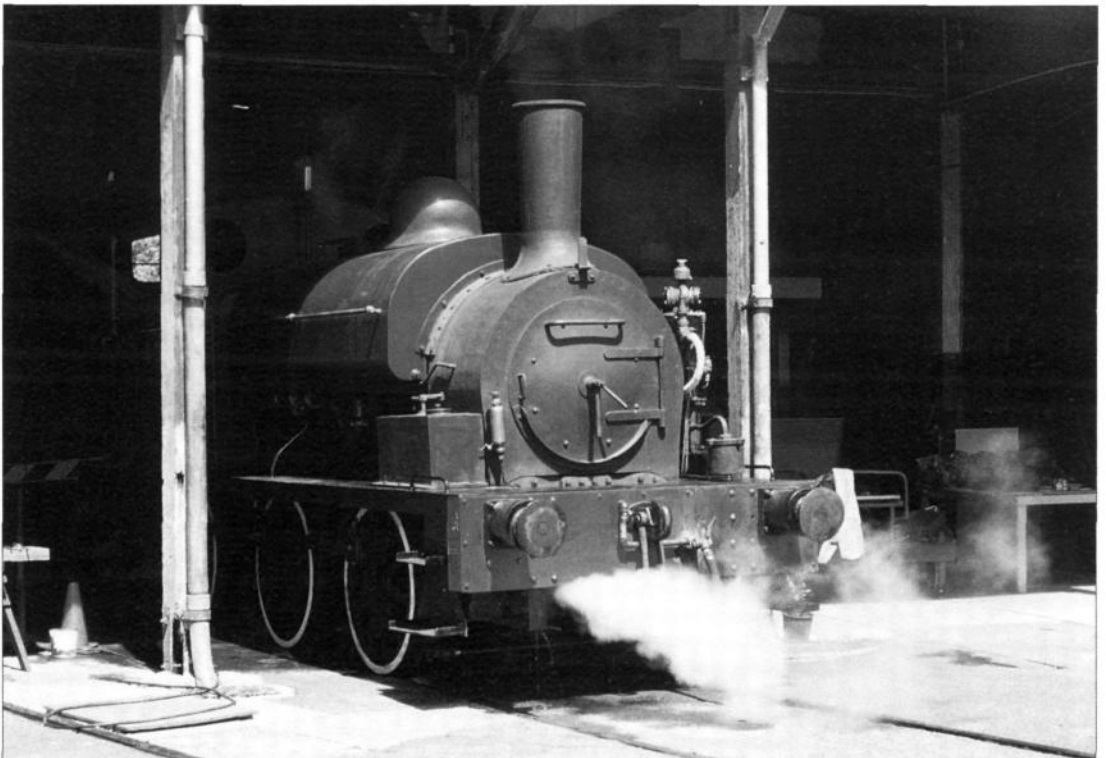


On its first day in steam, Stephenson No.2 stands on the turntable at Valley Heights on 18 February with proud members in attendance. From left to right: Frank Millier, David Lewis, Cliff Currell, John Webb, Tom Pall, Peter Stock, and on loco, Craig Connelly.

Courtesy Peter Stock

Stephenson No.2 leaves the depot for the first time after passing its initial inspection for certification, Friday, 18 February 2000.

Peter Stock



continued through all facets required, culminating in the granting to the Society of 'Accreditation as a Railway Operator in NSW', from 18 November 1999.

Work then intensified on the Stephenson No.2 locomotive to complete the many small jobs needed for its completion. These were completed and 'Stevo' was put forward for certification. It is a pleasure to report that the locomotive passed satisfactorily all aspects of the initial inspection on Friday, 18 February. Opportunity was taken to operate 'Stevo' for the rest of that day and the next for testing, trialing and conducting driver orientation within the leased area.

Certain members were also awarded Certificates of Competency as locomotive drivers, firepersons, trainee firepersons, conductors and track vehicle operators.

The Society wishes to place on record its gratitude to the Department of Transport for its courteous and patient dealings with the documentation described in this report. Our thanks are also extended to the Management Committee of the VHLDM who extended every encouragement during the negotiations.

At present, the Stephenson is the only item certified for operation. The Society is looking towards other items joining the operating fleet.

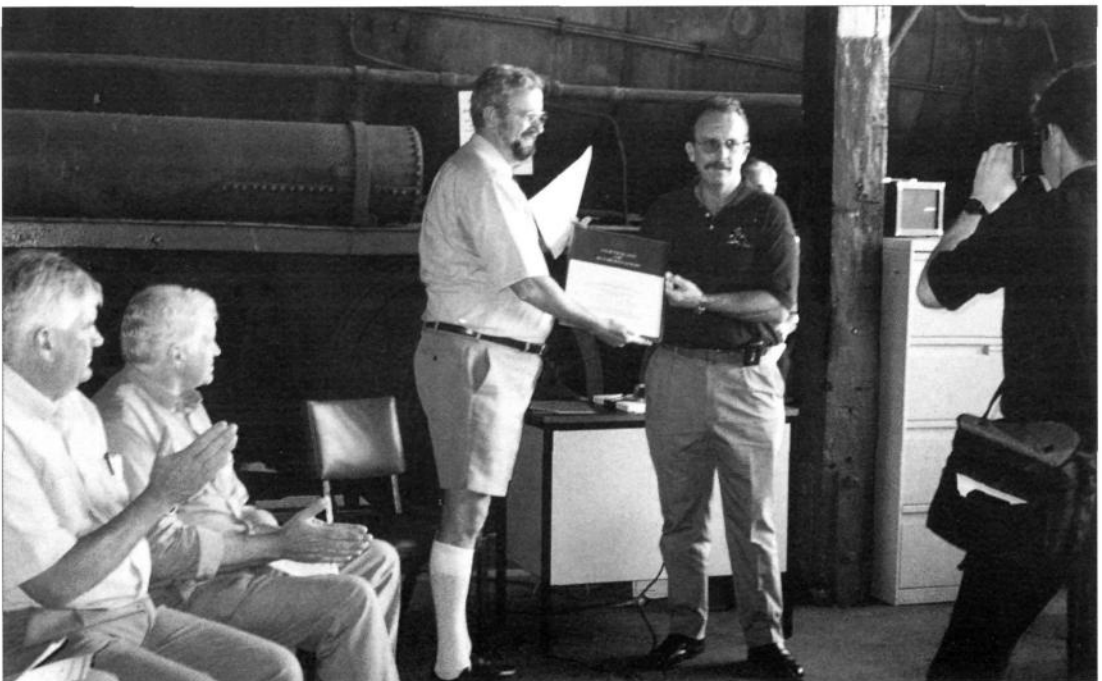
Presentation Day

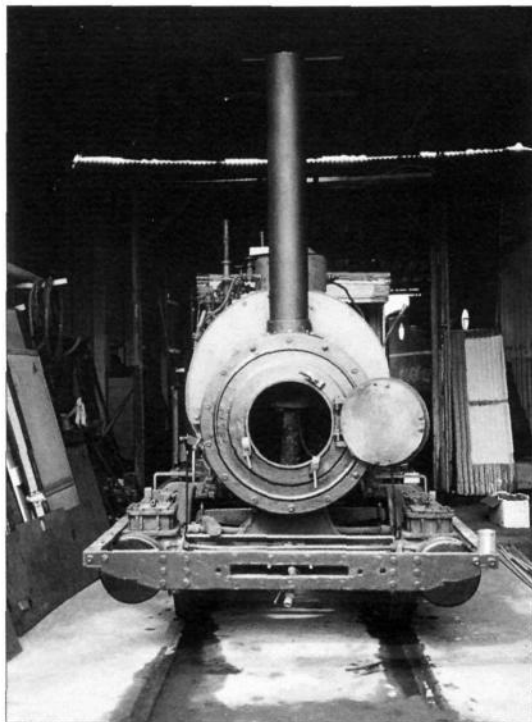
As previously reported, the Society was successful in being awarded a grant under the Federation Community Grants Scheme towards the restoration of the end-platform railway carriage CBI 1073.

It was decided to mark this occasion with a short ceremony, to present the Society with the grant documentation as well as the accreditation certificate.

On Saturday, 26 February, after morning tea, the Presentation Day ceremony took place at the VHLDM. John Hall, Executive Director, Transport Safety Bureau, Department of Transport presented the accreditation certificate and documents to Society Chairman, Peter Stock. Later, Kerry Bartlett MP, Federal Member for Macquarie, presented a cheque for the grant to Society Treasurer, Bruce Irwin. The Mayor

Chairman of the Steam Tram and Railway Preservation (Co-op) Society, Peter Stock is presented with the Certificate of Accreditation by John Hall, Executive Director of the Department of Transport's Transport Safety Bureau, on 26 February 2000. The backdrop is the VHLDM's standard goods locomotive 5461.
Robyn Stock





Steam tram motor 103A shows off its new funnel at Valley Heights in March 2000. The motor's leading sandbox has been removed and the front apron can be seen at left.

Peter Stock

of the City of Blue Mountains, Jim Angel, addressed the assembly on the tourism opportunities of the lower Blue Mountains. Ted Mullett, President, VHLDM extended best wishes to the society whilst Society foundation member Frank Moag formally thanked everyone for their attendance. The proceedings were guided by Arthur Tester from VHLDM, who acted as Master of Ceremonies.

'Stevo' was again in steam, making a complementary backdrop to the proceedings.

Guests and members of both Societies then joined together for lunch and an afternoon of savouring the sights and sounds of a steam locomotive again permanently attached to the Valley Heights Roundhouse.

Foundation Day

Each April the nearby town of Springwood celebrates its Foundation Day. The VHLDM always participates

in the activities by way of Open Days. Since the Society's re-location to Valley Heights, we have joined with our colleagues in these Open Days.

This year the roundhouse activities were held again, but with an added bonus.

The society was pleased to present the Stephenson locomotive in steam to the many visitors at the VHLDM on Saturday, 8 April 2000. The steaming of the locomotive proved popular with children and adults alike, who complimented the Museum on its considerable progress over the last year.

Works Report

Over the past few months, restoration has continued steadily on several fronts. Much effort had been put into the Stephenson locomotive to complete the many, many small jobs needed for its initial inspection for certification. The inspection was satisfactory and the appropriate certificate was issued.

Work progresses steadily on CBI 1073. All the new side panel frames have been fitted and work is proceeding to fit the hardware, etc., for the window frames. Much intricate work is involved in this area, and when completed, will be a credit to those involved.

Motor 103A is slowly coming together. It is the Society's intention to undertake as much as possible of the repair and restoration of mechanical components before the cabin is fitted. The new cabin is on-site and is of substantial construction.

The opportunity has been taken to remove both sand domes to enable years of corrosion, etc., to be cleaned away and the mechanisms overhauled to ensure trouble-free operation in the future. In these and other tasks, we are concerned that the work we undertake is of the highest possible standard.

Tickets Please!

Our secretary, Cliff Currell is presently developing a new exhibit as part of the overall VHLDM exhibit attraction. This exhibit will depict a railway booking office, complete with ticket racks, tickets, forms and all the tools of trade of a booking clerk. Whilst the exhibition is still being developed, it was available for inspection on the recent Open Day, much to the delight of the children and memories of the older folk.



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