

# FARES PLEASE!

July 1994

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## *Ballarat Trams are Ballarat History*

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*Mr! Mr! Mr!*

Museum Accreditation Program  
Registered Museum

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### **Annual General Meeting**

Notice is given that the Annual General Meeting of the Ballarat Tramway Preservation Society Limited will be held at 2.00 pm, on Sunday 30 October 1994. The meeting will be held at the Society's tram depot in the South Gardens Reserve, Ballarat.

Nominations are called for the following positions which will fall vacant on the Society's board of Management on that date:

President  
Melbourne Resident Vice-President  
Ballarat Resident Vice-President  
Honorary Secretary  
Honorary Treasurer  
Ordinary Board Members  
(six positions)

Any two members may nominate any other member to serve as an Office Bearer or Ordinary Board Member, provided that no person who at the time of such nomination is an unfinancial member.

Members must be financial to be entitled to be a candidate for election,

a proposer, or a seconder in accordance with the Articles of Association. Any nomination is to be sent in writing to the Returning Officer, to reach him not later than 5.00 pm, on Friday 7 October 1994.

Nominations may be sent to:  
The Returning Officer  
Ballarat Tramway Preservation Society Limited  
PO Box 632 Ballarat Vic 3353,  
or may be placed in the Ballot Box at the tram depot. Envelopes forwarded by mail should be endorsed "Ballot Material" on the back of the envelope. The nomination is to be signed by the proposer and seconder and consented to in writing by the candidate. Nominations may be accompanied by a statement (of not more than 500 words) setting out the candidate's policies and record of service.

A member may be nominated as a candidate for more than one position on the Board, provided that upon election to any position on the Board, the member's nomination for any other position shall forthwith lapse.

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# **News of the Ballarat Tramway Preservation Society Limited.**

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## COTMA Conference

The 1994 COTMA conference will be held in Bendigo from December 2 to 7th. Any Member wishing to attend should contact Richard Gilbert on (03) 598 5054. Post conference activities December 7th to 11th, include visits to Castlemaine and Maldon Railway, Ballarat Tramways, Haddon, a Melbourne tram car tour including Preston Workshops, visits to ABB Dandenong, the tramways historical collection at Malvern and the V/Line Driver Training School. The post conference programme is only available to Conference Delegates.

## Next Issue of *Fares Please!*

The next issue of *Fares Please!* will not be posted until about the middle of October 1994. This will enable us to list the nominations for Board positions and post the Annual Report in the same mailout, thus conserving the cost of postage.

## Local History Fair 1994

The Society will be taking part again in this years Central Highland Historical Association's History Fair at the Army Drill Hall, Curtis St. Ballarat. The fair will be held on Sunday 9th October from 10.00am to 4.00pm. The theme is 'Transport - Heritage on the Move' The Society is planning to display Horse Tram No. 1 outside the hall. The fair is being sponsored by the Ballarat 'Courier'.

## Sales Department

We have recently received in our sales department copies of:-

- the latest reprint of *Brisbane Tramways - The last decade* at \$9.95, great value for a 64 pages
- *Tramway by the River*, by the late Bob Prentice, \$4.00, 20 page booklet on the history of the Hawthorn Tramway Trust.
- *Feeding & Filling* by Graeme Breydon, \$3.00, a 12 page booklet on the history of the Prahran and Malvern Tramways Trust.

Additional hardcover copies of *Destination City* have recently been ordered from the publishers, and should be in the depot soon.

## 3-Axle Streetcars

We have recently received advice from a Mr Henry Elsner of 319 South 44th St. Philadelphia, PA 19104, USA of the publication of Volume 1 of a book titled *3-Axle Streetcars* for \$US 30.00 post paid. Volume 1 consists of 180 pages, 175 photographs, 75 drawings of cars, trucks and equipment. It is a limited edition of 1000 numbered copies. Paperbound, stitched binding. The two volumes will cover this unusual tram to Australian eyes that were once quite common in many US and European cities. Volume 2 is scheduled for publication in 1995. From the advice, the books seem to be very comprehensive. If any member would like a copy of the 'flier' please contact the Secretary.

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## No. 12 Conservation Plan

Warren Doubleday

Our Engineering Manager, Warren Doubleday, has recently completed the draft of a Conservation Plan for Electric Supply Co. No. 12. Over the next couple of issues, we will present a summary of the document. This is the first time the Society has prepared such a plan for a tramcar, and the project has been very interesting.

### Why a Conservation Plan?

The purpose of a conservation plan is to provide an understanding of the object to be exhibited. It determines the significant elements in order to form a policy for future work and enable a flexible approach to any work that may be undertaken. The preparation of this conservation plan follows the Engineering Heritage and Conservation Guidelines of the Institute of Engineers Australia published in 1992.

The major part of this analysis is the Statement of Significance. It outlines why the object is important to our culture. The Guidelines are derived from the Burra Charter.

### 1 Introduction

Electric Supply Co. of Victoria Ltd. (ESCO) Ballarat Tram No. 12 is a historically significant electric tramcar having been built in 1905 using the body of an 1892 Sydney cable tram trailer for the electrification of Ballarat's horse tramways. The social, technological and historical aspects of

of the tramcar are worthy of ensuring its retention as a museum exhibit.

Any reconstruction of the tram by the Society to an earlier state needs to be carried out in a method that recognises its significance. The process must not needlessly destroy or hide evidence that may be useful to people in the future investigating the original recovered remains of the tram.

Reconstruction to an operational condition, if done, needs to be executed in a manner that replicates the operating characteristics of the tram. The social aspects that it once operated in must be represented and it must provide the most effective means of interpreting the tramcar.

### 2 Documentary Evidence (Historical Background)

Electric tramway systems often developed around the desire to provide electricity to cities, with the trams providing the base load for the power station. In this manner the Liverpool based British Insulated Wire Company, through a subsidiary company, The Electric Supply Company of Victoria Limited (ESCO), purchased the Bendigo steam tramway in 1899 and the Ballarat Tramway Co. in 1902. They electrified the Bendigo system in 1903. Work on the Ballarat system commenced in 1904 and the first lines opened on 18 Aug. 1905. The electrification stage saw the construction of ESCo No. 12.

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The first 18 tramcars were converted from redundant Sydney cable trailers or electric trams originally built during the 1890's. Twelve cable trailers that had run on the North Sydney or King St. cable tramways in Sydney became Ballarat tramcars Nos. 1,4,6, 10-18. It was determined following recovery of the body, that the saloon section of the tram was most likely former North Sydney cable tram trailer No. 18.

Trailer No. 18 was one of a batch of four trailers and two grip tramcars built by Benjamin Carne (Sydney) in 1891, with the order completed on 14 Jan. 1892. Duncan & Fraser, tramcar builders, converted the bodies of these tramcars, which were all the saloon type, to a California combination style tram in 1905. The saloon was placed on a longer underframe and the roof lengthened. The saloon window's spacings were altered by converting the six window saloon portion to one of three windows. Driver's controls and outward facing longitudinal seats were placed at both ends.

## Operating History & Disposal

Little is known of No. 12's actual operating history. An examination of the body shows that it did undergo several changes, to accommodate one man operation in 1913, possible accident repairs or rebuilding to fix faults. No. 12 along with the other 22 ESCo built trams provided the service from 1905 until the mid 1930's.

By the late 1920's these trams were in poor condition due to their light

construction and many years of operation on poor track. In 1930 ESCo purchased several second-hand trams from Melbourne. As more ex-Melbourne trams were purchased, the old tramcars were withdrawn and scrapped. The last of the ESCo built passenger trams were scrapped in 1935, including No. 12.

The body of No. 12 was sold to a property owner in Raynor Road Nerrina, an old gold mining area to the north east of Ballarat. Other known bodies sold to property owners in the district have been broken up. No 12 is believed to be the last survivor of the 18 ex Sydney tram bodies that pioneered electric tramway operation in Ballarat.

The tram body was recovered by Society members in November 1990.

## Human Factors - crews and passengers

ESCO in the early years had a reputation as a hard taskmaster. Power consumption meters were fitted to the trams and motormen were queried if too much current was consumed. When the tramcars were built they were fitted with weather blinds at each open end, to give passengers some protection from the elements. The motormen were less fortunate, as initially they had to make do without windscreens. From 1911 onwards the union (supported by the Ballarat City Council) asked the ESCo to fit windscreens, as severe winter weather had laid several

motormen off sick. After one-man operation was introduced in 1913 the company faced criticism at Council meetings for making ladies stand on open platforms in the rain while paying their fares. Windscreens were subsequently installed on trams 1 to 18.

Unlike the later SEC trams, the ESCo's electric tramcars had no air brakes. Normal service braking was done by a handbrake with 'gooseneck' handles. A magnetic brake could stop the tram quickly in an emergency.

One-man-operation in Ballarat was a practice that would have major industrial consequences elsewhere around Australia. ESCo was the first to start this practice in Australia. It led to various industrial disputes over the years, but eventually established itself, as an accepted work practice.

## Impact on Ballarat

Electric trams provided Ballarat with an image of a modern world class city. They often featured in postcards and early motion picture films. Although Ballarat could not have afforded cable trams, they now operated electric trams and enjoyed the luxury of the power supply system that accompanied it. In providing public transport to Ballarat during the first 30 years of the 20th Century, electric trams had a major influence on the way the city functioned and appeared. While ESCo No. 12 may have only been a small player, it is one of the few remnants still existing of this period.

## 3 Physical Evidence

Compared to many tramcar reconstructions undertaken around the world, for its age, the body of No. 12 is surprisingly intact. One side of the tram has been virtually destroyed during its exposure to the weather, while the remainder, including the underframe is in a fair to good condition. No mechanical or electrical equipment has survived.

Detail Investigation work has been carried out at the Society's depot, including dismantling and removal of materials that were built into the tram body during its days as a house. This has shown that;

- The cable trailer body was placed onto a new wooden frame with a steel plate running the full length of the body bolted to the outside on each side. The floor of the cable body was removed, the doorstep where the sliding door ran was simply cut through, and the two inside doors lengthened by three inches on the bottom.
- Window-lifting fittings inside the tram are cast brass with builder's names embossed into them. The names are 'Duncan & Fraser', 'Carne' and 'Jones'. This suggests that the original window lifters were reused even though the windows were new.
- The electrical circuit breakers for the tram appear to have been located under the floor of the tram at either end. These were accessed

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by a centrally-located hatch under the driver's feet.

- The framing provided for the driver's windscreens was made using nails rather than screws.

Conversion of horse and cable trams to electric trams was attempted in the early days of electrification. With motors of under 10HP it was feasible, but as the power and speed of the electric trams increased more substantial bodies were called for. This can be seen in the tramcar construction throughout Australia. Over a 10 year period the weight of trams increased substantially, along with passenger carrying ability.

Compared with the BTPS's other four wheel tramcars that were built about 10 years later, the construction of the new underframe in 1903 is of a much lighter standard. The roof slats are of a heavier section than the thin basswood ones of the horse tram, reflecting less concern with weight saving.

Measurements of the underframe (timber sizes and dimensions) of Bendigo ESCo tram No. 7 shows that the frame is virtually identical to that of No. 12. Most other parts are of similar size although of slightly different design.

## Colour Scheme

When the tram body was recovered from the house, the colours that the tram operated in at the time of its withdrawal were still apparent, though faded. Some preliminary rubbing back of the main side panels has been

undertaken and this has revealed that the following schemes had been used. More research will be necessary. An area of one end bulkhead has been set aside to rub down to the North Sydney colours which are underneath.

**Side panels:** Columbia red with gold lining on top panel with the bottom panel having a ivory background with black, orange and brown lining. The words 'Ballarat Tramways' appeared on the lower panel when built. Later on these words were painted out, and simple corner scrolls provided.

On the top panel a large '12' is centrally placed. On the photographs of the tramcars when built in 1905 an elaborate scroll work appears in this location. Rubbing back around the sides of the number has not shown any remanent of this work. It is possible that on this tram only a number had been provided. No photographs prior to the fitting of windscreens of No. 12 have been located. All photos of this car, taken around 1913 show only the number in the central panel. In this case of the horse trams, it is known that the colour schemes did vary between the trams and it is possible that they did for ESCo as well.

Roof - White; End dash panels - Columbia red with a thin blue line and thicker yellow lining; Interior - varnished wood with exterior panels painted in a off white or ivory colour with black lining and blue shading. Signs have been lettered using a red paint.

To be continued in October 1994 Fares Please!

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## Traction Yearbook

Joseph P. Saitta of 'Traction Yearbook' of PO Box 123, Bank Plaza Station, Merrick, New York, 11566 USA is looking for a person who would be willing to trade original (no duplicates) colour slides of Australian electric traction properties for those he has from North America and Europe. He is happy to send samples of their work. We presume 'properties' refers mainly to vehicles.

## At the Depot

Since the publication of our last issue, there has been mostly good news from the Depot, but also some bad news. The bad news first. It had been noted by our Engineering Manager that tram No. 18 seemed sluggish when powering, but rolling well when not under power. The following day, after a day's running, he checked the bearings, and curses!@%\*(&%#, plus a few other words!!, No. 1 armature bearing was running hot. Well that's another unplanned job to be tackled soon. It is hoped that we can start this work during September.

On the good news front, the timber framing for the archives room above the mess room and office has been completed by John Phillips. In the display area, the panel for the Electric Supply Co. era of Ballarat's tramways has been completed. Planning for the next panel which will cover the SEC from 1934 to 1946 has been commenced. Work on the repainting of No. 671 is proceeding well, given the weather. The undercoating of the panels has been completed.

Gary Wood continues to make good progress on the frame of ESCo No. 12. The western end of the tram has been completed, and he has now dismantled the eastern end, finding similar problems to that of the western end, i.e., split timbers. The strengthening of these timbers is now being undertaken.

The large interpretation sign for the shelter at Gardens Loop was received from the manufacturer just before the end of July, a couple of weeks late, and all going well will be erected during the first weekend of August. The backing board, has been made up and fitted ready to be installed.

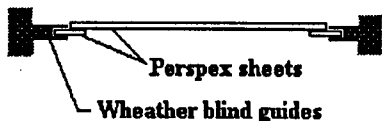
Fire Extinguishers have recently been fitted to all our operable tramcars. These have been fitted above the driver at No. 2 end, generally on the opposite side to the compressor switch.

For some time, tram crews have often wished on a cold winters day for an all enclosed tram. With the single truck trams, that is an almost impossibility, except for the saloon section of the tram. Even with weather blinds, the wind still comes in around the blinds, under the doors etc. The problem with weather blinds is that when carrying passengers in the drop ends, they can't see out very well. Recently fitted as a trial to No. 18, and then transferred to No. 13 to one of the smaller openings in the drop ends, has been a sheet of perspex to act as a window. It held in by two perspex sleeves, fitted into the weather blind runners, as shown in the sketch.

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Each tram varies a bit in the size of the area to be filled, but the idea has merit and with some design variations it is expected that satisfactory and practical solution will be achieved.



## Its a Birthday

Sunday 24th July was a busy day at the tramway as we celebrated along with Travis Jeffrey, his 50th birthday. After a barbecue lunch we journeyed along in the three operable bogie trams in our fleet. W4 671, W3 661 and maximum traction 38 all had a couple of trips on the road. Len Millar made up some 'Travis' paper destination signs, which from a distance you would be hard put to tell them from a proper roll. The W4 was also numbered 44, the year Travis was born in, and the route number set, of course, to read 50. In the late afternoon, a sumptuous afternoon tea was enjoyed at the Depot. The birthday cake was absolutely delicious, being a fruit cake and all agreed 'they don't make them like that any more.

After a pleasant day and lots of 'Best Wishes' expressed by us to Travis, we

put the trams away, left some cakes for the weekday workers and departed or home feeling good that we had shared in the celebrations for one of our popular and active participating members.

## Cataloguing Kit

The Ministry for the Arts have finalised our Museum Cataloguing Kit by giving us a class of instruction in the correct use of the kit. Caroline Carter and a student from the Ministry travelled from Melbourne on June 21, a cold Ballarat day, to teach Warren Doubleday, Richard Gilbert and Neville Gower on how to gain the best advantage from the kit. This will enable us to correctly catalogue our collection of archives. The catalogue and register will cover all our archives from trams to film, artefacts and paper archives. It will be a formal system of detailing what we have in our collection and where it is. Most tramway museums know only too well how the collection becomes disorganised, damaged and even lost. The system is also standard with the cataloguing done by other museums in Victoria, and in the future, museums will be able to seeking information from other collections by computer linking them.

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Fares Please! is published six times a year in alternate months commencing in January and is distributed to members and friends of the Ballarat Tramways. For further information regarding the Society's activities and publications please contact:- The Secretary,

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Ballarat Vic 3353 Phone (053) 34 1580

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