PROCEEDINGS OF

THE ELEVENTH CONFERENCE

OF

AUSTRALASIAN

TRAMWAY MUSEUMS

WHITEMAN PARK

PERTH, WESTERN AUSTRALIA

29 May — 4 June, 1992

PROCEEDINGS OF THE CONFERENCE OF AUSTRALASIAN TRAMWAY MUSEUMS

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Conference delegates assembled in front of newly restored Fremantle bogie saloon car 29 at Whiteman Park, 2 June, 1992.

CONTENTS

Acknowledgments		6
Participants		7
Conference Programme		9
Keynote Address		
Urban Transport: What Does the Past Tell Us About the Future?	Stuart Hicks	14
Papers		
W Class Status Report	Les Jean	20
The Place of Tram Museums in the International and Australian Museum Movement	John Radcliffe	23
Our Cultural Heritage	Richard Gilbert	26
Management of Rolling Stock	Christopher Steele	29
Driver Training at Bendigo Tramways	Harold McCarthy	31
"Trolley Wire"	Robert Merchant	33
Collection Policies	Richard Gilbert	34
Occupational Health & Safety	Craig Tooke	40
Relationships with Local Government	Christopher Andrews	44
Corrosion - Electrolysis	John Lambert	46
Promotion	Graeme Vellacott	49
Accreditation and Its Effect On Tramway Musems in NSW	David Rawlings, Bill Denham	50
Workshops		
COTMA — What is Needed?	John Radcliffe	54
Membership for the Young	Bill Kingsley	55
Archives	Barrie King	56
Conservation Management Review	John Radcliffe	58
COTMA Electrical Operations Rules	Craig Tooke	59
Visits and Tours		
Perth Electric Rail System: *Northern Suburbs Railway* *Armadale Line* *EMU Depot* *Westrail Control Room*	Robert Pearce	60
"The Prospector" Railcar Tour	Robert Pearce	63
Reports		
"Trolley Wire"	Robert Merchant	64
"Tramway Topics"	Alan Smith	66
Electrical Operations Rules Committee	Craig Tooke	67
COTMA Chairman	John Radcliffe	68
COTMA Operations Group	Bill Kingsley	72
Spare Parts & Uniforms	Keith Kings	72
Executive Officer	Bill Kingsley	73
Treasurer	Carolyn Dean	76
Audited Statements		77
Minutes		
Tenth Conference General Meeting		81
Museum Directory		86

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I am grateful to all those persons who gave their time to present a paper or lead a workshop session: to the members of the various tramway museums, and also especially to the following:

Gavan Troy, M. L. A.
Stuart Hicks, Director-General of Transport, WA
Les Jean, Manager Fleet, PTC, Victoria
Ken Gow, Willis Engineering
Noel Zeplin, Australian Railway Historical Society
Graeme Vellacott, Hotham Valley Tourist Railway
Alan Cotton, General Manager, Urban Rail, WA

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Australian Airlines
Wattyl Paints
M & M Engineering
Police and Nurses Credit Union
Transperth
Westrail
Whiteman Park
Arnotts-Mills & Wares
Visionhire
Mobil
Hiline Constructions

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Barrie King
Chairman
Organising Committee
Eleventh COTMA Conference

CONFERENCE PARTICIPANTS

Australian Electric Transport Museum	Christopher	ANDREWS
	John	RADCLIFFE
	Christopher	STEELE
Ballarat Tramway Preservation Society	Phillip	BERTRAM
	Carolyn	DEAN
	Richard	GILBERT
	Len	MILLAR
	John	PHILLIPS
Bendigo Trust	Dennis	BELL
	Michael	BOYD
	Bill	KINGSLEY
	Harold	MCCARTHY
	Dennis	O'HOY
Brisbane Tramway Museum Society	Peter	HYDE
	John	LAMBERT
	Robert	THOMSON
Maitland Tramway Museum and Park	Lewis	NYMAN
Melbourne Tramcar Preservation Association	Noel	GIPPS
	Craig	TOOKE
	John	WITHERS
Perth Electric Tramway Society	Noel	BLACKMORE
	Ray	BLACKMORE
	David	BROWN
	Arthur	CHADWICK
	Kevin	CLARKE
	Trevor	DENNHARDT
	Paul	EDWARDS
	Martin	GRANT
	Barrie	KING
	Brent	LUSCOMBE
	Duncan	MCVICAR
	Brian	MORRELL
	Kevin	PARKER
	Robert	PEARCE
	Lindsay	RICHARDSON
	John	SHAW
	Michael	STUKELY
	Terry	VERNEY
South Pacific Electric Railway Cooperative Society	Don	CAMPBELL
	Howard	CLARK
	Anthony	CODY
	David	CRITCHLEY
	John	HORNE
	Chris	JACOBS
	Richard	JONES
	Stuart	KEENAN
	Robert	MERCHANT
	Bill	TUFFNELL
	Bruce	WORTHINGTON

Tramway Historical Society, Christchurch	Bill	COX
	Bruce	DALE
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	John	SHANKS
Tramway Museum Society of Victoria	Dean	FILGATE
	Keith	KINGS
	Bob	SERLE
	Keith	STODDEN
Wellington Tramway Museum	Morris	MOLLER
	Barry	OLLERENSHAW
	Bryce	PENDER
The Met., Victoria	Les	JEAN

CONFERENCE PROGRAMME

Friday 29 May:

WELCOME FUNCTION (ROSE & CROWN HOTEL)

6.00 pm	Registration
8.00 pm	Informal Gathering
9.00 pm	Official Welcome and Announcements
11.00 pm	Close

Saturday 30 May:

PRE-CONFERENCE TOURS

9.00 am	Depart Rose & Crown Hotel (bus)
10.00 am	Arrive Burns.

- Tour and inspection of Northern Suburbs Rail Project

12.15 pm	Arrive Perth Station
12.30 pm	Lunch at Perth Station (Upper Concourse — Sinatra's)
1.45 pm	Depart restaurant for special train — Platform 4
1.59 pm	Depart Perth Station (train)

- Tour to Armadale and return by chartered EMU

3.15 pm	Arrive Claisebrook

- Tours of EMU depot and Westrail Control Room

5.40 pm	Depart Claisebrook/East Perth (train or bus)
6.00 pm	Arrive Guildford
7.00 pm	Dinner at Rose & Crown
8.30 pm	Evening entertainment:

- *History of the Inglewood Tram Route* — N. Zeplin

9.30 Close

Sunday 31 May:

CONFERENCE SESSIONS (ROSE & CROWN HOTEL); INSPECTION OF WHITEMAN PARK AND TRAMWAY MUSEUM

8.45 am — Late Registrations, Welcome, Announcements

9.00 am — **Conference Opening**

- *Official Opening* – Gavan Troy, M. L. A.
- *Keynote Address* – Stuart Hicks (Director-General of Transport, W. A.)

10.00 am — Morning Tea

10.30 am — **Conference Session 1**

- *W-Class Tram Status Review* – Les Jean (Manager Fleet, PTC, Victoria – Conference Guest)
- *The Place of Tram Museums in the International and Australian Museum Movement* – John Radcliffe
- *Our Cultural Heritage* – Richard Gilbert

12.30 pm — Lunch

2.00 pm — **Conference Session 2**

- *Management of Rolling Stock* – Chris Steele
- *Workshop: Spare Parts – Manufacturing Policy* – Ric Francis
- *"Trolley Wire" and "Tramway Topics"* – Bob Merchant, Bryce Pender

- *Workshop: Driver Training* – Harold McCarthy

3.30 pm — Afternoon Tea

4.00 pm — Depart Rose & Crown (bus)

4.15 pm — Arrive Whiteman Park

- Inspection of facilities at PETS Carbarn and Workshops.

5.00 pm — Depart Carbarn (service tram)

- Travel from Carbarn to Whiteman Village Junction (tram)

5.15 pm — Arrive Whiteman Village Junction

5.20 pm — Depart Whiteman Village Junction(WALRPA steam train, NG 15 123)

- Travel on WALRPA loop line.

6.00 pm — Arrive Mussel Pool

6.15 pm — Depart Mussel Pool

- Travel on newly restored tram FMT 29

6.30 pm — Arrive Village

Dinner at Country Kitchen

8.00 pm — Return to Carbarn

- Night rides on trams; Wight Nalk.

9.00 pm or 10.00 pm — Return to Rose & Crown (bus)

Monday 1 June:

CONFERENCE SESSIONS (ROSE & CROWN HOTEL)

9.00 am **Conference Session 3**

- *Workshop: Manufacturing Wheel Sets, Truck Frames and Bogies*
  – Ken Gow (Willis Engineering - Guest Speaker)
- *Workshop: Where Are We Going?*
  – John Radcliffe
- *Collection Policies*
  – Richard Gilbert

- *Workshop: Security Systems*

10.30 am Morning Tea

11.00 am **Conference Session 4**

- *Occupational Health and Safety*
  – Craig S. Tooke
- *Workshop: Membership for the Young*
  – Bill Kingsley
- *Relationships with Local Government*
  –Chris Andrews

- *Workshop: Archives*
  – Barrie King

12.30 pm Lunch

2.00 pm **Conference Session 5**

- *Corrosion – Electrolysis*
  – John Lambert
- *Workshop: Conservation Management Review*
  – John Radcliffe
- *Sales and Souvenirs*
  – Dennis Bell

- *Workshop: Electrical Rules*
  – Craig Tooke

3,30 pm Afternoon Tea

4.00 pm **Conference Session 6**

- *Promotion*
  – Graeme Vellacott (Hotham Valley Tourist Railway (WA) – Guest)

5.00 pm End of Session

5.45 pm Dinner at Rose & Crown (smorgasbord)

7.30 pm **Museum Progress Reports**

11.30 pm Close

Tuesday 2 June:

CONFERENCE GENERAL MEETING (WHITEMAN PARK); TOUR OF ARHS RAIL TRANSPORT MUSEUM

8.00 am	Depart Rose & Crown (bus)
8.15 am	Arrive Whiteman Park — Shooting Complex
8.30 am	**Conference General Meeting**
10.30 am	Morning Tea
11.00 am	**Conference General Meeting**
12.55 pm	Arrive Whiteman Park Village
1.00 pm	**Conference Photograph**
1.05 pm	Lunch at Country Kitchen
3.00 pm	Depart Whiteman Park (bus)
3.20 pm	Arrive Bassendean

- Tour of ARHS Rail Transport Museum

4.45 pm	Depart Bassendean (bus)
5.00 pm	Arrive Rose & Crown
6.00 pm	Conference Dinner
8.00 pm	After-Dinner Speaker – Allan Cotton, General Manager, Urban Rail: *Rail Electrification Project*
9.00 pm	Coffee

Wednesday 3 June:

TRAM OPERATIONS (WHITEMAN PARK); POST-CONFERENCE TOUR

8.45 am Depart Rose & Crown (bus)

9.00 am Arrive Whiteman Park

- Tram driving and rides

12.00 noon Tram operations finish

12.30 pm Depart Whiteman Park (bus)

12.55 pm Arrive Midland Station

1.15 pm Depart Midland Station

- Tour in *The Prospector* Diesel Rail Car: Moondyne/Leighton/Fremantle.

3.30 pm Arrive Fremantle Esplanade – free time

6.00 pm Dinner

(Time Open) Depart Fremantle

- EMU to Guildford

Thursday 4 June:

FREE DAY: TRAM OPERATIONS AT WHITEMAN PARK

Trams to run if required, from 9.30 am until 12.30 pm

Historical display on W. A. Tramcars

URBAN TRANSPORT: WHAT DOES THE PAST TELL US ABOUT THE FUTURE?

Stuart Hicks
Director General of Transport, Western Australia*

1. INTRODUCTION

1.1 Appreciation

Thank you to COTMA for inviting me to speak to you today. I am greatly honoured.

And a special welcome to our visitors to Western Australia from around Australia and New Zealand.

1.2 Reason for my topic/ What I am planning to talk about

A friend was telling me how he is saving on records with his 16 year old son. He takes out his old Beatles and Credence Clearwater records, a couple at a time, and presents them to his son. To his amazement there is a wave of nostalgia in this generation which makes the kids more interested in the music of the sixties than the music of the nineties.

I went to a convention a couple of weeks ago where some fairly erudite speakers talked on the subject: Is there a role for 1950s values in the 1990s?

The social analysts are calling this the X-generation because, they say, it is a generation which is uncertain of its own identity.

These examples and many others show how powerfully we tend to be looking back to our past for some of the answers to questions which puzzle us today. Often I think this backward-looking approach is little more than self-indulgent sentimentalism. But not always.

Whatever the causes of today's focus on the apparent "certainties" of the past, there are things we can learn from the past, and I thought it might be of interest to the Council of Tramway Museum Associations if I were to speak from the vantage point of somebody who shares your love of transport things past and who also carries some responsibility for transport things present and future.

2. PERSONAL HISTORY

For you to understand the source of my love for transport things past, you need to know a little of my own past.

My family came to Western Australia in 1853. I am the seventh generation of my family to live in Australia. Each of those generations has been employed in some form of transport.

For reasons which some of us might wonder about, they later moved to Victoria, and as a result, I was born a Victorian, as were the two generations preceding mine.

When I came to live in Western Australia in 1977, I started researching my family's history as it parallelled the history of transport in this country. A lot of this is today contained in a large manuscript I have written and will continue to write. When I started this hobby of mine I had no idea I was in the process of becoming a transport social historian!

3. OLD AND NEW

So I have often been struck by the contrast between what I have been doing professionally, particularly when I was chief executive of Transperth, our State's public transport system, and what I have been finding out in my spare time at weekends.

Here is one piece I was reading recently—

> FIRST ELECTRIC TRAM RAN ALONG HAY STREET IN SEPTEMBER 1899 from car barn in East Perth to Colin & Thomas Streets. This followed an agreement reached on April 17, 1897 when Mr. Charles Preston Perkins entered into an agreement with the Perth Road Board to lay down $17\frac{1}{4}$ miles of tramway tracks. The inaugural Perth service was run with a 9-car fleet (each car costing £600) with 28 passengers per car. The operators were the Perth Electric Tramways Ltd.

Contrast today: The Transperth fleet now has 900 buses costing approximately $250 000 each with 60-70 passenger capacity.

> TRAM SERVICE EXPANDS
> — 1905 Tramway to Victoria Park across the Causeway
> — October 1905 service in Fremantle
> — December 1906 Perth to North Perth
> — 1914 track opened to Crawley Baths.
>
> TRAM DEVELOPMENT
> — Tramway operations came under Government control (Commissioner of Railways) July 1, 1913 when there were 50·6 km of single track on which 63 cars operated.
> — 1915-16 trams carried 11.2m passengers
> — At peak of trams in 1933, Government was running 53 small trams and 68 bogie trams over almost 66 route kilometres. In that year, more than 35 million passengers were carried over 5·6 million kilometres.

Contrast today: Transperth operates 917 buses over 1876 unduplicated route kilometres. In 1990/91, there were 53.7 million bus passenger boardings and the

buses operated a total 48.2 million kilometres.

LAST TRAMS
— Fremantle abolished its services in 1952 and the last tram in Perth made its run to Inglewood on July 19, 1958.

The passing of trams has meant that many people are not aware how important they have been. Only a small portion of the community is conscious of those heady days when trams did the lion's share of the metro transit task in Australia, when electric trams carried over a billion passengers in one year!

Chart One: Australia's Metropolitan Public Transport Patronage 1865-1980 (Page 18)
Chart Two: Motor Cars Registered in Australia 1920-1985 (Page 19)

4. Some Things We Can Learn.

As thought starters I wanted to highlight six lessons we might usefully learn (or, more accurately, re-learn) from our past. An interest in things past, I hope you agree, is not a simple exercise in nostalgia.

By the year 2020 a city like Perth will be twice as big as it is today. There is absolutely no way that our city can maintain its single-minded reliance on the car into the future. If we try, it will end in calamity, and some future generation of my family will have to add another chapter about how misguided we transport people were back in the 1990s!

Here are my six thought starters.

4.1 People will use public transport in their droves — when they have no alternative!

Probably the main cause of the enormous public transport patronage of earlier decades was the absence of alternatives to public transport.

4.2 The *Great Investment* can work.

Trams were an important part of my life. My grandfather was one of the prime contractors for much of Melbourne's tram building years.
In 1924, the enormous job of converting from cable trams to electric trams started in Melbourne. This was the biggest traction conversion task ever to be undertaken in that city. My grandfather contracted for the transport aspects of the job, and progressively he won most of the contracts, one by one, for pulling apart the road and setting in place the new traction mode.

My family still have the contract documents for MMTB Contract No 505, for the conversion of the Spencer Street, Flinders Street, Wellington Parade, and Bridge Road routes. The tender was for £79,013.19.4d.

[Exhibits:]
(1) These first documents are my grandfather's apparently successful quotes for two jobs in 1937. (I have to note that my grandfather must have been fairly confident when he quoted 5/6d in August and only 3/9d in February; maybe he was travelling longer distances.)

(2) This second document is precious to me. This is when my family moved from freight into serious passenger transport! In 1936, apparently all the men who were working on the tramway were having difficulty getting home from the Glenhuntly Road job at night. They petitioned my grandfather to give them a lift in the back of his trucks into the city where they could catch their trains and trams. My grandfather agreed, subject to them signing a legal indemnity.

I remember the tar-coated woodblocks, roughly the size of a large brick, which, having been dug up from the road surface, often ended up as firewood.

Sixty years later, I became chairman of the group which undertook the biggest change in traction ever undertaken in Perth. It built up to become the biggest single Government works project in the State. I hope you liked what you saw yesterday when you inspected the rail electrification project and rode in our new trains!

Two people who share my great pride in this project are Gavan Troy, who was the Minister for Transport who obtained the green light for the project (and who appointed me to chair the project), and Tony Middleton, who was the project coordinator, and later succeeded me to become chief executive at Transperth. Both those men are with us this morning.

I would not like to give you the impression that any large expenditure on public transport would rate, in my eyes, as a "Great Investment". It is astoundingly easy to spend a very large amount of money for no social reward.

A "Great Investment" must return social benefits which exceed its social costs. Unfortunately, in the world of public transport, this seldom seems to mean that there will also be a financial profit on the investment!

On the electrification project we knew from the outset that the investment would not "cover its costs" in a financial sense. That did not remove from us the sacred duty to spend roundly a half-billion dollars wisely and without waste. Our accountability in this regard is to future generations as well as to today's.

4.3 Personal Service can help.

We tend nowadays to think of service as something like a vintage tram: you have to travel a long distance to find it.

Perth is famous for the bus drivers who put the pram on hooks on the back of the bus. I trust that any of our visitors who take a bus will also see the courtesy and quality of our bus operators.

Technology is an important adjunct in achieving modern efficient public transport, but we have to be conscious that public transport devoid of human contact is dreadfully barren. Just as in those bygone days we need to have employees on the system who have time to talk and be helpful.

I believe Transperth was the first operator to appoint a full-time quality manager. Today, special emphasis is placed on personnel selection and training. On the trains you will find people whose job it is to help rather than to police passengers.

4.4 Making decisions on where we live and work, where we send the kids to school etc, will need to take transport arrangements more into account than they seem to these days.

In the 1930s my grandfather and grandmother moved to Caulfield, to a little street within a stone's throw of Balaclava Road — and the Number 69. Three of the main reasons for their choice were their sons, who travelled to and from school on the Number 69.

A quarter of a century later, I used to catch the same tram (I mean it was probably literally the same tram!) between the same school and the same house, where I would stay with my grandparents until my father came past in his car and picked me up to take me home.

If I go back 100 years I go back to my great great grandfather's decision to leave the bush and move down to South Melbourne.

South Melbourne then was a flat and dismal working class area. It had tanneries, boot factories, wool scourers, and later metal and engineering establishments, along the edge of the very dirty Yarra River, around the wharves.

It was a dreadful place to live. But that's where my great great grandfather settled when the boom went bust in the 1890s. He lived there, like a lot of people, because that was where the work was. If he didn't live there he had no way to get to work, apart from one or two expensive bone-crunching horse-drawn trams.

Meantime something called the Octopus Act was pushing new railways in all directions, without anybody worrying too much about the economic sense of it all. Ultimately some 1200 miles of suburban railways were built in Melbourne at the time, costing some £5 million.

Railways were being used to create dormitory suburbs.

The Railways Commissioner of the time saw rail as the great fulfiller of the already lively Australian dream of owning a home away from the inner city drudgery—

> The tendency of Melbourne is to reside outside the city, and the greater the opportunity you afford for getting to and fro the more rapid will be the development and expansion of the suburbs.

It appeared to the Commissioner that "the proper principle to adopt was to make railways precede population and not population railways."

This, I must say, seemed to us a wholly sensible notion in the 1980s in Perth as we struggled with the problem of piercing into the well established northern suburbs with a new railway line. Our choice, to go up the middle of the Mitchell Freeway, was ultimately the only socially or economically feasible route we could follow.

It is an irony that modern-day Perth's suburban growth had been driven not by railways (which were struggling, it seemed, to find a role at all) but by freeways.

4.5 Aesthetics matter.

Every morning I pass a W-class tram painted (if not exactly, then pretty much) in the colours of the MMTB. It protrudes rather incongruously from a hotel bar out into the street.

I'm much happier seeing the poor old girl in this role than left to rot somewhere. But I still ponder sometimes why she sits with her backside in a pub on the other side of the continent to her birthplace.

The reason, of course, is that she has what we usually call "atmosphere". She is there to act as a magnet to attract people to the pub. When I remember this, I remember another lesson from the past:

Will we ever have transport vehicles as beautiful as the old ones?

Our rolling stock must display a sense of function, combined with detail and beauty; human scale etc.

I am looking forward to seeing the wonderful old Fremantle Number 29 running again this afternoon at Whiteman Park.

I think Fremantle was one of the pioneers of this practice of dressing up a bus to make it look like a tram. Visitors who go to Fremantle will see little four wheelers built like trams and called "Fremantle trams". You may well see a more elaborate rubber-tyred replica running up and down St Georges Terrace in the city.

All our mock trams are actually custom built, I should say. I don't think you will find that my colleague,

Tony Middleton, has yet been reduced to what I understand is going to happen in NSW where we are told that buses with the outlines of trams painted on their sides are the precursors to bringing trams back to Sydney!

4.6 Money matters

A few months before I was born, Australia's first mass produced car, the Holden, was launched by Prime Minister Chifley. It cost £760, which put it out of the range of most Australians. By comparison a sixpenny return fare to Nedlands included admission to Nedlands Baths as a special Sunday attraction.

People always have been, and always will be, influenced by pressures on the hip-pocket. Yet, in our car-oriented society, many people, even those with very meagre incomes, ask themselves: "Can I afford not to have a car?"

Today Perth public transport fares are still among the cheapest in Australia. Nedlands falls within Zone One on the current fare schedule and can be travelled to for just $1.20, although you won't find baths at the end of the jetty any more.

Public transporters need to consider innovative fares if they wish to encourage additional patrons. People have the strange ability to find very large amounts of money to fund their car habits while at the same time criticising public transport for fare levels which frankly are among the last great bargains of the twentieth century.

In the early 1900s Perth workers who used the trams before 8 am or after 4 pm could go from one terminus to another (including a change in the City) for just twopence when the standard fare was threepence. Off-peak pricing is no new idea!

Today Perth commuters can take advantage of the Multi Rider ticket providing discounts of up to 15% — reducing the Nedlands example to $1·04.

When I was at Transperth we introduced the scheme whereby people who travel around the Perth central city can take advantage of a Free Transit Zone, where all public transport is free. Part of the idea of this scheme is to attract people to have another go at public transport, so that they can find out how different it is to the rattlers they last used in their schooldays. If the FTZ attracts them to try the service once, then maybe they will regain the old habit.

5. CONCLUSION

When one considers the influence of the past on the future a key question which remains is this—

Will the tram, or LRT, come back into its own?

I am very optimistic. Experience in more than 100 overseas cities serves to confirm my optimism.

Recently Tony Middleton and I have been involved in evaluating alternative forms of transit for Perth's south western corridor and the early results have confirmed that there may be sense in the application of modern LRT technology. The answer to this particular question will be forthcoming later in the year.

Thanks principally to COTMA, future generations will be able to see and ride living trams from our past. But quite possibly the tram is anything but an outdated artefact.

Another golden age may be coming. Whether it comes or not, Australia's trams have already had a profound and permanent effect on the way we move ourselves through the city.

We must never let the lessons we can learn from them be forgotten.

Thank you.

Stuart Hicks has been Director General of Transport in Western Australia since 1990. Since January 1992 he has also been Executive Director of the Department of Marine and Harbours. Prior to these appointments he was Chairman and Chief Executive of Transperth, operator of Perth's rail, bus and ferry services. He studied economics and politics at Monash University, and transport at the University of New South Wales. Born and raised in Melbourne, he has held positions in transport and transport policy in a number of Australian States. Stuart is a Fellow of the Australian Institute of Management and a Fellow of the Chartered Institute of Transport, of which he is Immediate Past Chairman in Western Australia. He is a member of the Traffic Board and the Metropolitan Planning Council. He has chaired the Perth rail electrification project since its inception.

Australia's Metropolitan Public Transport Patronage 1865-1980

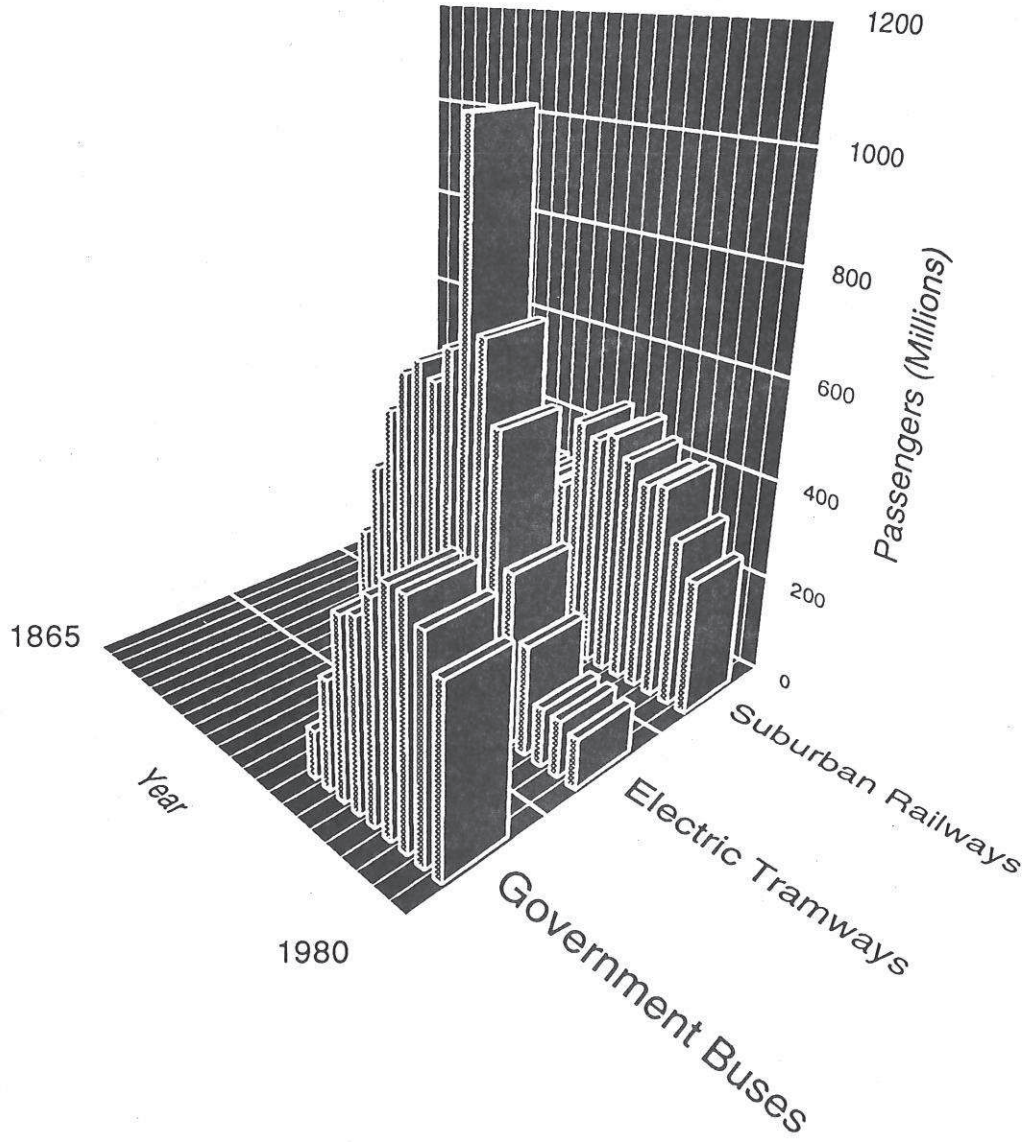
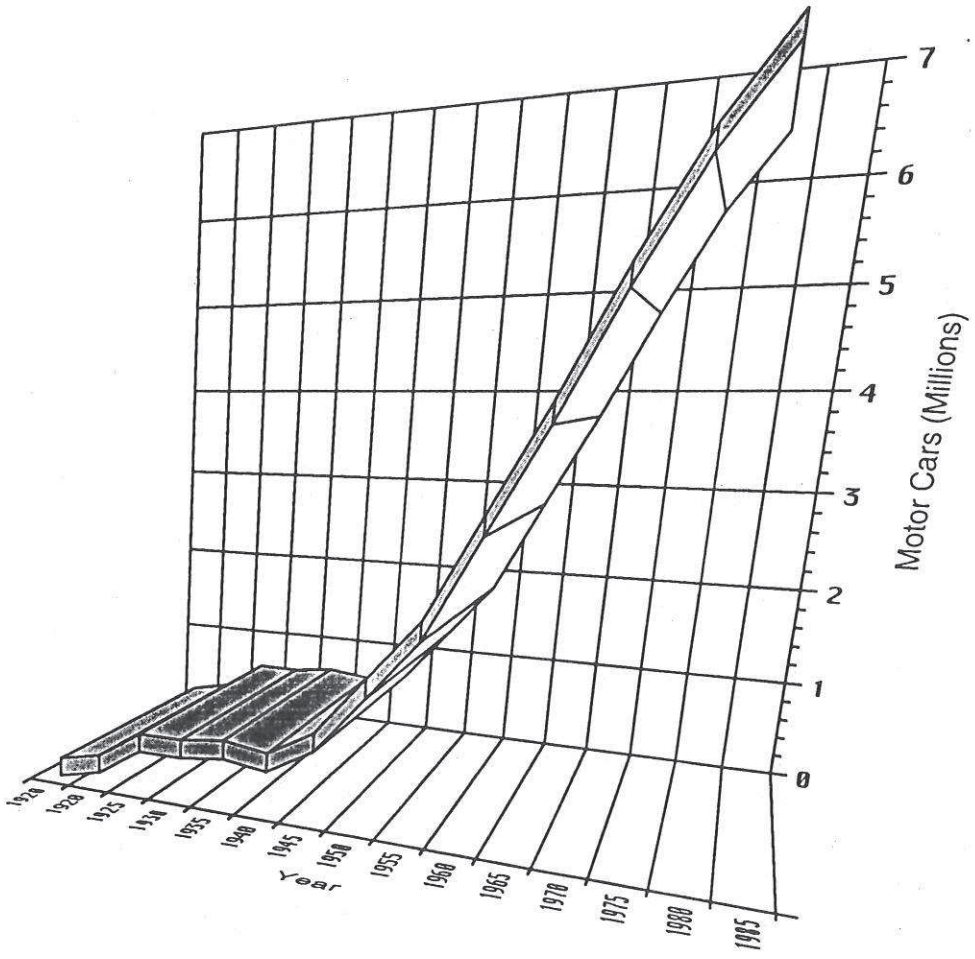


Chart 1

Adapted by Stuart Hicks from data in *Australians: Historical Statistics* (1987),TC 10-13, p168.



Motor Cars Registered in Australia
1920-1985

Chart 2

W CLASS TRAM STATUS REPORT

Les Jean
Manager, Fleet, The Met

Mr. Les Jean presented a report on matters concerning W class trams. The main points in this report are summarised hereunder:

1. STATE GOVERNMENT POLICY

State Government policy is to

- retain all W class trams in Victoria;
- support cavalcades and displays of trams (tourist value);
- restore an example of every type of tramcar used on the Melbourne system;
- support the establishment of a tramway museum at Hawthorn.

It is not clear whether the policy is to retain all present W class trams in service. This is generally a very emotive issue, with most discussions, such as newspaper articles, presenting only one point of view.

Trams have been exchanged with Bendigo and Bylands under Ministerial authority.

2. FEDERAL GOVERNMENT ACT

Protection is given in terms of an export embargo.

3. STATE OPPOSITION POLICY

The Liberal Party policy is also to retain all W class trams in Victoria.

4. HISTORICAL TRAM FLEET

Vintage cars should only run if fully restored and declared safe.

5. NOW

Ninety articulated cars are now in service. There is a space problem for storage of displaced cars, currently 40, ultimately 90 to 120. Twenty-eight cars are stored on the test track at Preston workshops, others are in the workshop area. All depots and Preston are full, and there are 30 more articulated cars to come. There is no answer in sight to the storage problem.

The COTMA/PTC agreement, which supports COTMA being the coordinating body for parts, etc, is still valid.

6. INFLUENCES

Influences on policy development include the National Trust, Friends of the Ws, the Public Transport Users Association, the Unions, the media.

A fleet size study [WWR] indicated that it would cost about $400 000 to restore a W class tram, $100 000 for a Z class tram. [The restoration would include motors, compressors, etc.] Friends of W Class Trams believe these figures should be reversed.

Unions favour retaining Ws.

Probably about 120 Ws will be kept, upgraded to some degree. Zs will remain.

7. FLEET STRUCTURE AND DEPLOYMENT

A report [not yet released] has been carried out into cross-city linking, which is favoured by WWR. If this comes into effect, there would be a need for about 140 Ws to be retained in the fleet — restored to a suitable standard.

W7s are likely to be the first to go, since they have not yet had a full overhaul.

8. MAINTENANCE COSTS

It is held by some that Ws are cheaper to maintain than Zs, but in fact the costs are about the same: $12 000 per year in a large shed, $15 000 in a small one. Every motor needs overhauling every two years. Compressors are prone to failure. Braking is a problem with Ws — there are many rear-end collisions.

Upgrades on Zs are falling behind as problems with Ws mount.

Asbestos is a problem in W cars, especially in those with Clyde controllers — about 50. It would cost about $10 000 per tram to remove. Negotiations are under way to remove the asbestos over a 12 month period.

In general, tram availability is not high enough.

9. SPARE PARTS

Supplies are down.

10. TRAM UPGRADE

There is a minimal budget for this. Management wants engineering upgrades to improve reliability; passenger comfort is also a consideration.

Questions, Comments and Discussion:

1. *What can Museums do to help the problems?*

- Nothing!

2. *What is the state of the system in general?*

- Not good, but recoverable.
- Overhead replacement is due — about $500 000;
- Track is poor.

3. *What about the pantograph conversion programme?*

- Nothing is being done at the moment.
- Production of trolley poles is now a problem!

CLASS		DEPOT STOCK	AM PEAK	STOCK AVAIL	VAR	PWS REP	FOR PWS	PWS CON	PWS TFS	DEP HUP	DEP CON	DEP REP	DEP BAN	DEP FLAT
BWK	W	21	19	16	-3	2				2		1		
	Z	17		12			3			1		1		
	LRV	26	23	15	4	1		3			5			2
CAM	Z	58	37	41	4	3	7			2		1		4
	LRV													
E PT	W	37	32	28	-4	6			1			2		
	Z	29		26			2					1		
	LRV	25	37	21	10		1	1			2			
ESS	Z	94	69	65	-4	8	5		1	8		2		5
GH	W	61	50	55	6	3			1	1		1		
	Z	10	4	5		1	1		1	2				
KEW	W	4		2		2								
	A	63	58	48	-4	2	9					4		
	POLE	6		4								2		
MAL	W	83	64	66	2	8	6					3		
	Z	16	12	11	-1					1		4		
NF	LRV	10	8	10	2									
STH MEL	W	39	35	28	-7	3				3		5		
	LRV	29	11	15	4	3	6	2				1	2	
		628	459	468	9	42	40	6	4	20	7	28	2	11

@ PWS	26	14	2	10	52
FOR PWS	6	18	9	7	40
TRAM FLEET REPAIRS	18	32	4	12	66
	W	Z	A	B	TOTAL

REP =REPAIRS
CON =CONTRACTS
TFS =TRAM FLEET SUPPORT
HUP =HELD UP FOR PARTS
DEP =DEPOT
VAR =VARIANCE

AM PEAK

TRAM FLEET DEPARTMENT

27-May-92

W =	245		
LRV =	90		
A =	69		
Z =	198	FLEET=	602

DATE27-May-92

TRAMNO	TYPE	MAKE	YEAR BUILT	COMMENTS
8	M	HTT	1916	BEING REBUILT PRESTON WORKSHOPS AVAILABLE ?
104	L	MMTB	1921	HERITAGE SERVICE SUNDAYS SOUTH MELBOURNE
106	L	MMTB	1921	ZOO SERVICE SUNDAYS ESSENDON
138	P	HTT	1918	STORED THORNBURY NOT AVAILABLE
164	S	MBCTT	1916	STORED HAWTHORN AVAILABLE FOR RESTRICTED USE
180	T	MBCTT	1917	STORED HAWTHORN AVAILABLE FOR RESTRICTED USE
214	V	NMETL	1906	STORED HAWTHORN AVAILABLE FOR RESTRICTED USE
217	X	MMTB	1924	STORED HAWTHORN NOT AVAILABLE BROKEN WINDOWS
380	W	MMTB	1925	STORED HAWTHORN (?HERITAGE SERVICE SUNDAYS SOUTH MELBOURNE)
431	W1	MMTB	1927	STORED HAWTHORN (?HERITAGE SERVICE SUNDAYS SOUTH MELBOURNE)
469	Y	MMTB	1927	STORED HAWTHORN AVAILABLE FOR RESTRICTED USE
510	W2	MMTB	1928	STORED HAWTHORN (?HERITAGE SERVICE SUNDAYS SOUTH MELBOURNE)
610	Y1	MMTB	1930	STORED HAWTHORN DEFECTIVE DOORS PWS REPAIR
611	Y1	MMTB	1930	STORED HAWTHORN
612	Y1	MMTB	1930	STORED HAWTHORN DEFECTIVE DOORS PWS REPAIR
613	Y1	MMTB	1930	HERITAGE SERVICE SUNDAYS SOUTH MELBOURNE
644	W2	MMTB	1930	ON LOAN TO TMSV BYLANDS
646	W2	MMTB	1930	RUNNING IN NORMAL SERVICE IF DRIVER AVAILABLE SOUTH MELB HERITAGE SERVICE SUNDAYS SOUTH MELBOURNE
676	X2	MMTB	1930	STORED HAWTHORN AVAILABLE FOR RESTRICTED USE
774	W5	MMTB	1936	BEING REBUILT PRESTON WORKSHOPS AVAILABLE JUNE 92
782	W5	MMTB	1936	ON LOAN TO TMSV BYLANDS
902	SW6	MMTB	1945	ON LOAN TO TMSV BYLANDS
1001	W7	MMTB	1955	ON LOAN TO TMSV BYLANDS
1040	W7	MMTB	1956	REBUILT PRESTON WORKSHOPS NORMAL SERVICE GLENHUNTLY FEB 92
1041	PCC	MMTB	1973	STORED HAWTHORN NOT AVAILABLE

THE PLACE OF TRAM MUSEUMS IN THE INTERNATIONAL AND AUSTRALASIAN MUSEUM MOVEMENT

John C Radcliffe
Chairman, COTMA

The fourteen tramway museums which are federated into the Council of Tramway Museums of Australasia are but the first order of aggregation of museum organisations. These aggregated groups are important for their power in lobbying to Governments on policy issues. Governments and Ministers prefer to deal with single cohesive organisations rather than splinter groups having disparate and competing aspirations. Therefore, when making approaches either on issues of legislative change or when seeking funding support, it is desirable to do so from a position of strength achieved by bringing together museums which either have a common technical or a common geographic interest. It is therefore helpful to understand the way in which museum organisations are structured in Australia and New Zealand and how they relate to the international museum movement.

MUSEUM ORGANISATION IN AUSTRALIA

Within Australia, individual museums and museum participants are catered for by the **Museums Association of Australia (MAA).** It is a national body that includes among its members persons employed mainly in history, natural history, science and technology museums. This is the museum association which will have most immediate benefits to offer those interested in tramway conservation.

However, there are a number of other related organisations which also pertain to museums. The **Art Museums Association of Australia (AMAA)** serves all of those working in art museums and public galleries throughout Australia. It has its own formal secretariat established in Melbourne in 1986 with funds from the Australia Council.

The **Australian Institute for Conservation of Cultural Materials (AICCM)** is the national organisation of conservators whose aim is to foster the preservation of material of cultural significance in Australia. Conservators are particularly important in advising on the care and maintenance of fragile historic materials such as paper, photographs, textiles, metallic objects, and timber and synthetic artefacts. Whilst they are usually thought of in terms of small items, they can also advise on the conservation requirements of much larger exhibits including tramcars themselves.

The **Council of Australian Museum Directors (CAMD)** comprises the sixteen directors of Australia's principal State sponsored museums or museum control agencies concerned with science and history. The **Council of Australian Art Museum Directors (CAAMD)** comprises the eight directors of Australia's principal art museums of whom two from the Tasmanian and Northern Territory Government museums are also members of CAMD.

The **Museum Education Association of Australia (MEAA)** is a national association of educators working in museums, galleries, botanic and zoological gardens and similar institutions. Frequently, its members are employed by local education authorities but seconded to museum institutions. They are responsible for many of the school programmes in the major museums.

The **Australian Federation of Friends of Galleries and Museums (AFFGM)** is a national organisation with more than seventy support groups, representing 130 000 friends of museums, galleries, botanical gardens zoos and libraries in Australia. They are the "volunteers" who support the staff of the major collecting institutions. (In North America these volunteers are sometimes called "docents".)

The **Australian Heritage Parks Association (AHPA)** is the national body formed to represent the interests of outdoor museums and heritage parks in Australia, encompassing such organisations as Sovereign Hill at Ballarat. The group exchanges visitor information and has excellent statistics on visitor trends and average levels of visitor expenditure in the outdoor museums and parks.

The **Australian Museum Shops Association (AMSA)** is a national body which facilitates the free exchange of ideas and information among members about commercial activities within institutions, and encourages joint buying and/or manufacturing to maximise profit margins and aids in the promotion of museum shops to the public as educational resources as well as generating additional revenue.

These organisations are federated together in the **Council of Australian Museum Associations (CAMA).**

CAMA is increasingly responsible for the conduct of meetings and conferences among the museum community in Australia. Its next conference is scheduled to be held in Melbourne at the Royal Exhibition Buildings from November 17-21, 1992.

MUSEUM ORGANISATION IN NEW ZEALAND

The principal museum organisation in New Zealand is the **Art Galleries and Museums Association of New Zealand (AGMANZ)** . Its corporate and individual

membership has primarily been drawn from the professional museums, and it has been under stress in recent years, and virtually collapsed two years ago over the issue of Maori-Pakeha perspectives. It has now been revived to incorporate a Maori-Pakeha partnership with half of its committee representation coming from each group.

A **Museum Directors' Federation of New Zealand** operates, but is primarily driven by art gallery directors. It is likely to be expanded to include museum directors.

Other specialised museum groups in New Zealand include the **Museum Education Association of New Zealand (MEANZ)**, which conducts an annual conference for education staff, and the **New Zealand Professional Conservators' Group** which links conservators. Other rather ad hoc groups link registrars, historians etc. There is nominally a national committee for ICOM.

GOVERNMENT POLICY AND SUPPORT TO MUSEUMS IN AUSTRALIA AND NEW ZEALAND

The primary thrust of Government support to museums in Australia is through the State Ministries of Arts, or Arts & Cultural Heritage. Federal responsibility for museums is within the Department of Arts, Sport, the Environment and Territories (DASET). The Australian Federal Government also contributes through its sponsorship of the Australian National Gallery (ANG) and its intended creation of the Museum of Australia.

Since 1975, efforts have been made to encourage the Federal Government to contribute to museum development at state and regional level, though largely without success. The policy issues for museums are dealt with in the Cultural Ministers Council which is composed of the relevant State and Federal Ministers responsible for the Arts.

By contrast, support for museum activities in New Zealand is largely through local government where there is potential for rating powers to be used to support the creation of regional museums. The New Zealand Government sponsors the National Museum, formerly the Dominion Museum and has been moving towards the creation of a new Museum of New Zealand on a reclaimed site on the Wellington waterfront. Like its Australian counterpart, this proposal has also had a chequered career. The Museum of New Zealand is an independent statutory authority, though it derived from the Internal Affairs Department of the Government. Museum policies to the extent that the New Zealand Government takes any direct responsibility, lie within the Ministry of Arts & Culture.

Although there are no direct grants from the New Zealand Government to support regional and specialised museums, the government view is that it indirectly supports museums by their ability to access capital funds through the New Zealand Lottery Grants Board. This board also supports four museum liaison officers who provide an advisory service to regional and specialist museums from bases in the four principal museums in Auckland, Wellington, Christchurch and Dunedin.

MUSEUMS, INTERNATIONALLY

The international museum movement is brought together under the auspices of the **International Council of Museums (ICOM)**. Its organisational structure is based on national committees comprised of members of ICOM resident in the different countries and with an international organisational headquarters in Paris. The **Australian National Committee for ICOM** is also a constituent member of the Council of Australian Museum Associations.

ICOM also has a series of international committees and affiliated international organisations which bring together groups of museum participants with specialised interests.

The international committees, some of whose acronyms are derived from their French titles rather than their English titles as both French and English are the official languages of ICOM, include:

Applied Art (ICAA)
Archaeology and History (ICMAH)
Architecture & Museum Techniques (ICAMT)
Conservation
Costume
Documentation (CRDOC)
Educational and Cultural Action (CECA)
Ethnography (ICME)
Exhibition Exchange
Fine Art (ICFA)
Glass
Literature (ICLM)
Modern Art (CIMAM)
Museology (ICOFOM)
Musical Instruments (CIMCIM)
Natural History
Museum Public Relations (MPR)
Regional Museums (ICR)
Science and Technology (CIMUSET)
Museum Security (ICMS)
Agricultural Museums (AIMA)
Arts and Military History (IAMAN)
European Open Air Museums
International Confederation of Architectural Museums (ICAM)
International Congress of Maritime Museums(ICMM)
Performing Arts (SIBMAS)
Transport Museums (IATM)

ICOM convenes every three years, recent conferences having been held in Buenos Aires in 1986, The Hague

in 1989 and Quebec in 1992. There are proposals afoot to secure the 1998 Conference for Melbourne.

The specialist organisation within ICOM to which tramway museums are best affiliated is the International Association of Transport Museums. COTMA has been a member of this group for many years, and has been in receipt of the annual year books which the IATM has published following its own periodic conferences. The 1992 IATM Conference is being held in Ottawa from September 14–18 1992 which is the week prior to the 1992 ICOM Conference. Other IATM members include the National Tramway Museum at Crich, UK, and MOTAT is a member in its own right. Other Australian IATM members include the National Museum of Australia, the Museum of Victoria, the History Trust of South Australia, and the National Maritime Museum, Sydney.

OTHER COUNTRIES

Just as there are various museum structures within Australia and New Zealand, there are similar co-ordinating bodies in a number of other countries.

For example, in North America, railway and streetcar museums are loosely joined into the Association of Railway Museums. Within each State of the USA there is a State Historical Society, providing a role somewhat akin to that of the State Branches of the National Trust in Australia or the History Trust of South Australia. The American Association of Museums in Washington brings together the various professional associations and their role in protecting and advancing the interest of museums in the USA.

In Britain the Museums Association caters for Government-sponsored museums, while the Association of Independent Museums (AIM) serves museums outside of the Government sector including the National Tramway Museum at Crich, Derbyshire. Much of the initiative for the development of the AIM came from Dr Neil Cossens, when he was Director of the Ironbridge Gorge and later the Greenwich Maritime Museum, though he is now the Director of the Science Museum at South Kensington.

The horizons of tramway museums and their members can be broadened by participation in the wider national and international museum movement and much of the benefit can be obtained by correspondence when attendance at conferences is not financially practicable. Participation in these organisations leads to considerable credibility to individual museums in their dealings with the Government.

As Australasian tramway museums move towards greater maturity, their horizons will become broadened and their place in the greater museum movement will become increasingly important to members.

OUR CULTURAL HERITAGE

Warren Doubleday and Richard Gilbert
Ballarat Tramway Preservation Society

INTRODUCTION

The question we must ask ourselves is

"Are tramway museums part of cultural heritage?"

Street tramways have a strong cultural heritage in Australia. They were a prominent feature in the street scenes of our major cities for many years. They transported people to and from their homes for work, shopping or leisure.

Melbourne has only in recent years recognised this cultural aspect. It is now developing this around its trams, from both heritage and lifestyle viewpoints. But have we translated this cultural heritage into the way we present our collections to the public, so they may understand and appreciate their past?

SOME DEFINITIONS:

> Culture is each society's special way of perceiving and representing life in its place and time [1, p.7]

And its relevance to history?

For others, culture is learning and the intellectual achievements of society. Some place emphasis on history: as material artefacts, museums, monuments and sites; it is written and oral expression, . . .

This paper looks at the cultural heritage aspects of tramway museums and draws heavily on an article by Warren Doubleday from the December 1991 issue of Newsrail: *Culture! What relevance to Railway History?* This article was written following the announcement of the Victorian Government's cultural policy in 1991. It also drew upon two articles by Jim Longworth in the May and June 1991 issues of Railway Digest. He examined the cultural significance of preserved railways or that of the operation of heritage trains. The need for this examination grew out of the 3801 accident. I would commend these articles to all those operating preserved railways or tramways.

THE VICTORIAN GOVERNMENT'S CULTURAL POLICY

The Victorian Government announced this new policy in June 1991. Its objective is to provide a framework for developing culture in its many forms: traditional and innovative arts, recreation and sport, education and heritage. The policy booklet *Mapping our Culture* points out that culture is relevant to all Victorians, whether we place value on the Melbourne Cup, regional art galleries or our universities and schools. Victoria has often been the seedbed of new forms of culture, and the Cultural Policy aims to encourage this.

With regard to the heritage aspects of the policy, the area that the various preserved railways/tramways fall within the policy points out that:

> Conserving and enhancing Victoria's cultural heritage is a priority of the Cultural Policy. That heritage is not only the many buildings and objects of the past but also the social history of Victorians. Information collections and access to them are an essential part of developing ways of improving Victoria's future.[1, p.3]

Some of the Strategic Actions proposed by Heritage and Tradition section of the policy are [1, p.30]:

- develop appropriate legislation and infrastructure for heritage protection, including objects and artefacts;
- develop a State Cultural Heritage Strategy based on widespread public consultation;
- establish and maintain a State register of significant portable cultural heritage;
- implementation of the Museums and Historical Collections Policy of the Museums Advisory Board;
- the development of the thematic museums, based on existing collections, facilities and sites, such as a multi-location Victorian Maritime Museum and a network of Historic House museums;
- the provision of support services to encourage regional co-operation between museums and historical societies.

The policy also addresses the important aspect of social history. This would allow, for instance, the development of social history collections and research to reflect Victoria's social development through the construction of transport links and their support facilities. For example, the importance of railways in the provision of employment to local communities and the acceptance of immigrants into the railways/tramways employment.

ITS IMPORTANCE TO US!

Longworth in his paper *Tourist Railways - money trees, cultural cancers, or?* [2, p. 173] notes that:

> There is likely to be an increased requirement on private railway operators to validate their place as providers of cultural heritage, resourcing as they do, the tourist market. Those seeking government funding are especially likely to need increased explanation of why they should be supported by the overall community.

(The following comments were written for the railway viewpoint, however, many of them apply equally to the tramway aspect.)

Some railway enthusiasts in management positions of preserved railways have long recognised this need, but have often neither fully understood it, nor had a government policy on which to construct a case for funding. To gain continuing access to funding, they will need to place their project submissions into a cultural context.

Decisions about the presentation of railway objects or their lines, are too often made on expediency, simplicity or commercial points, or even on just a whim of management. There is little thinking sometimes of the heritage or cultural aspects. Longworth points out,

> Meritorious good may be seen as residing in the significance of the proposal to the region's cultural heritage: this is a particularly powerful argument given the place that railways played in developing this nation's rural and mining industries, although it should be realised that tourist developments will severely compromise the pure cultural significance of any resource used as an attraction. Denial of access to non-paying visitors, inappropriate site works, display of decontexturalised relics, hyperreal presentation and gaudy servicing of visitors all detract from the historical authenticity of the visiting experience. The visiting experience shifts from being within the social context of education to that of entertainment.

Many preserved, or "tourist", railway operators face this quandary. To overcome it, policies on the collection, its presentation and conservation will be a requirement. The formation of these acquisition and heritage policies by the railway operators will provide a framework for planning decisions. Such policies go a long way in building a case for government funding, or even just focusing people's attention on what they are doing. Government through its various "arts" or "museums" programmes will favour those who have established such policies and show that they are relevant to the culture of Victoria.

The other advantage of such polices and discussions over the cultural heritage of railways is that it allows the assessment of the attributes of the preserved train relevant to us and our society. [3, p. 194]

However, it raises other questions. Are we conserving the railway relics for future generations to enjoy, or are we selfishly consuming them now? Will R class locomotives and 1900 era carriages still be operable in 600 years time? Well, that depends on what we do now, and of course it begs the further question, will there still be tracks suitable on which to run a R class? For the point of the discussion, let's assume yes.

First we have to establish that the train or locomotive is culturally significant and that it is worthwhile to preserve it. Then we must ensure that this can be done, by recording, conserving, establishing the maintenance facilities and maintaining an understanding of the past technology.

The view of the author is that too many railway enthusiasts are pure consumers, and could not care about the future. This selfishness applies particularly to the one sided steam fanatics. They do not look at the other aspects of railway operation or to the long term preservation of equipment etc. It is a complex system, a lot of which depends upon the people who operate or maintain the railway or the piece of equipment itself. Too little work is done to understand or record the "software", ie., the personal component or the methods of maintenance.

It is hoped that the existence of a cultural policy will provide the process to enable the preservation of the relics and the provision of suitable maintenance facilities. It should foster the desire through education, and thereby knowledge, to include for example the social side of railway history.

Our Tramway Cultural Heritage

Though repeating the opening paragraph of this paper, Australian street tramways have a rich cultural heritage. They had significant influence in the ways the cities were developed up to the second world war, they provided a relatively cheap means of getting around town. A number of authors have written books and articles on the tramway hardware, with some reference to the people or the software that ran them. This later aspect is what too often we tend to ignore in our museums.

We would argue that many of these aspects have been recognised by the COTMA museums, although most of us still have a long way to go to present them properly. Most of us are undertaking good conservation and preservation work, and aiming to present our tramways in a view that would enable their cultural heritage to be understood by the visitor. Most of us suffer from the inability to present our major exhibits in their correct habitat, a street with live motor cars etc. to contend with, and stops to pick up and set down passengers at. Fortunately at Ballarat, we are able to do that, and this is an element we are able to capitalise on.

While tramways did not have the political significance that railways did, they were often influential in the local political scene throughout Australia. The people, the lines, the equipment and their facilities were all part of the tramway culture that developed over the Victorian era and extended up to the 1960's in Australia. In Ballarat for example, the street trackage has been in the Gardens Reserve for over 100 years, and its attendant overhead clutter for almost 90 years.

Tram Museums and Culture

The last 30 to 40 years have seen the development of a very extensive world wide movement for the conservation of tramway equipment, lines and facilities. This is almost entirely volunteer based, with only some professional management or workshop based personnel. Australia is no exception to this movement.

The Australasian groups have, generally, a high community acceptance of their activities. This is shown in the assistance, in the form of either equipment, facilities or money, that has been or is being provided by government or their authorities. To ensure that this continues, the various groups will have to understand what they are doing and think towards to the future.

In Victoria, government, whether state or local, has recognised by its past actions the importance of conservation of tramway culture. They have offered the opportunity, not only to enhance the preservation activities of the various groups, but also to conserve many aspects of Victorian culture for present and future generations. It is up to us to recognise and use this aspect to our advantage in the future.

Even in Victoria, we get many visitors from Melbourne who do not know much about Melbourne's tramway system, let alone use it. If you live near Dandenong, Frankston or Knox, for example, there is no need to travel to the CBD. Many of our visitors are locals bringing their grandchildren along for a ride on the tramway, to show them a past bit of Ballarat's history. This applies to all of COTMA's museums. The knowledge of trams today exists for many only within a museum environment.

This problem of lack of actual tramways operating in reality is a problem that we have to face if we are to encourage young volunteers to join and continue the operations after we pass on. It will help to promote the ongoing commitment and involvement of these volunteers if their managers, ie the elected boards, understand their position in the overall picture of what they are doing.

Our tramway heritage is not a plaything, and simple commercially expedient solutions should be avoided if it is to survive in a worthwhile form for future generations. The visitor's dollars will be the prime source of funding. However, it must be properly presented for them to undergo a culturally enriching trip, and not just be another form of entertainment.

CONCLUSIONS

Australasian Tramway Museums are a part of society's Cultural Heritage. To ensure that our tramway cultural heritage survives in an operable condition, we must all understand the cultural process and work accordingly. To continue to gain funding for our future operations, we will have to express our presentations for funding in terms of this cultural heritage. It will not be handed to us on a platter, as it has been done sometimes in the past.

If our museum operations are to stay relevant to the public, which is rapidly becoming one which never saw our trams operating in their real environment, we must tailor our presentations to explain how and where they once fitted into their past culture. This will also be essential if we are to encourage the young volunteers to join and continue the operations after we pass on.

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MANAGING ROLLINGSTOCK — THE ADELAIDE EXPERIENCE

Christopher Steele
Australian Electric Transport Museum

1. INTRODUCTION

The AETM nominally has 13 operational cars — enough for two fleets by our capacity/variety criteria. We enlarge our fleet by one car every four years on average, mainly by restoring hulks obtained over the years.

2. OPERATIONS AND DISPLAY

Since inception of operations in 1974, general opening hours have been Sundays and most Public Holidays 1 pm to 5 pm. (for a short initial period 2 pm to 5 pm) plus charters, commonly organised on Wednesdays but available any time given a fortnight's advance notice to organise the necessary staff. For a long time, mid-week operations have occurred during some school holidays. The AETM has never operated regular services on Saturdays, which have been set aside for maintenance work and restoration projects. Eight trips are generally run each Sunday.

The operating fleet is kept in the old running-shed and takes up traffic duties from the fan in front of the shed. The so-called second fleet is on display in the new tram shed. Trolley buses and a motor bus are all kept in a display shed — only the latter is operational. There is a related floor and wall display in this building. Non-operating cars awaiting restoration or repair are kept out of public view in the old main running shed. Other vehicles housed include a motor tower wagon, a rail-borne tower wagon and a weed-killer trailer hauled by the works car (an ex-MMTB W2 car).

Garford trolley bus 216 has been to a couple of events off-site as Australia's first trolley bus. A-type car 14 has been used in a minor fashion at a public ceremony at St Kilda to promote the proposed 'Century 21' appeal for funds to create a 'Bib & Bub' set.

3. FLEET ROTATION

Passenger traffic on any Sunday can be handled by any tram — small or large. Each fleet is rotated — not totally — about every twelve months. Exceptions challenging this dictum are cold/wet weather (less so hot weather) when passenger loadings decline anyway. Closed cars obviously are used for wintry conditions. The all-steel car 381 is the least affected by operating in cold or wet weather. Also it is not structurally deteriorated by the elements.

Numerous trams and trolley buses in various conditions have been acquired over the years to enable the AETM to have a representative South Australian electric traction collection. The most modern, most robust cars tend to be the work-horses of the AETM. Of the 13 operational cars these include H1 381, W2 294 and F1 264. The more special vehicles sparingly used, including No 1, are Adelaide's earlier electric trams featuring the most ornate restoration.

4. OPERATION AND MAINTENANCE RECORDS

Operating trams have trips and other running details recorded in the Dispatcher's day book for regular Sunday and charter runs. All traction poles along the 2 kilometre line are numbered for distance recording purposes. Ad hoc lineside maintenance trips, 'playtimes', and crew training are recorded by motor-persons on the casual run sheets. All the above statistics are collated for each car in a circulated operations report each month.

Compatible records are also kept on file by workshop staff and are used to determine times of 'pull-ins' for maintenance/servicing. Operating staff also have a form on which to record any deficiencies in cars requiring immediate attention. These matters should be followed up efficiently and records kept meticulously, for they could even be a useful defence in an accident case.

5. HULKS

Regarding hulks (wrecks), all vehicles but one are presently under cover. Parts to restore these hulks have been acquired or can be fabricated.

Our museum members are not jaded or demoralised by the presence of these hulks, as the AETM has a proven restoration record, and the statutory authorities recognise this by occasionally providing assistance or funding programs.

Another D-type car of reasonable condition for restoration was offered to the AETM but was declined; it went to the Canberra Tradesmen's Club instead. The first C-type car obtained was later sacrificed when a second C-type body was acquired. After being stripped of all useable parts the remains were quietly burned.

6. RESTORATION

Operation of the AETM trams is regulated by the criteria in section 3. The more ornate trams (invariably the older ones) tend to be used less due to the risk of weathering by rain or sunshine of the external paintwork and artwork. Our original restoration of A-type car 1 in 1966 was repeated in 1981-4. Our second restoration (E1 car 111) dating

back to 1972 is now undergoing its second restoration mainly due to a deteriorating subframe which we did not feel confident or competent to deal with 20 years ago. Required tools were lacking then too. Our standards of restoration are becoming higher with new expensive materials being used and a professional standard of painting being undertaken.

7. Shed Design and Disposition

AETM policy is to house all vehicles under cover and further acquisitions are determined and mandated on this premise. It is now general policy for each new large shed to be physically separate to minimise the destruction of the fleet by fire.

7.1 Fire precautions

Sheds have fire extinguishers placed near the doors for both general and electrical fires. A new mains-pressure standpipe which can be used by the fire brigade is now being installed in a strategic and accessible position. If possible, sheds should be free of any inflammable stores such as paper, deal, rags, petrol, oil, lubricants, paints or anything else likely to be used as a fire accelerant.

All AETM sheds have been built high enough for trolley-wires to be installed. Single-pole cars are 'reversed' in to enable a quick exit if necessary, but poles on bogie cars are hooked down. However, in our opinion, realistically, an electrical or deliberately lit fire in the absence of any museum members would be catastrophic. Thus the emphasis is on protection and care in housing the cars. The operating fan is sufficiently large to accommodate cars driven out if a fire broke out on a work or operations day. Set procedures and regular fire-drills are desirable for such an eventuality.

7.2 Security

Doors and cladding should be burglar and vandal resistant as far as possible and have security protection with audible and visual alarms, the visual alarm being a blue light in a prominent position. These should be sufficient to scare off intruders. Laser-triggered alarms along straight wall-lengths should also be considered.

7.3 Conservation

Sheds should be weather-proof including the exclusion of outside run-off from the shed itself. Fungus spores can develop in the damp ground near doors. For this reason it is preferable for sheds not to have any wood (including sleepers) embedded in the ground. Fungus is likely to pose a bigger threat to wood in cars than white ants!

Sheds should be clad to prevent entry by birds which foul cars with nesting materials and droppings.

7.4 Utility

The practicality of manoeuvring vehicles for any purpose is simplified by more and smaller sheds. Sheds for housing cars, trolley buses, etc., are designed to be long enough to economically use optimum space. Templates of car lengths are used to judge which vehicles can be housed on which tracks — useful in shunting manoeuvres. A couple of feet between vehicles should be allowed for the convenience of personal movement and to avoid collisions when parking the cars.

Two vehicles under restoration can be housed in the new Body Shop. Hulks are kept, basically, on two tracks in the old main shed. Operating cars also have two tracks in the old main shed, plus one track in the mechanical workshop. [The latter was the first extension to our depot in the early 1970s.]

8. Maintenance Facilities

A pit long enough to serve both bogies on our longest trams exists in the mechanical workshop. Electrical, brake and other mechanical underfloor servicing requirements can be performed in some degree of comfort. Lighting, power and compressed air ancillaries are located in the pit; also a wandering lead is available nearby for traction power if required. All maintenance areas have concrete floors for cleanliness, convenience and comfort. A couple of wheeled platforms and various ladders are available for cleaning and maintenance work on cars.

9. Summary

Our overall policy in regard to rollingstock has aimed to preserve, restore and operate the cars and trolley buses in good order to ensure that South Australians and other visitors may be aware of the important place these vehicles had in the life of Adelaide in their era. This is being achieved by:

1. providing lock-up covered accommodation;
2. having a continuing restoration and refurbishment programme;
3. displaying and operating the available cars regularly;
4. judiciously operating individual cars when conditions are satisfactory, and being selective in using older, more fragile cars;
5. keeping careful operating and maintenance records;
6. paying attention to the security of the fleet; and
7. providing adequate facilities for restoration and maintenance.

It is by the diligence and dedication of museum members that these aims are being achieved.

DRIVER TRAINING AT BENDIGO TRAMWAYS

Harold McCarthy
Bendigo Trust

1. APPLICATION FOR DRIVER TRAINING.

People who wish to be a driver of our trams must write to the tramway to be considered for training. The application then goes to the Tram Committee for approval. It is not a fait accompli — some applications are politely deferred for various reasons.

Our drivers are more then drivers. They are our shop front, so to speak, welcoming passengers, selling tickets, giving a talk about the Bendigo Trust and the trams, then selling souvenirs in the shop. It helps to have a sense of humour, too. Our drivers need to be able to answer questions about the Trust, the trams, Bendigo and other tourist attractions.

So, wanting to drive a tram and passing the tests are not the only pre-requisites for the job.

2. MEDICAL EXAMINATION.

When applicants are accepted they have to undergo a medical examination of eyesight, hearing and general fitness. They must also have held a car driver's licence for 3 years.

3. DRIVER'S MANUAL.

After passing these tests, the applicant is given a Driver's Manual containing questions and answers to various situations that can occur while operating a tram. They are required to read the manual thoroughly.

4. DRIVER TRIP JOURNAL.

When training commences, the applicant is given a Trip Journal which is a record of the number of trips, type of tram and the comments of the instructor.

5. DRIVER TRAINING.

The applicant is now ready to drive a tram, gaining experience in the various air brake systems — manual lap, self lap and Birney — and controllers — GE, Westinghouse and MMTB. Also covered are how and when to apply sand; emergency braking — first, second, third and fourth — and handbrake driving. To make it harder the driver has to learn the commentary tapes, when to actuate and stop them, and how to regulate the speed of the tram to coincide with the commentary on points of interest.

6. DRIVER EXAMINATION.

When the applicant has completed 10 trips he or she receives a Restricted Certificate which allows them to drive trams within the depot confines without supervision. After completing 30 trips the applicant is ready for the test, which comprises a written test of questions with Yes/No answers, followed by a driving test.

7. CERTIFICATES OF COMPETENCY.

The full Certificate is presented at the Tram Meeting or some special occasion by the Chairman of the Tram Committee.

8. ACCIDENT REPORTS.

We have two Accident Reports and an Incident Report:

The Yellow Tram Accident Report is for the tram driver to complete after being involved in an encounter with another tram or any other object, car, truck, trailer or member of the public likely to involve an insurance claim. The Blue Report is for the Traffic Inspector or Supervisor to complete.

The White Special Day Report is for drivers or conductors who are involved in minor accidents or anyone who may have been a witness to a minor accident.

COMMENTS, DISCUSSION AND QUESTIONS:

1. At Bendigo, the main instructor is the Tramway Superintendent. The time taken to complete the training depends on the person.
2. Bendigo has no government testing. It was noted that New Zealand has government testing.
3. There is no refresher training at Bendigo. It was noted that Adelaide has refresher training, including skid training and ensuring continued familiarity with all types of tramcar. It was suggested that drivers who have not driven for some time might need to be re-certificated.
4. It was noted that knowing theory is not always the same as being able to react appropriately in practice, and that training could therefore include coping with various deliberately induced faults and problems.
5. Bendigo has three fully-paid drivers as well as volunteer drivers. It was reported that there was felt to be no clash of interests between the two. Some paid drivers acted as volunteers on their days "off". Volunteers rarely received payment of expenses.

6. Most COTMA organisations are run by volunteers, who need to be welcomed and enjoy their hobby. It was noted that some volunteers would not be taken on as employees. Rosters may need to be juggled to cater for such.

7. **Tram conductors at Bendigo:**
   In a system similar to driver training, potential conductors are given a booklet to study, do practical training with an observer, and undergo a test. The Public Relations nature of this job is stressed; if applicants are thought not to be sufficiently outgoing they are told "thanks very much, we have enough conductors at the moment".

8. Should training include cutting out motors?

9. Should there be a regular medical review? What standards should be used for this?

TROLLEY WIRE

R. I. Merchant
Trolley Wire Editor

Does Trolley Wire have an editorial policy?

Trolley Wire does not have a set editorial policy. The Editor will publish almost any contribution received. No contributed item to date has been rejected by the present editor.

What is the News deadline for Trolley Wire?

The deadline date for Museum News is the 7th of the month prior to the month of issue. News not received in time will be held for the next issue.

The deadline dates are:
7 January for the February issue,
7 April for the May issue,
7 July for the August issue and
7 October for the November issue.

What are Trolley Wire's photographic requirements?

We can use almost anything, and have done so in the past. Photocopies, newspaper clippings and so on have been used where original photographs have not been available. Prints from colour transparencies, colour prints, black-and-white prints, copy photos, have all been used — how successfully depends on the original being used. Good black-and-white prints from original negatives still cannot be beaten for reproduction in black-and-white, however.

As a guide to budding authors, and to prevent duplication of effort, what does the Editor have in the way of articles on hand for future use?

Articles already on disk ready for photo-typesetting include Ballarat in 1906, Adelaide in the 1940s, grip cars and trailers in Melbourne (to be spread over at least two issues), a San Francisco update and a small, 500 word "Out of the Past" item on Innsbruck. These are ready to go and, thankfully, only the San Francisco item is time sensitive. An article on Geelong and one on Melbourne's tramway signalling are on hand and two papers from the 1934 Tramway Commissioners' Conference are emergency stand-bys. An article on Richard Youl's narrow gauge tramway has been submitted by a young contributor but will require some editing. The Editor does not want to discourage young contributors.... A major work on the Port Adelaide system has been promised. One article being worked on by the Editor, which is still in the planning stages, will cover the two Australian Hedley-Doyle stepless cars, Brisbane 301 and Perth 63, the only cars of their type to leave North American shores. Any assistance with information or photos, particularly with the 1920–40s doings of the Perth car, would be welcomed by the Editor.

Budding authors are encouraged to write on any Australian tramway subject, and short items of 1500 to 2500 words or so are needed to supplement the larger works. As examples, Walter Cumings' Adelaide horse car reminiscences was just under 3000 words, David Burke's Brisbane reminiscences in August 1991 was 2800 words, Dale Budd's 1950s reminiscences in our May 1992 issue ran to 2600 words, and the Athol Wharf diversion in November 1991 was just over 2000 words. The items on Adelaide's restaurant car and the reconstruction of 93U were between 750 and 1000 words. Small items such as these are also very welcome.

Can the Editor accept articles on computer disk?

Yes, the Editor will happily accept articles or news on disk if that is convenient to the contributor. The Editor uses Wordperfect which recognises some 42 different file formats (not all of which are used in the average office) and can accept Wordperfect 4.2 or higher, Wordstar 3.3 or earlier, MS Word 4.0 or higher, Multimate Advantage II, and any file in ASCII text format. Windows Notepad, for instance, saves in ASCII text. Final-form text and Revisable-form text (used by some mainframe computers) can also be accepted, as can DCA format used by IBM mainframes. It is suggested, and certainly in the first instance, that a printout of the disk's contents be provided with the disk. All disks will be returned to the sender.

COLLECTION POLICIES

Warren Doubleday and Richard Gilbert
Ballarat Tramway Preservation Society

The Ballarat Tramway Preservation Society has recently completed the preparation of a collection policy. This policy is to assist the Society in determining what it should be collecting in the future, and expressing, in a written form, a theme for our collection. The Society cannot accept everything that is offered, either free or at a price, or collect everything that is available.

A copy of the policy is attached to this paper. The first page sets out some points on the need to have a collection policy, and then discusses its aims. The policy addresses not only the major element of our collection, our trams, but equipment, spare parts, overhead, track materials, pictorial records, artefacts and Society materials. I will refer to these later, when I review the policy itself.

Many museums, not only railways and tramways, seem to be out to collect everything, and are then in a position of not being able to look after them or to house them. Many of the small country museums are often in this position, of having an item given to them, and then not knowing how to say "no thankyou". All large museums have such a policy, while it may be more general than ours. They apply various tests to the item to see whether it should be collected, using pro-forma and various decision making processes. A copy of such a pro-forma used by the Museum of Victoria is included.

The Society had an idea of its collection policy expressed through its Memorandum of Association, the various thoughts of members, Board actions, and what it had, or was seeking. The need for a written policy was perceived following discussions with museum professionals, the possibility of museum accreditation within Victoria and the question, asked on Museum Grant applications forms, whether we did have a policy or not. You can only say "in preparation" for so long. The Society has also matured in its approach to itself, and now sees the tramway as a specialist museum. It is not trying to compete with other museums, but to carve a niche in Ballarat, and be a reminder of Ballarat's rich past street tramway history.

The major collectibles in all tramway museums are the tramcars themselves. This as expected caused the most problems in the formulation of the policy, given what we have, what we see as our gaps, and possible excesses. Reasoning why it is necessary for a small operational museum such as ours, to have duplicates is given. In the big museum field, the amount of duplicates we have would probably be seen as excessive. As you will see on page 37, we have categorised our collection into three categories. This started off as five, and the various names have changed around a few times.

We have identified two major gaps in the collection, one of which we have a good possibility of filling in the future. The policy also considers trams from other systems, and other forms of Ballarat Transport. You will notice that the SEC tramcars are considered from the Ballarat viewpoint and not their originating class of tram, such as a Melbourne M, J or H class.

To assist in preparing the policy, the Board had a number of special meetings to consider the documents. It also received comments from the Museum of Victoria, which were very useful. The document will now be made available for member comment. After receipt of comments, it will then be finalised.

The Board did look at a point scoring system to try and formalise the various categories to which the trams were allocated. This attempted to allocate points on the basis of value to Ballarat, not necessarily that of Australian or Melbourne tramcar history, the tram's rarity, physical and operational condition, ownership, and value as a passenger carrying vehicle in order to earn money to enable upkeep. Such a scoring system is very hard to set up completely impartially, and is very subjective on viewpoints etc. The problems are; on what basis do you allocate points, score them, and then draw the various cut-off lines?

The Society has over the years collected a number of items which are not strictly relevant to our collection, and part of the policy is a de-acquisition section, outlining the process of disposal. You will note that for example tram No. 32 is considered as supplemental in our listing on page 37. At the time of its acquisition, the tram was acquired specifically for its mechanical equipment, for use in No. 12, which we knew was to be a future collectible.

Finally the Society would be interested in receiving comment about its policy, and hopes that it fosters other formally prepared policies within COTMA. The next policy to be prepared is a Heritage policy. This will attempt to put in writing the standards of up-keep, restoration, presentation of displays, operational aspects such as uniforms, methods of working to try and retain the cultural heritage that tramway has inherited from its past in Ballarat.

A COLLECTION POLICY FOR THE BALLARAT TRAMWAY PRESERVATION SOCIETY LTD.

1. WHY HAVE A COLLECTION POLICY?

To assist the museum in determining what it should be collecting, and what it should be trying to do. It cannot accept everything that is offered, or collect everything that is available. This is due to:

1. Space limitations
2. Duplication with other museums
3. Appropriateness
4. Worth of the object being collected

2. AIM OF A COLLECTION POLICY

A collection policy is to identify the general aim or purpose of the museum. It should be written, so that it can be referred to in the future. This provides some continuity of purpose to the museum. Each museum should clearly understand its particular purpose, its reason for existence in a community. Often this purpose is revealed in the title of the museum. The aim of the collection policy will reflect this purpose. The aim will impose limitations on what is to be collected, and these should be clearly spelt out through the expression of defined or specific objectives. These objectives may comprise:

1. A distinctive theme of the collection, which is expressed in a formal statement, and communicated through the displays of the museum.

2. Variation in the displays, and flexibility of the presentation of the theme to the public.

3. Having conditions for an object's acceptability, based on space limitation, appropriateness, worth or historical significance to the museum, history of the object (its provenance).

4. Physical characteristics and physical condition given its worth, and the ability of the museum to care for the object.

Not all items are necessarily significant, although significance does not depend on monetary value. An object's significance is enhanced by:

1. Its documented history
2. Its place in the past
3. Its physical condition

Each museum should endeavour to make every effort to accept only those objects that fit the collection policy of the museum, and for which the museum is able to care.

Reference: Willis E, and Cook P. in *Handbook for Small Museums*, pp 10–15

3. "THE MUSEUM" OF THE BTPS

In the case of the BTPS, "The Museum" is defined as the whole of the BTPS operation; its depot, the trams, track, overhead, method of operation, the display area within the depot and our collection of artefacts, drawings, photographs etc. We are an operating museum dependent largely upon visitors or tourists for our income. We are not just a tourist attraction.

4. BASIS OF BTPS COLLECTION POLICY

The basis of the collection policy for the BTPS is found in the statement of the objects for which the Society was established for, as stated in the Company Memorandum of Association:

1. To establish at Ballarat an authentic working tramway museum as a tourist, historical and educational attraction.

2. To acquire, restore, maintain, repair, preserve, exhibit and operate trams on the Ballarat tramway system and elsewhere.

3. To construct, manage, operate, maintain, alter, repair, extend and renew tramways together with all appurtenances works and conveniences necessary or desirable for any of such purposes.

4. To purchase, take under trust or otherwise acquire tramcars and any plant, machinery, rolling stock, equipment or parts to be used in connection with any such tramcars and with any tramway owned or operated by the Society.

5. To establish at Ballarat a transport museum and for that purpose to purchase, take under trust or otherwise acquire any item of transport equipment or of tramway historical significance and to maintain, repair, preserve, exhibit and operate the same.

6. To produce, edit, print, publish, issue, sell, circulate, and preserve such papers, periodicals, books, circulars, tickets, photographs and other items of literary or artistic worth as are conducive to the objects of the Society.

While these objectives have been set very wide by the authors of the Memorandum so as not to unduly limit the activities of the Society, these have been further defined in practice by the Society's past activities through its various actions. This is not to say that in the future the Society can not amend these objects, to extend or contract the activities of the organisation

5. SOCIETY HISTORY

As an operator of Ballarat Trams, the Society is forming its own history as an operator. As such it should collect and record its own history and that of its collection, particularly that of the tramcars.

COLLECTION OR ACQUISITION POLICY OF THE BTPS

1. AIM

To define the general purpose of the museum operated by the Ballarat Tramway Preservation Society Ltd. (BTPS) and by this identify a collection policy for the care of our current collection and future acquisitions.

2. PURPOSE

The purpose of the policy is to assist the Board in fulfilling the aims of the Society in what it collects, maintains and disposes of in the future. It is not to detail the standard of upkeep, or presentation etc., this will be purpose of a separate Heritage Policy.

3. BASIS

The policy has been prepared on the following elements, given the history of the Society, its present aims and what is seen as its future.

1. The objects expressed in the Memorandum of Association.
2. The Society's expressed aims in the early days of the Society formation which was to "preserve and operate a portion of the Ballarat system as it was done by the SECV, up to Sept. 1971".
3. The current collection of the Society.
4. The limitation on space available to house the Society's collection in the South Gardens Reserve. (The present building cannot be extended further.)
5. What is likely to become available in the future, and that is consistent with the theme of the collection.
6. What would be nice to have in our collection.
7. The history of the various Ballarat tramway operators.

4. COLLECTION THEME

The theme has been constructed from the relevant elements of the policy basis outlined above, the need to tell the story of an aspect of society in the way that it lived in the past, and the present BTPS Board's aims.

The collection theme for the museum functions of the BTPS is "the history of Ballarat's passenger tramways, its people, equipment, development and operation in relation to the history of Ballarat and the State Electricity Commission of Victoria".

"Ballarat Tramways are Ballarat History" would be a short form statement of this theme.

5. COLLECTION POLICY

The Society's collection comprises a large number of items, varying in size. To prepare a combined or summary policy for all of them would not relevant. Thus the policy has been broken down into a number of headings:

1. Tramcars
2. Equipment /spare parts
3. Overhead and track materials,
4. Photographs
5. Artefacts and other collectibles
6. Society Archives

5.1 Tramcars

The tramcars are the primary collection items of the Society and form the operating section of the museum. While these form the largest single collection item in terms of physical size, they are the smallest in numerical number. The history of the individual trams are reasonably well documented. In the case of tramcars, it is the body number that is considered unique to that car, ie. its essence, not its trucks or mechanical equipment, which was often swapped between trams.

The collection has a number of duplications. This is necessary from an operational viewpoint, where restoration or maintenance of a tram to operating condition, can take a volunteer organisation such as ours, a number of years. It also allows the Society to represent the various colour schemes that were used on the various trams. This adds to the visual impact of the collection and enables better interpretation of the story of Ballarat's trams. To assist in the understanding of the importance of the individual trams to the collection, a classification is suggested. This is:

Essential

BTPS ownership, or under long term control and an essential tram in relation to the history of the tramways of Ballarat. They would not be loaned out, or only leave Ballarat on temporary transfer under the most stringent safeguards.

Reserve

Not necessarily owned by the BTPS, but completes history of the Ballarat Tramways or useful to maintain or have as an operational part of the collection.

Supplemental

Owned by the BTPS, but not needed to illustrate the history of the Ballarat Tramways, and/or in poor condition. The classification shown in the table below, is based on the above categories, though this is somewhat subjective.

The Present Collection

The present collection of trams and their interim classification is presented in the following table:

Tram	Description	Ownership	Status	Classification
1	BTC Horse tram	BTPS	Under Restoration	Essential
11	SEC Single Truck	BTPS	Not operational	Desirable
12	ESCo Single Truck	BTPS	To be restored	Essential
13	SEC Single Truck	Goldsmith	Operational	Desirable
14	SEC Single Truck	BCC	Operational	Desirable
18	SEC Single Truck	Sebastopol	Operational	Desirable
26	SEC Single Truck	BTPS	Operational	Essential
27	SEC Single Truck	BTPS	Operational	Essential
28	SEC Single Truck	BTPS	Operational	Desirable
32	SEC Single Truck	BTPS	Restoration required	Desirable
33	SEC Single Truck	BTPS	Operational	Essential
38	SEC Bogie	BTPS	Operational	Essential
39	SEC Bogie	BTPS	Not operational/display	Supplemental
40	SEC Bogie	BTPS	Operational	Essential
661	MMTB Bogie	BTPS	Operational	Supplemental
671	MMTB Bogie	BTPS	Operational	Supplemental

Legend

BTC	Ballaarat Tramway Company
ESCo	Electric Supply Co. of Victoria
SEC	State Electricity Commission of Vic.
MMTB	Melbourne and Metropolitan Tramways Board
BCC	City of Ballaarat
Sebastopol	Borough of Sebastopol
Goldsmith	Lake Goldsmith Steam Preservation Co-Operative

Future Acquisitions

Missing from the BTPS collection are the following items:

ESCo Toastrack Car:
Built new for the Company in 1913 where its use predominated on the Sebastopol line.

SECV works car:
Used to maintain the tramway track and drainage system.

Policy Relevant to Trams from Other Systems

Trams from other systems are seen to have a low priority, particularly with respect to Ballarat History. They only should be acquired on merit. Each particular case having regard to storage space, historical relevance, condition and need.

Other forms of Ballarat transport

Other forms of transport used in Ballarat, e.g. horse drawn cabs, omnibuses, motor buses etc. are not directly relevant to the history of Ballarat Tramways. While these are relevant to the history of transport in Ballarat, it is considered that acquisition of these items is not part of the Society's aims, although the objects of the Society does allow it.

5.2 Equipment and Spare Parts

This area of collection management for an operating museum is a difficult one. It can collect everything that may be useful or very little and hope that spares will not be unduly needed. The latter practice relies on the ability to repair equipment without resorting to the needs of spare parts. On the other hand, spares are also useful for rebuilding or restoring tramcars. The other limitation of gathering equipment and spare parts is the ability to store, manage them and keep them in good order.

The BTPS has currently a reasonable collection of spare parts for tramcars that it uses, however it is generally poorly stored and not catalogued. Most of the spares held are from SECV origin. The present source of spare parts is primarily from ex Melbourne trams. Most of these parts are not directly relevant to our trams, due to their later construction date and different type of vehicle.

With regard to equipment, e.g. machine tools, the BTPS has a reasonable range of modern hand tools, with some machine tools. Some old style ex tramway hand tools are held by the BTPS, but are seldom used due to their age, size or obsolescence. The need of the BTPS for large machine tools to undertake specialist work is limited due to the availability of the tramway workshops in Melbourne, other engineering shops in Ballarat, or other preservation operators facilities who have set up relevant machines to undertake their work.

The following priorities with respect to spare parts and equipment have been established.

1. Spare parts directly relevant to our single truck or maximum traction bogie trams and in short supply to be acquired.

2. Spare parts related to Melbourne trams to be acquired only where relevant to our Ballarat trams or our two ex Melbourne trams where stocks are not at present held, or are critical to the future operation of the trams themselves.

3. Small hand tools relevant to the SEC operations are to be considered for acquisition where historically relevant, and are suitable for display or could be useful in the conservation of our present fleet.

4. Machines and machine tools to be acquired where considered to be useful, not requiring large space or specialist qualifications for their use. Consideration is to be given to other holdings or abilities of other groups at the same time.

5. Spare parts related to non Ballarat trams or Melbourne trams which are not suited to our trams, will not be acquired.

5.3 Overhead and Track Materials

The BTPS has currently a large collection of overhead equipment for use in additional construction, or in maintaining its present system. Most of the material used in the construction of this equipment is brass, and thereby has a high scrap value. Equipment coming from Melbourne is limited because of its scrap value, however it has some usefulness for use in the maintenance of our overhead.

In the aspect of track materials, the Board has not stored any significant quantity of track materials due to the difficulty of doing this with regard to space, and the location of our depot within in the park. Materials if required for renewals would have to be done with railway type profile rails as grooved tramway rails are no longer manufactured. For points etc., second hand or reconstructed plant would be satisfactory for use in Ballarat.

The collection policy for this type of operational material has been formulated as follows:

1. Overhead materials where necessary for essential spare parts or for historical displays (includes all traction power supply equipment from the switchboard, to the actual trolley wire).

2. Track materials will not be acquired unless for direct use in the track or as essential material for the maintenance of existing material.

3. Samples of track materials, or equipment may be acquired where historically relevant and suitable for display.

5.4 Pictorial Records

The policy is to acquire pictorial records, which is inclusive of photographs, video and films of trams operating in Ballarat, and of the equipment used to maintain, operate construct the system, the personnel who worked on the system, or other photographs relevant to the history of Ballarat and its tramway system. The photographs should not be only of the trams themselves, but of life and street scape aspects of Ballarat's tramway history.

In this respect the following priorities have been established, particularly where a purchase, or where the cost of storage and display are involved.

1. Photographs of 1880–1920s, of all types, including those requiring restoration.

2. Photographs of 1930–1940s: poor or lower grade photographs acceptable.

3. Photographs of the 1950–1960s should be collected where of good quality.

4. Photographs of the last years of operation — Ballarat street scapes, life and activity with the trams. Photographs of trams standing for example would not form a prime priority for acquisition, especially where a cost was involved.

The location and knowledge of other museum's collections of relevant photographs should be incorporated into the collection files for reference purposes. Where possible copies of these photographs should be obtained.

5.5 Artefacts etc.

This area is quite extensive and includes such items as; drawings, tickets, fare tokens, timetables, rule books, personal records, operational paperwork, uniforms. conductors bags, safeworking equipment, tramway street furniture — e.g. stop signs, record books, references used in the operation and maintaining the system, ancillary equipment such as tower trucks.

The BTPS has a collection of such materials although not formally catalogued. The cataloguing of the material will allow for better implementation of this section of the policy in order to find "holes" or excessive holdings of a particular type of material in the collection.

Such material should be collected on the following basis:

1. Historically significant in understanding the operation of the Ballarat tramways over its life.

2. Size of the object/s, the ability to properly store it and its condition.

3. The number of similar items in our collection already.

Material not associated with the Ballarat tramways or the operation of a tramway system should not be acquired, but should be directed to organisations where it would be more appropriate.

Parts or materials removed from tramcars, such as defective structural members should be considered for acquisition. This is where the item's failure can be shown to a part of the tram's overall life history. Examples, are parts of the Horse Tram showing deterioration of the wooden members, and a sample of the steel bolster that failed on the W3's truck due to metal fatigue. It would not be necessary to keep all failed or removed material.

5.6 Society Materials

The Society itself has operated or cared for Ballarat Trams longer than the Ballarat Tramway Company. As such our pictorial and physical records, materials, equipment and operational paperwork should be sampled and collected on a rational basis for form a collection of Society activities and its history for future reference. This should be done as a matter of course. We are today setting up the basis of future historical research into our activities.

6. De-acquisition of Collected Items

An important part of any collection policy, is a policy of de-acquisition, which outlines the process for determining the need of disposal, i.e. finding a suitable home for object in a caring manner. The Society has a number of trams which are either supplemental or surplus to our collection.

The pressure to de-acquisition a tramcar will be brought about by the pressure of space on the Society's collection, its inability to house the item, and its lower standing in the classification ranking, or a deliberate decision at the time of acquisition to acquire an item for a specific purpose and to later dispose of part of it.

The following should be taken into account when de-acquisitioning an item:

1. Its relevance to the history of Ballarat tramways.
2. The condition of the object.
3. Any determination made at the time of acquisition.
4. The need to dispose — i.e. pressure on space.
5. Any alternative use that could be made of the object by the Society.
6. Its relevance to other Museums' collections.
7. Statutory requirements.

When a item has been identified for de-acquisition, the item should be offered to other museums, either for sale, long term loan or as a donation, depending on the acquisition history of the object and its value on the open market.

For tramway items, these should be offered firstly through COTMA, and then other museums, followed by private bodies. In the case of items which are not directly related to tramways, e.g. equipment or tools which could have been used by any organisation, these should be offered firstly to museums affiliated with the Central Highland Historical Association, and then other museums, before being offered on the open market. An exception to this would be if the item was determined to be of national or state significance when priority should be given to the Museum of Victoria.

OCCUPATIONAL HEALTH & SAFETY

Craig S. Tooke
Melbourne Tramcar Preservation Association

BACKGROUND

I would like to begin my paper by firstly exploring some of the history behind occupational health and safety as we know it today.

The origins of concern for health and safety in the work place can be traced back to Britain when in 1844 the Factories Act received Royal assent and became law. The necessity for this Act was primarily due to the industrial revolution going on at that time in Britain, which saw larger and more dangerous machinery being developed and hence a need for legislative measures to protect those using these machines.

As time progressed so the sophistication of industrial processes also progressed.

AUSTRALIAN LEGISLATIVE APPROACH

Here in Australia much of our legislation is modelled on that used in Britain, and legislation in the area of occupational health and safety is no exception. As mentioned previously the first Act developed was the Factories Act of 1844. Similar legislation soon came into force throughout Australia under in some cases similar or in others slightly different names.

It is interesting to note that as early as 1917 insurance companies in America were refusing to insure people who worked with asbestos because they knew it involved high risk.

The status quo remained virtually unchanged until arguably one of the most important reports since the Factories Act was introduced, the Robbins Committee Report[1] of 1972 was handed down. This report lead to the drafting and subsequent Royal assent of the Health and Safety at Work Act of 1974[2] in Britain. This act has been used as a basis for the drafting of all of the Australian acts that deal with occupational health and safety.

It is interesting to note that in the financial year 1989-90 the cost of workers compensation claims in Australia amounted to $4·8 billion dollars or 1·3% of non-farm GDP[3], a tremendous burden on the community.

The prevention of occupational injury and disease should not rely only upon the use of the "big brother" approach; it is also a matter of education, training and commitment. These areas have been addressed to varying degrees by each of the Australian Acts. I have included the titles of the principal occupational health and safety Acts at the rear of this paper as Appendix One for further reference.

Because I am familiar with the Victorian Occupational Health and Safety Act (1985)[4] I will from now on be using this as the base act throughout this paper. Similar Acts exist in other states and these should be consulted for varying local considerations that may be applicable.

VICTORIAN OCCUPATIONAL HEALTH ACT

This Act is the principal Act dealing with occupational health and safety in Victoria. It is divided up into a number of sections each of which deals with different aspects of occupational health and safety. The operation of the Act is overseen by the Victorian Occupational Health and Safety Commission. Similar bodies exist in all of the other states and further details can be found in Appendix Two at the end of the paper.

The Act places a responsibility on all manufacturers and suppliers of equipment, employers, owners, bodies corporate and individuals to ensure that equipment, materials and processes used in the work place are safe and present no hazard when utilised.

The penalties for non-compliance with the act can be up to a fine of $250 000, two years jail or both for any offence found in breach of the act. In addition to the Act, common law provisions also apply with certain limitations to the area of occupational health and safety.

APPLICATION OF THE ACT TO MUSEUMS

Because the Act is designed primarily for situations where paid labour is employed application of the Act to museums is limited where volunteer labour is used. However, it is directly applicable where either paid employees or contractors are involved in museum activities.

This should not, in my opinion, mean that certain provisions of the Act should not be also applied where volunteer labour is involved. For example it is just as easy for a museum volunteer who is filing an asbestos electrical arc chute to breath in an asbestos fibre and develop asbestosis as it is for a person employed by the Public Transport Corporation and engaged in identical work to breath in the fibre and develop asbestosis.

Under the Occupational Health and Safety Act various Regulations and Codes of Practice have been developed for use in industry. Whilst the regulations

are mandatory the Codes of Practice are designed as a guide only. They can and have been cited in prosecutions by the Department of Labour as minimum standards. It would be wise for us, as tramway museums, to keep abreast of and implement these as minimum standards in our museum operations.

As can be seen by viewing the information contained in Appendix Three, a great variety of areas are covered by these Codes of Practice. Various standards published by the Standards Association of Australia are also applicable to certain situations in which museums are likely to be involved. There is also large range of commercial literature available in the area of occupational health and safety and I have listed some useful and relevant titles in Appendix Four.

Assistance and information on many aspects and occupational health and safety problems can also be obtained from the various authorities that oversee the occupational health and safety acts in each state.

PRACTICAL CONSIDERATIONS FOR MUSEUMS

As museums we are attempting to preserve our trams in first class operating conditions so that future generations will be able to ride and view them just as we have had the opportunity to do. We should however not be attempting to use ancient and dangerous practices in the preservation of the trams.

An example to illustrate what I am talking about is the electric cables used to control the power within a tram. No one in their right mind would use the original vulcanised india rubber insulated cable when rebuilding or restoring a tram in this day and age when far more modern and safer cables are available.

The first and most important occupational health and safety consideration by a museum, therefore, should be a commitment by the Board of Management to creating a safe and efficient working environment for all members and others who are involved in museum activities. Accidents and injury do not just happen. They are the result of the actions of people and a given set of circumstances. Just as a fire needs both fuel and oxygen to continue to burn so does it take both a person and a given circumstance for an accident or injury to occur.

Having made this commitment, questions such as the following should be asked:

1. Do we have a person who looks after safety matters at our museum?
2. Do we have a reporting system in place to record and follow up any accidents or near miss incidents?
3. Do we have written procedures in place for activities that our members undertake on behalf of our museum?
4. Do we have adequate first aid facilities at the museum?
5. Is our fire protection equipment adequate?
6. How do we store our flammable material such as oils, paints and solvents?
7. Do we store our spare parts and equipment in an accessible manner?
8. How often do we review our procedures?
9. Do we have a list of emergency phone numbers available?
10. Are all of our machines fitted with correct guards?
11. Do we have any necessary personal protective equipment available for use at our museum?
12. Do we carry out regular safety audits of our museum site ?
13. Do we have copies of the material safety data sheets for each of the chemicals, solvents and paints used at our museum?

Whilst you may think that dealing with matters of occupational health and safety are time consuming and an added expense on museums, this is not the case.

Imagine the situation where one of your museum's historic or newly restored tramcars burns to the ground through lack of proper fire protection; or a situation where a museum member injures themselves and inadequate first aid facilities are available.

What would you say, or more importantly how would you feel, being in the situation yourself? What would you say to defend your museum in a common law court case where a member was suing your society for an obvious case of negligence ?

Proper care and planning can also lead to improvements in productivity and in cost savings which will assist all involved in your museum.

CONCLUSION

I have attempted to illustrate that as museums we are involved in a highly industrial environment and therefore the occupational health and safety of both members and our paying visitors should be of prime importance to us all.

Occupational health and safety should be yet another area in which, as museums, we strive for excellence. Through commitment, careful planning, critical analysis of what we are striving for and the way we are going about achieving our goals, we can achieve this excellence.

Observance of the legislative framework that is in place together with use of the Codes of Practice and appropriate Australian Standards will go a long way to ensuring that we reach this very important goal, allowing our museums to be run effectively, safely and efficiently.

REFERENCES

1. Robbins Committee Report 1972, H.M.S.O. London 1972.
2. Health and Safety at Work Act 1974, H.M.S.O. London 1974.
3. The Review of Occupational Health and Safety in Australia, Australian Government Publishing Service 1990.
4. The Occupational Health and Safety Act 1985, Victorian Government Printer.

APPENDIX 1

The principal Occupational Health & Safety Acts correct to December 1991 are:

New South Wales

The Occupational Health & Safety Act 1983

Victoria

The Occupational Health & Safety Act 1985

Queensland

The Workplace Health & Safety Act

South Australia

The Occupational Health, Safety & Welfare Act 1986

Western Australia

The Occupational Health, Safety & Welfare Act 1984

Tasmania

The Industrial Safety, Health & Welfare Act 1977

Australian Capital Territory

The Occupational Health & Safety Act 1989

Northern Territory

The Work Health Act 1986

APPENDIX 2

The Government authorities responsible for occupational health & safety within Australia correct to December 1991 are;

New South Wales

WorkCover Authority
1 Rosebery Ave
Rosebery 2018 Ph. 697 8333

Victoria

Victorian Occupational Health & Safety Commission
80 Collins St
Melbourne 3000 Ph. 655 6444

Queensland

Division of Accident Prevention
Department of Education, Vocational Education, Training & Industrial Relations
State Law Building
50 Ann St
Brisbane 4000 Ph. 239 3111

South Australia

South Australian Occupational Health & Safety Commission
Henry Waymouth Building
100 Waymouth St
Adelaide 5000 Ph. 226 3120

Western Australia

Department of Occupational Health, Safety & Welfare
"Westcentre"
1260 Hay St
Perth 6000 Ph. 327 8777

Tasmania

Department of Labour & Industry
81 - 89 Brisbane St
Hobart 7000 Ph. 33 7657

Australian Capital Territory

Private Sector Occupational Health & Safety Section
Industrial Relations Branch
A.C.T. Administration
(Address Unknown)

Northern Territory

Work Health Authority
66 The Esplanade
Darwin 0800 Ph. 89 5511

APPENDIX 3

The following Codes of Practice are in use current to October 1991;

National Codes

- Prevention and Management of Occupational Overuse Syndrome
- Safe Removal of Asbestos
- Safe Handling of Timber Preservatives & Treated Timber
- Safe Use of Vinyl Chloride
- Manual Handling
- Safe Use of Synthetic Mineral Fibres
- Control of Workplace Hazardous Substances

New South Wales

- Garbage Compactors
- Tunnel Construction
- Manual Handling
- Farm Silos & Field Bins

Victoria

- Workplaces
- First Aid in the Workplace
- Foundries
- Lead Control
- Manual Handling
- Manual Handling in the Furniture Removal Industry
- Manual Handling (Occupational Overuse Syndrome)
- Safety Precautions in Trenching Operations
- Temporary Electrical Installations on Building & Construction Sites Tilt-up Constructions
- Safe Work on Roofs (Excluding Vila Constructions)
- Safe Use of Cranes in the Building & Construction Industry
- Safety in Forest Operations
- Building & Construction Workplaces
- Demolition

Queensland

- Manual Handling
- Manual Handling (Building)
- Workplace Amenities
- Project Amenities Safe Design & Operation of Tractors
- Personal Protective Equipment
- Steel Construction (High Rise)

South Australia

- Safe Removal of Asbestos
- Manual Handling
- Safe Use of Synthetic Mineral Fibres
- Safe Handling of Timber Preservatives & Treated Timber
- Safe Erection of Structural Steelwork
- First Aid in the Workplace
- Logging Stanchions & Bulkheads
- Chainsaw - Safety Requirements
- Brush Cutters - Safety Requirements

Western Australia

- Safe Work on Roofs
- Hepatitis B & HIV/AIDS
- Prevention & Control of Legionnaires Disease
- Styrene in the Fibreglass Industry Noise Control in the Workplace
- Manual Handling

Australian Capital Territory

- Manual Handling

Northern Territory

- First Aid in the Workplace

APPENDIX 4

The following selected references would prove useful in the field of occupational health & safety:

Accident Prevention
International Labour Organisation 1986

Health & Safety at Work
John Mathews
Pluto Press 1985

Work Health Makes Work Sense
Damien J. Smith
Enterprisecare 1989

Planning Occupational Safety & Health
CCH Australia
3rd Edition 1991

Guidebook to Australian Occupational Health & Safety Laws
Adrian Brooks
CCH Australia
3rd Edition 1988

Managing Occupational Health & Safety in Australia
Quinlan & Boyle
MacMillan Australia 1991

Australia Standard A.S. 1470 - 1986 Health & Safety at Work - Principles & Practises
Standards Association of Australia 1986

Manual of Industrial Personal Protection
Standards Association of Australia 1986

Australian Standard A.S. 1885.1 - 1990
Work Place Injury & Disease Recording Standard
Standards Association of Australia 1990

RELATIONSHIPS WITH GOVERNMENT AUTHORITIES

THE ADELAIDE EXPERIENCE

Christopher Andrews
Australian Electric Transport Museum

The AETM has had on-going relationships with a number of Government Authorities over the period of its existence.

The following is an outline of some of these experiences:-

A. SALISBURY COUNCIL

Salisbury was the only local government authority that was prepared to permit a tramway museum to be established in its area.

1. The construction of the two kilometre track was a Council initiative under the auspices and efforts of an unorthodox and dynamic City Engineer. The project was financed by funding under the State Unemployment Relief Scheme (SURS).

1.1 There has been no legal agreement drawn up regarding:-

(i) ownership of the line
(ii) operating times
(iii) major renewals ie: capital replacement

There is an unwritten understanding that the Council has legal possession of the track (outside of the Museum site boundary) and periodic negotiations occur in regard to the maintenance of the line.

The AETM is essentially self regulating in the absence of any attempts by authorities to institute regulatory control, eg: the State Transport Authority or the Department of Labour.

1.2 Salisbury Council finance has been forthcoming only for work on the track although it has hinted at support for particular schemes such as improvement of the line in St Kilda township or the foreshore area.

1.3 Council works employees were employed on track construction when AETM member, Chris Steele, was recruited as the project co-ordinator.

1.4 During construction of the line, AETM members acted as virtual subcontractors in supplying specialist hardware. This left very little in the way of labour resources for other museum projects and activities.

A similar situation arose when AETM cars operated on the Glenelg line in 1978-9 and members were rostered on vehicles.

1.5 The Council-administered RED Scheme project in 1973 gave the AETM a great boost and set a precedent for this type of museum in relation to capital-infrastructure input by government agencies. A significant spin-off was that this boost in activity evinced greater effort from museum members.

2. In more recent times there have been negotiations with the Council when it was necessary to close roads for track renewal. This has sometimes involved restricting access to the properties of local residents.

A grant from Council has also been provided to improve the playground stop.

3. Salisbury Council has incorporated the tramline into landscaping activities for the foreshore area. When the Mangrove street crossing was renewed Council provided staff, equipment and material eg: the rock fill and the tar dressing.

Council makes an annual visit to the Museum to acquaint Council members and staff with the current operating situation. There is also minor publicity support (possibly a blessing in view of potential vandalism dangers).

Council also expressed some concern when approaches were made by the Port Adelaide heritage authorities regarding a possible move there. Perhaps more advantage could be taken of these concerns to encourage additional Council support.

4. The AETM determines its own long-term policies and day-to-day activities with no demands being made by Council.

B. TOURISM IN SOUTH AUSTRALIA

Tourism SA (The South Australian Tourist Bureau) has printed several runs of the St Kilda Tramway brochure as well as a poster in past years.

Occasionally the information they provide is not accurate and requires correction.

C. HISTORY TRUST OF SOUTH AUSTRALIA

This is the pre-eminent statutory body in South Australia acting as an umbrella organisation for the disbursement of government funding assistance to museums using a system based on standards for accreditation. An office bearer and trustee of the AETM has also been Chairperson of the History Trust. In turn experience has been imparted to the History Trust with a number of recommendations now embodied in administrative and liaison practices.

D. South Australian Department for the Arts and Cultural Heritage.

Funds were recently allocated by this Department towards the fitting out of the new body shop.

E. Commonwealth Department for the Arts.

An attempt has been made to access a new source of Commonwealth funding for several projects up to a value of $50 000.

It is hoped to make the Bib and Bub project a recipient of "Century 21" funding.

F. State Transport Authority (STA)

In 1978 and 1979, the STA under the impetus of a dynamic public relations officer took the initiative of celebrating the centenary of Adelaide street public transport and the golden jubilee of the Glenelg tramway. This entailed the operation and display of vehicles selected from the museum collection and included trolley buses as well as tramcars. The STA bore all the costs.

More recently in 1990 a mutual commercial venture was suggested for AETM tram operation on the Glenelg line. This proposal was, however, rejected by the AETM as it was seen to be too time-consuming with little publicity or financial advantage.

The STA has recently produced a poster, promoting the Museum, which is displayed in the Glenelg tramcars. The STA transport map also includes the St Kilda tramway.

The STA was a joint sponsor for the restoration of car 264, a state sponsored "Jubilee 150" project. The original agreed conditions for the joint annual use of this car, however, have lapsed with the STA no longer pursuing heritage matters.

Another example of co-operation between the STA and the Museum was the housing of two surplus H cars at St Kilda. The STA paid for and also constructed track alterations to facilitate the loading and unloading of theses cars. Immediate and full ownership of these two trams is currently an "issue" as under the present arrangements the AETM may be legally and financially liable should anything untoward occur if they are operated.

G. Future directions.

There are other Local, State and Commonwealth government and semi-government agencies that may be potential sources of financial and material assistance.
More recently, and aided by a member who is a lecturer with a local TAFE college, the Museum has been assisted by TAFE on vehicle restoration and building construction work. As part of their on-the-job training activities, staff and students from this college have carried out such tasks as spray painting buildings on the site, formwork for concreting, carpet laying, shopfitting and various elements of timber machining and construction. This work has been of considerable assistance to the Museum.

In addition, offenders under the Community Service Order Scheme of the Department of Correctional Services have been engaged in overhead pole painting and track maintenance.

State and Commonwealth labour market programs have in the past been of considerable benefit to non-profit organisations such as the AETM. However policy changes over the past 3-5 years have seen a major shift in emphasis away from the capital intensity of job-creation programs such as the former Community Employment Program (CEP). The major emphasis is now on training and short term "KickStart" type activities.

Notwithstanding this, if museum organisations are willing to make available their facilities, which are often of an constructional and engineering nature, there is scope for integration of these training activities into museum operations. The use by the AETM of TAFE assistance is but one example.

H. Summary

As can be seen, the Museum has generally benefited from its dealings with external government agencies, although there are potential drawbacks which need careful consideration before becoming involved. A great deal will depend on the personnel willing to participate and the general economic and financial conditions pertaining at the time. Opportunities will nonetheless be available and should be positively considered.

Discussion and Comments:

Community Service Order workers:

1. AETM reported mixed experiences with CSO workers. Some of them are satisfactory, especially the more mature ones; others do not do any useful work. Some museum members will not work with them.

2. Different workers come each week, which can be a problem.

3. Supervision is also an issue. The best solution is to work with them in a work team.

CORROSION: ELECTROLYSIS

John Lambert
Brisbane Tramway Museum Society

The aim of this paper is to give COTMA delegates (as traction system owners and operators) a brief introduction into the nature and control of electrolysis caused by stray current from DC traction systems.

The testing of interference, the design and installation of mitigation, plus the correlation of all results is a highly specialised technical area and well beyond the scope of this paper. The State Electrolysis Committee, where it exists, is the appropriate technical body for coordination and consultation regarding stray current problems and mitigation systems.

STRUCTURE

This term is used to describe any underground metallic structures that may be influenced by stray current. Examples of structures are telephone cables, gas mains, oil lines, water mains, electricity cables and the electricity earth (MEN) system.

INTERFERENCE

Interference occurs when stray traction currents influence metallic structures so that their potential to soil is altered. Interference may be either *cathodic* or *anodic*. Where cathodic, the potential of the structure is made more negative and where anodic, the potential of the structure is moved in the positive direction. At points where stray traction current is collected by the structure, the potential changes in the cathodic direction. Where it is discharged the potential changes in the anodic direction and if conditions are right corrosion (electrolysis) will take place. The zones where this occurs may be significantly remote from the traction system. (See Fig. 1)

LIMITS

The tolerable limits of interference vary from state to state. However, it is recommended that anodic interference should be controlled to less than a change of 20 millivolts positive, while cathodic interference is not normally controlled except where the potential change is considered excessive.

TESTING

Testing is performed over a 24 hour period using chart recorders at several strategic locations. At the substation the following items are monitored:

1. Substation load
2. Rail to earth potential.
3. Drain current.
4. TDU output.

At the drainage point on the structure the following items are monitored:

1. Potential to soil.
2. Drainage current.

At several other locations on the structure, known as test points, potential to soil charts may also be taken to assess the function of the drainage bond. (See Fig. 2)

Initial interference testing in a Tramway Museum environment would most likely consist of 24 hour charts on the following items:

1. Substation load
2. Rail to earth potential at the substation.
3. Several test points on the structure.

These charts would then be correlated and the results would indicate what effect the operation of the traction system has on the structure. Should adverse results be indicated then corrosion mitigation would have to be designed and installed. Interference may be reduced (possibly to acceptable levels) by minimisation of track leakage by the following methods:

1. Obtaining maximum conductance in the rail return by ensuring that the rails form an electrically continuous conductor. Bonding should be installed across all rail joints (fishplates) and between rails (across the track) at intervals of approximately 50 metres. Bonding should also be made to and around special work as manganese steel is of higher resistance than carbon steel.

2. The installation of negative feeders from remote parts of the track to the substation.

Special note: Track in mass concrete is notoriously bad for current leakage as concrete is hygroscopic, thereby becoming a conductor under certain conditions. Good bonding is therefore essential during track construction.

MITIGATION (DRAINAGE BONDS)

These drainage bonds are installed so that they "drain" the stray current off the structure and return it to the traction system. There are a number of different types of drainage bonds in Australia; some of these are:

TDU: Thyristor Drainage Unit
VCDB: Variable Conductance Drainage Bond
TRAD: Transformer Rectifier Assisted Drainage

(See Fig. 3)

It is preferable to return stray current to the substation negative busbar via "Electrolysis Feeders" as this gives greater control over the drainage bond than if the stray current is returned to the rail. (See Fig. 4)

CONCLUSION

Operators of tramway museums should be aware of what underground metallic structures exist in the vicinity of their traction systems and appropriate testing should be performed to ascertain if any adverse effects have been created. Consultation and cooperation with the owners of these structures is of great importance in these matters.

ACKNOWLEDGMENTS

I wish to acknowledge Mr Bill Attard and staff of the Victorian Electrolysis Committee for their assistance in gaining information on Traction Electrolysis, Mr Brian Byrne of Telecom Australia who made the initial contact with Mr Attard and Mr Jim McMonagle of Telecom Australia who supplied information on electrolysis in New South Wales.

REFERENCES

1. Australian Standard 2832.1 Guide to the cathodic protection of metals.
2. Information from the Victorian Electrolysis Commission
3. *An Introduction to Corrosion Technology* (Australian Corrosion Association)
4. Information from the NSW Electrolysis Committee.

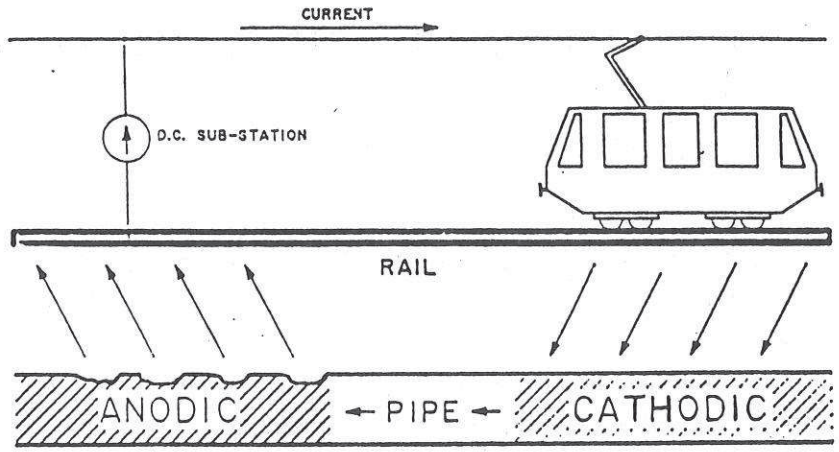


FIGURE 1 : CORROSION DUE TO STRAY TRACTION CURRENT

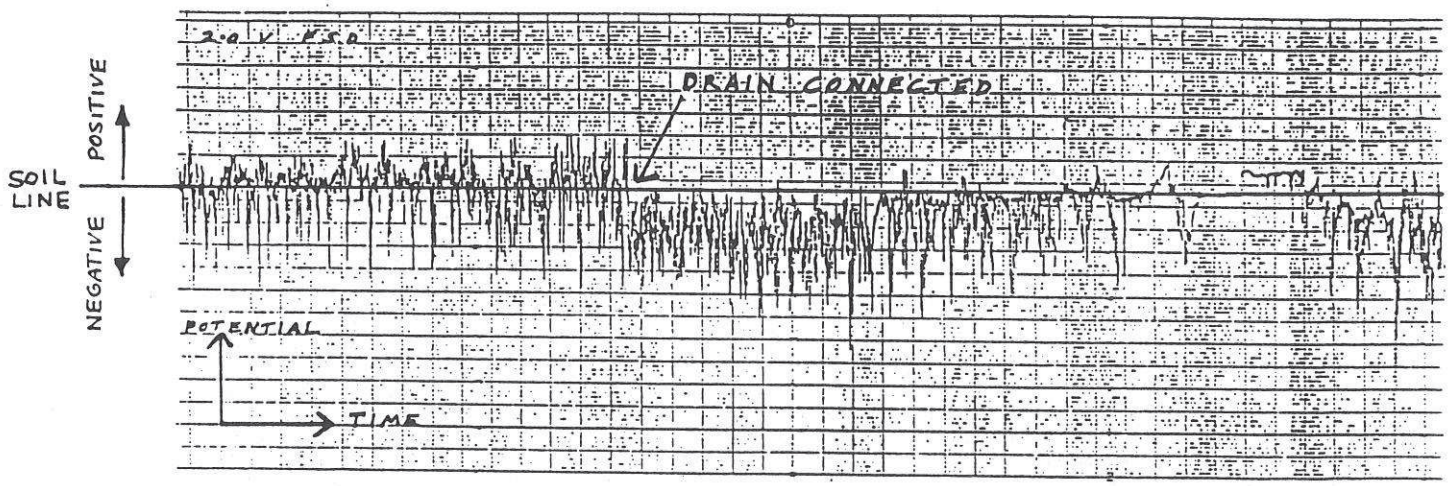


FIGURE 2 : 24-HOUR PIPE TO SOIL POTENTIAL RECORDING SHOWING EFFECT OF STRAY CURRENT DRAINAGE

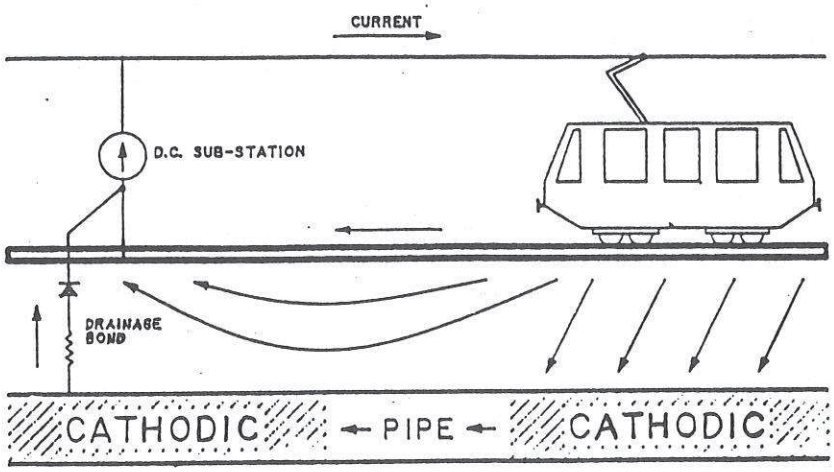


FIGURE 3 : DIODE CONTROLLED DRAINAGE BOND

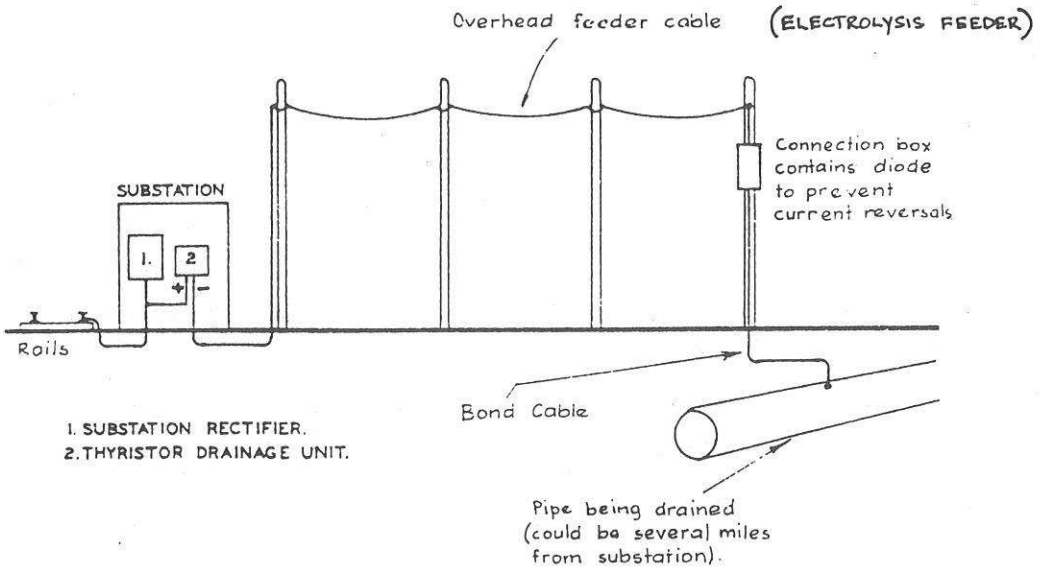


Fig. 4 : Schematic Diagram of Electrolysis Drainage

PROMOTION

Graeme Vellacott
Senior Vice President
Hotham Valley Tourist Railway Inc.

Mr. Graeme Vellacott presented a paper on marketing, advertising and promotion strategies for a volunteer-based operating rail preservation group, as suggested by the Hotham Valley's Tourist Railway's experiences. The main points in this paper are summarised hereunder:

1. BACKGROUND

- Hotham Valley Railway was established in 1974 as operator of a 24 kilometre line from Pinjarra to Dwellingup.
- It now carries 47 000 passengers per year and has an annual turnover of $1·3 million.
- As an example, a recent tour carried 81 passengers at $390 each. The train had a crew of 36 — 6 to run the train, 30 devoted to passenger care.
- How has this come about?

2. UNDERSTANDING AND IDENTIFYING YOUR INDUSTRY AND TRUE COMPETITION

- HVR had to broaden its revenue base on the 24 km line.
- The rail enthusiast market is too small to allow success — the aim had to be at members of the general public.
- HVR decided it was in the tourism industry (not rail preservation), competing for visitors and the leisure dollar with other organisations such as Sea World.
- It was decided to run rail tours to other places, giving people a good time.
- Mr and Mrs Average with two kids are the clients. *What do they want?* Give it to *them* to satisfy *your* hobby.

3. CREATING THE PRODUCT

- HVR had to create something unique and credible.
- Need to cater for tourists.
- Need a trading name.
- Strong Corporate Image needed
  - logo
  - slogan *The Railway run by Volunteers*
- HVR has a full-time equivalent staff of $5\frac{1}{4}$.
- Need a balance of commercial operation versus enthusiast organisation.

4. CREATING PUBLIC AWARENESS

- Advertising needs to be long term to build up a profile.
- HVR – 10% of budget is for advertising.
- Find creative persons in the membership to do it.
- News items in local community newspapers
- Write to all Rotary/Lions/Apex who can't find speakers.

5. CONVERTING PUBLIC AWARENESS TO DOLLARS VIA BOTTOMS ON SEATS

- $\frac{1}{2}$ million leaflets, half paid for by Macdonald's, printed "in-house".
- Free ride for family of hotel concierges to encourage promotion.
- HVR has its own booking centre — bookings are listed by postcode and by how clients found out about HVR. Advertising can be channelled to where it is most effective.
- Only use radio and TV for awareness and image. For specific sales — use press.

6. HELPFUL HINTS

- Produce a "Bid Pack", for potential sponsors showing achievements and aspirations, with glossy pictures. [About $600] Leave this with managers for a week.
- Be ruthless on "front-of-house" people and their behaviour.
- HVR does surveys constantly –
  - by phone;
  - by coach captains on each trip.

ACCREDITATION AND ITS EFFECT ON TRAMWAY MUSEUMS IN NSW

David Rawlings with assistance from Bill Denham
South Pacific Electric Railway Cooperative Society Ltd.

Accreditation is defined as:

- certified as being of a prescribed quality;
- being declared as meeting official requirements.

BACKGROUND

On Sunday May 6, 1990, an historic train trip, hauled by locomotive 3801, was climbing Cowan Bank heading home after a trip to Newcastle.

For various reasons 3801 could not lift the train up the grade and, after several attempts, had come to a halt. Without warning an Intercity express ploughed into the rear of the train, resulting in several fatalities.

As a result, the State Rail Authority imposed an immediate and total ban on all steam-hauled train trips in NSW. This ban applied to main line and branch line operators. Operators on private lines were not affected.

At the following coronial inquiry, the NSW Deputy Coroner, Derrick Hand, handed down a finding "that the accident did happen because of that 'million to one chance'". Basically the evidence presented at the inquiry led him to believe that due to excessive sand on the rails the whole train was effectively insulated from the signalling system which allowed the following train to proceed. The overall actions of the Society running the trip did not contribute to the accident.

For reasons unclear, the Transport Minister had formed the opinion that as steam train operations were not all that popular the ban should remain. Within a couple of weeks he had changed his mind, perhaps due to the volume of correspondence he had received regarding the social importance of steam-hauled train trips. These letters had come not only from the well-organised enthusiast lobby, but from many councils and shires throughout the state as well as community groups, all expressing the feeling of fondness for steam trains held by the public at large.

The Minister then set up a meeting early in January 1991, between the historical societies, the State Rail Authority and the Department of Transport to discuss a proposal for the accreditation of historical train operations on SRA main lines. The major thrust was for main line operations and branch lines connected to the main system, whether used by SRA for normal services or not. Two working parties were established to consider two key issues: Accreditation Standards and Public Liability Insurance.

All historical societies were invited to present submissions detailing their respective group's views. Our [ie SPER's] major point of issue was that we were an electric tramway and not a railway, and as such we should not be considered in the same category as rail tour operators. We operate on purpose built, private tramway right of way with no common workings with other operators, travelling at relatively low speeds with light passenger loadings. We are a long term operator with no operation related incidents during 26 years of running the trams.

On March 11, 1991, the Minister announced the resumption of heritage train operations. Along with this announcement the SRA released the Accreditation document for main line operations. The document was basically non-negotiable. The NSW Rail Transport Museum and 3801 Limited prepared their accreditation submissions to the Authority and following extensive and detailed questioning the Accreditation Panel gave in-principle support to the proposals. These two organisations eventually received full approval, followed shortly afterwards by ARHS (ACT Division).

One outcome from the accreditation steering committee was a proposal that the SRA not be responsible for operations on non-SRA lines and that the private line operators come under control of the Workcover Authority (formerly the DLI). The Workcover code in force at that time regulated industries only where there was a demonstrated public safety need. The Workcover Authority did not regulate private railways over 650 mm gauge and would require internal changes if it were to set and monitor accreditation standards. The WCA decided that it would continue its current policy of non-active involvement until a change of incident/accident record justified otherwise.

SOCIETY'S ACTION ON SELF REGULATION

At this point it is relevant to return to the early days of the Museum in the Royal National Park.

As the Museum developed after 1961, plans were also undertaken to ensure the project would stand official scrutiny, more so since the enthusiast group had been subject to public ridicule from various quarters. For that reason, an early official act was the publication, by the Board of Directors in 1963, of a set of "Regulations for the Conduct of Traffic and Guidance of Members and Employees". (The Grey Book)

As the time for trial electric operations approached during the latter part of 1964, the museum executive appointed a member, who had been a tram driver, to the position of Chief Driving Instructor. He was in control of all driver training for the next 5 years. The early operation was supported by the first issue of

"Tramway Working Orders" based on the documents previously used by the Department of Government Transport.

After 4 years of operations, the Directors were faced with a number of problems. The initial power supply had such a limited power output that trams were restricted to slow speed operation. This was about to change as approval had been given to boost power supply. The number of trams being readied for traffic was increasing. as was the number of members seeking approval to drive.

These factors forced the implementation of the next stage of development. It became necessary to form a committee of experienced members to establish a training programme for traffic staff and to expand the Rules and Regulations to include Working Orders and other instructions due to the increasing number of new members who had not had previous contact with trams in their normal operating environment.

The Crew Training Course Committee reported back to the Directors in 1970 with outline proposals for training to be implemented as soon as details could be finalised. A number of senior members were appointed to the Committee to establish a practical training programme, based on the outline proposals. These members became the Society's first "Instructors".

In 1972, the first review of drivers resulting from this Committee's training programme was held. This took the form of lectures based on the Handbook, which contained Working Orders and Equipment and Operation sections. Following the lecture, each member was asked to demonstrate his capability in driving. For the first time he was instructed on the methods of operation of electrical emergency procedures. Those who showed reasonable competency had their previous authorisation renewed. Those who did not attend this review had to undertake any new training programme from the beginning. Concurrently, a similar programme was instituted for the conductors.

The final stage was to invite other members to undertake training. It was stressed that all new trainees would have to be approved as a conductor before driving instruction could commence.

The programme continued until 1980, being altered and adapted as the Instructors gained experience in teaching and the peculiarities of the system and the tramcars became evident. At that stage a number of changes took place to further improve the training programme situation.

In 1980, the Crew Training Committee suggested that the next stage of training should be implemented. This was a written examination for previously authorised drivers. The examination consisted of 20 questions which covered the topics of museum philosophy, working orders, electric operation and mechanical operation. Three instructors marked the papers independently and the marks were aggregated, with the pass mark being set at 45. The Crew Training Committee would discuss any major difference in the marking of any particular answer at their next meeting.

With the plans drawn up for the new tramway at Loftus, it became apparent that the new line would present totally different operating situations with which we had no experience, including the crossing of a side street and several property access crossings. A new training programme was devised and once again the traffic staff had to be retrained.

Prior to this training, the then Chief Training Officer was able, with the co-operation of the Melbourne tramway authorities, to attend the Hawthorn Training School as an observer and to have lengthy discussions on training with their staff. This co-operation has continued through the years.

In view of the new accreditation procedures being implemented by the government, we are in the fortunate position of having in place a well structured training course for our traffic staff, which has been based on our many years of experience.

Other Events Affecting the Museum

Until mid-1991 the Museum was prepared to sit and wait until the relevant authority approached us. However the State Rail Authority ceased electric train services on the Royal National Park Branch Railway line. This was an opportunity which the Museum could not afford to miss, so when invitations for Expressions of Interest for the disused Branch Line were called, the Museum lodged a proposal. The format of the Expression of Interest was based heavily on accreditation procedures. This gave us an insight into the new requirements. The Authority accepted our proposal "in principle", subject to further negotiations including accreditation.

So, in a relatively short space of time the situation had changed from the Workcover Authority's "let well enough alone" to one where, for the first time in our 40 year history, an outside authority was to regulate our operational procedures.

Prior to the SRA letting out the Expression of Interest documents, the SRA Accreditation Officer, Keith Audet, sought an unofficial visit by a number of SRA representatives from the Special Trains Unit and their legal department.

Apart from Keith Audet, none of the SRA group had visited the Museum previously. The only knowledge of the Museum was, quote, "a few trams in a tin shed". In fact prior information hinted that one of the group was indifferent to visiting the Museum at all. It was therefore an eyeopener for them to see the facilities that existed.

During the mandatory tour of the display hall it became evident that the visit was more than a sightseeing trip. Questions on our history, formation

and legal standing were the first raised followed by those dealing with financing of the enterprise and its long term viability. As the party passed into the "works" side of the Museum, the thrust of the questions centred around maintenance procedures, planned maintenance, the qualifications of those involved in tramcar maintenance and the keeping of records. Although impressed with the workshop facilities and our workmanship in general, the discussions inevitably returned to accountability of personnel. The fact that our Chief Engineer is a professional electrical and mechanical engineer and those responsible for maintenance have the appropriate trade qualifications appeared to alleviate the earlier concerns.

On the subject of the Operations staff, especially the tram crews, it was stressed by the Museum that the Directors had initiated the training of our tram crews and the publishing of the Rules and Regulations early in our public operations. The current set of Rules and Regulations were shown to the visitors, along with the earlier documentation to illustrate our long term commitment to safe public operations.

The visit was beneficial to both the Authority and the Museum as it changed the visitors' preconceived ideas of the museum consisting of "little boys playing trams" to a dedicated group of "professional amateurs".

The visit by representatives from the Department of Transport was almost a carbon copy of the SRA visit. Apart from operations safety, which included maintenance standards and conformity to those standards, their concern was one of management stability and financial ability.

As the Museum has been established for over 40 years and the majority of the current Directors have been on the Board for over 10 years, the officials believed we had satisfied the management criteria. They commented that the Museum had shown great innovation over the years and had been prepared to accept responsibility for its actions. This would hold the Museum in good stead with the authorities.

Both groups of visitors who viewed our Operations Handbook expressed surprise that such an authoritative document had been produced by a volunteer group and requested a copy for their files. We have been led to believe that other groups have been shown the documents as a guide to what is desirable.

The only shortcoming for the Museum to receive full accreditation approval is in the area of records. Although maintenance for trams, track, overhead wiring and buildings is being carried out, the new accreditation conditions require documented proof that such maintenance is carried out in accordance with predetermined standards.

ACCREDITATION CRITERIA REQUIREMENTS

The accreditation document forms part of the Operating Deed between the SRA and the operating organisation. There are two types of Deed: a "Main Line Operating Deed", where only the equipment requires registration, and a "Disused Lines Deed", where the SRA infrastructure as well as the private infrastructure requires registration.

Managerial Capacity

1. **Incorporation**

- the group must be incorporated.

2. **Operational History**

- a heavy reliance is placed on this aspect.

3. **Organisational Structure**

- must be appropriate for the operations.

4. **Management Personnel**

- Directors:
  looking for managerial experience
- Engineers:
  must have qualifications and relevant experience
- Operations Staff:
  training, qualification and/or authorisation, experience
- Maintenance personnel:
  qualifications and experience

5. **Financial requirements**

6. **Statement of Assets and Liabilities**

7. **Profit and Loss Statements**

8. **Statement of Opinion**

- by bank or financial institution

9. **Insurance:**

- minimum of $10 million

Certification of Equipment and Infrastructure

1. **List of equipment to be used**

- Engineering drawings — especially any modifications
- Certificates
- Results of tests and inspections

2. List of Private Infrastructure to be used

- Engineering drawings
- Certificates
- Results of tests and inspections

3. Engineering and Safety Standards to be developed by Engineers

- these standards should be based upon relevant existing standards (SRA standards in the case of mainline operators). The standards have to be approved by the authority.

Safety and Maintenance Plans

1. Safety Operation Plan

- Identification of any hazards
- Safety Facilities and Procedures: based on these hazards
- Safeworking procedures

2. Safety Monitoring Plan

- to monitor the above Plan

3. Maintenance Plan

- formal mechanisms to ensure adherence
- Inspection facilities, procedures and checklists
- Records to be kept and history to be developed

4. Regular review of Plans to be undertaken

Part of the accreditation procedure is the inspection by the Authority of the vehicles to be registered for operation on the line. Each annual inspection will incur a cost of $200 per vehicle.

The deed for the disused line can be for any period up to five years. A permit to carry out operations will be issued, but this permit must be renewed each six months. This requires the lodgement of certificates from both the Mechanical and Civil engineers, at least 14 days prior to the end of the period.

SUMMARY

The main theme of accreditation is "Self Regulation"

The group seeking accreditation must display:

- sound management and financial control
- adequate insurance and legal responsibility
- registration of equipment
- operational and maintenance standards
- qualified personnel
- safety and maintenance plans
- ongoing monitoring and reporting
- continual improvement

CONCLUSION

Although accreditation of enthusiast groups, or for that matter commercial organisations, wishing to use steam engines and historic carriages for tours was invested with the SRA, they are also the accrediting authority for all organisations wishing to operate any form of rail based activity. Within 18 months, however, the Department of Transport will take over the responsibility for accreditation for all groups, including the SRA itself we believe, and that will be interesting.

The accreditation criteria is demanding on all aspects of Museum operations. It will increase costs in the form of insurance and inspection charges. The accreditation criteria will be enforced and compliance will be mandatory to keep operating. Survival requires that a culture change in the Museum's attitude is necessary. Once accredited, "playing trams" will be gone. Only through responsibility and accountability as demanded by accreditation will the Museum continue to attract the support it requires to continue into the future as a viable force.

WORKSHOP:

COTMA — WHAT IS NEEDED?

chaired by
Dr. John Radcliffe
COTMA Chairman

Chris Steele asked what happens when sub-committees were formed — does information get back to the committees?

John Radcliffe stated that committees can work, giving the Electrical Rules Committee as an example.

Bill Kingsley mentioned the broadening of the COTMA structure by the formation of the Operations Group; however, whatever structure is used, it is vital for museums to respond to requests. He finds difficulty in getting information back from museums, and cannot assist them if they do not respond.

Craig Tooke noted that there were only 2 outstanding overhead and electrical requests and expressed surprise at the lack of requests in this area. He expected that in future there would be more requests for technical assistance rather than spare parts. Bill Kingsley mentioned that provision of spare parts was not one of the original aims of COTMA.

Dick Jones stated that SPER needed some small amounts of equipment from the MTA, but that safety and other codes of practice were their main concerns. The 3801 incident had prompted widespread concern about safety, and all NSW rail organisations were now under accreditation, which was issued by the State Rail Authority. The New Zealand experience with accreditation and self-regulation was also referred to.

Howard Clark noted that the important thing was to do something about safety *before* you think you have a problem. While it was difficult for small organisations to recognise their own shortcomings, external persons or bodies such as the Department of Labour could perhaps assist. A uniform Safety Code for Museums could be looked at.

It was emphasised that museums need to consider possible future government regulation, and should anticipate this by initiating self-regulation. It was noted that Dave Rawlings' paper on accreditation [published with these Proceedings] is available to inform and assist museums in this matter.

The work on Collection Policies was put forward by Richard Gilbert as another area where dissemination of information through COTMA can assist other member Museums. He noted, however, the danger of just adopting an existing policy without the wide consultation and involvement of members which went into drawing up the policy in the first place.

WORKSHOP:

MEMBERSHIP FOR THE YOUNG

chaired by
Bill Kingsley
COTMA Executive Officer

This was totally a discussion Workshop, led by Bill Kingsley, seeking and finding ideas. At the 1990 conference in Wellington, Richard Gilbert had provided a paper entitled "Is Your Museum Dying?". That paper and the discussion which followed it included ideas on how to obtain young members. This Discussion Workshop now needed to probe the question of how to retain those young members.

Family involvement was seen to be most important. Martin Grant indicated that PETS had 3 father-son teams and 1 father-daughter team. Craig Tooke said that MTPA had 1 father-son team. It is known that SPER and TMSV both have at least 1 father and son, while AETM and WTM both had 3-generation teams.

Paul Edwards (as one of the sons) indicated that it was vitally important for young members to feel and be part of the total team. Ray Blackmore (as another) listed the following needs for young people:

- to assist the experienced and be encouraged by them
- never to work unsupervised or alone, as interest will wane
- no restrictions should be placed on the type of work
- excitable nature of some young people can be steered into enthusiasm

Don Campbell emphasised that young people need and want personal help and attention.

John Horne warned that Museums must ensure that they are not full of cliques into which young members cannot fit.

Lewis Nyman asked us not to expect too much from young members, and the group agreed that we must allow young members to ask all those "stupid questions" and be given patient, understanding answers.

Phil Bertram saw parental support as important. He also pointed out that many young people see preservation as a rewarding way to fill in spare time, but that this came easier with trains than trams.

Two very important questions were then raised. Bob Serle wanted to know how young members would travel to and from the Museum: whether by public transport, parent's car or with older members. David Critchley queried whether young members should be told what they were to do and where they were to help, or whether they should be asked what they would like to do.

Reference was made to the excellent record of the Pichi Richi Railway Preservation Society in SA for their achievements in encouraging and utilising the potential of young members. There were always important and rewarding tasks for young members to do, and even more important and rewarding tasks for them to see as goals for the future.

When asked, as the youngest delegate present, what rewards he found in being a member of PETS, Paul Edwards stated that relaxing with fellow members was most important. He also put a very appropriate conclusion to the discussion by telling us of his satisfaction at seeing Fremantle 29 restored and running, and knowing that he had been part of the team that made it happen.

The active involvement of all the Delegates in this Workshop was excellent, and gave support to the need for all Museums to give serious thought to means of encouraging and inspiring their young members.

WORKSHOP:

ARCHIVES

chaired by
Barrie King
Perth Electric Tramway Society

The workshop was structured around a number of stimulus questions, which are given with comments from the discussion. In finding their own answers to these questions, museums will be developing an Archives policy. This policy could be part of an overall Collection Policy, but more is involved in archives than just collecting.

1. WHAT IS MEANT BY "ARCHIVES"?

The term "archives" encompasses both *information*, which may be

- technical
- social
- historical

and *the medium used to store the information*, such as

- documents
- photographs
- films
- videos
- sound recordings

Not included are objects or artefacts.

A distinction can be drawn between *official records*, from government departments, and *social records*, for example newspapers.

2. WHY PRESERVE THESE ARCHIVES?

Preservation of archives can be thought of as preservation of the information contained in them. This information is part of our cultural heritage. We have a responsibility to ensure that the information is available to future generations — for many hundreds of years.

From a tramway museum point of view priority may sometimes need to be given to preserving the information contained in the archives, rather than the original form.

Archives of a museum's own development, besides being history in their own right, can help to provide documentation and evidence for government grants.

3. WHAT SHOULD BE PRESERVED?

Museums should consider what *needs* to be preserved; for example it might be decided not to save a whole newspaper if the interest is just in one article.

There are now policies requiring official records to be held in a public repository, but many items from earlier years are not available. Such official records would not need to be collected by museums, but appropriate documents could be duplicated for museum members' use.

In places where there is little official material preserved, the Museum policy might be to take anything which becomes available.

4. HOW SHOULD ARCHIVES BE PRESERVED?

Different types of archives require different specific storage, but in general there is a need to preserve and secure archives against

- theft
- fire
- flood
- humidity (mould)
- temperature
- chemical fumes
- magnetic fields
- insects
- excessive handling

If we spend the time and money to collect, organise and preserve material, it should be stored properly. Copied slides, for example, should be stored in archival quality slide files which are available.

Some records are in unstable form, for example modern newspapers and certain old films. Preservation may require transfer to a more stable medium. If they have already deteriorated, some restoration may be needed.

Electronic records also present a problem. Apart from possible deterioration of the storage medium, will appropriate reproduction technology be available in, say, ten years time — or 100 years time? Video tape, for example, cannot be considered an archival material. Computerised databases raise questions about the future existence of computer systems to access them; as technology changes, information will progressively need to be transferred to new systems.

5. WHERE AND HOW SHOULD ARCHIVES BE STORED?

Many tramway museums keep at least some of their archives on museum premises, but the typical

tramway shed is not ideal — dust and heat, moisture and frequent handling are likely to cause damage.

Backups should be made of the most important material, and these should be stored away from the main collection. If there is a need for reference collection at the museum for quick access by the restoration and maintenance teams, this could be copies of the originals.

Some material of wide social importance perhaps should not be in museums' hands.

What about individuals' private records?

6. HOW IS ACCESS TO BE MANAGED?

When will access be available? how often? by whom? Will borrowing be permitted? Under what conditions?

The collection must be accessible. However, access, and associated handling, can threaten preservation. The need for handling can be minimised by

- cataloguing,
- indexes,
- finding aids,
- information.

For most purposes access to copies should be sufficient.

When including archival material in displays, do we display originals or copies?

It was noted that at the Stanhope St Hall in Melbourne, the Norm Maddocks collection has been set up with copies available for browsing, research, etc.

7. HOW IS CATALOGUING MANAGED?

Under the control of a single archivist plus helpers, or a committee?

8. WHAT ARE THE FUNDING IMPLICATIONS?

To acquire and preserve archives properly requires adequate funding. Museums' funds are generally committed for current maintenance and restoration work. It was noted that the Victorian Department of the Arts provides funding for archives work.

Funding might be available through "taxation incentives for the arts" programmes. Manuscripts can be valuable; they need to be valued by two people recognised in the field, and the institution needs to be registered. Taxation deductions are only available if you are alive(!), so people can be encouraged to donate material now rather than hang on to it.

WORKSHOP:

CONSERVATION MANAGEMENT REVIEW

chaired by
Dr. John Radcliffe
Australian Electric Transport Museum

As part of its preparation for seeking full accreditation as a regional or specialist museum by the History Trust of South Australia, the Australian Electric Transport Museum (AETM) was encouraged to have a professional conservation management review undertaken of its St Kilda Museum. This was undertaken by ArtLab Australia (Adelaide), the cost being in part supported by a History Trust Grant.

Workshop discussion centred on the following issues which arose from this review and which are of relevance to other Tramway Museums:

- Are the museum's objectives clearly defined? Are members aware of them and do they accept them?
- Does the museum have a corporate plan for future development, are members aware of its contents and are mechanisms in place to review and update it as milestones are achieved?
- Is there adequate interpretation of the museum collection for the visitor, including the place of the various exhibits in the social development of the community?
- To what extent are exhibits to be conserved, restored and/or operated? (There can be conflicts between conservation and operating objectives.)
- Are adequate records held of restoration work so future researchers and those responsible for ongoing maintenance know what has been done?
- Is the quality of scholarship and research for restoration adequate?
- Is the accommodation in which the vehicles and other artefacts are kept secure and environmentally satisfactory?
- Is there provision to cull (deaccess) less relevant material?
- Is archival storage for associated records (photographs, administrative files, drawings, books, uniforms, destination blinds, tickets, etc) the best which can be arranged?
- Is pest control monitoring and treatment adequate?
- Is there a disaster preparedness plan for the museum and are staff/members trained for its possible implementation?
- Is the accession register complete and is a duplicate copy held off-site?

As museums move from the basic requirement of sheltering their vehicles to becoming comprehensive museums with conservation/restoration programmes, regular operation and the interpretation of the role of tramways in the historical development of their communities, all of these issues become significant.

WORKSHOP:

COTMA ELECTRICAL OPERATIONS RULES

chaired by
Craig Tooke
Melbourne Tramcar Preservation Association

Craig Tooke, as COTMA Electrical Officer and Chairman of the Electrical Rules Committee, related briefly the history of the Rules.

1. Requirement by the Wellington Conference 1990 for the setting up of the committee and detailing its membership.

2. Appointment to the Committee of representatives by the four Victorian Museums.

3. Complete revision and rewriting of the MTPA Electrical Rules by the Committee, leading to Draft 1.

4. Comments on Draft 1 by the Victorian Museums and by Noel Blackmore of PETS.

5. Preparation of the Final Draft and associated notes.

6. Distribution to all COTMA Museums just prior to the Conference.

Craig explained briefly the need for and nature of the rules and opened the Workshop for discussion.

Chris Steele stated that non-Victorian Museums had not had sufficient time to study the Rules and that further amendments might still be necessary.

Following considerable discussion, the Workshop recommended that rather than the Rules being a Voluntary Code of Practice, the Rules be presented as Guidelines, and that the Electrical Rules Committee be kept as a Committee of Review.

Three motions were then proposed by the Delegates at the Workshop to be put to the Conference General Meeting:

1. That the Final Draft Presentation of the Electrical Rules Committee be accepted by this Council Meeting as the COTMA Electrical Operations Guidelines.

   Moved Dennis O'Hoy/Noel Blackmore.
   Carried with 1 abstention.

2. That the Electrical Rules Committee be retained as a Committee of Review and to report if necessary to the next Council Meeting or as required.

   Moved Barry Ollerenshaw/Lewis Nyman.
   Carried with 1 abstention.

3. Thanks to all the Electrical Rules Committee and congratulations on their work and diligence.

   Moved Dennis O'Hoy/Ray Blackmore.
   Carried unanimously.

TOUR:

PERTH ELECTRIC RAIL SYSTEM TOUR — SATURDAY 30 MAY 1992

Robert Pearce
Perth Electric Tramway Society

1. Northern Suburbs Railway [NSR] Project

The Tour Group departed the Rose and Crown Hotel Guildford on an articulated Transperth Mercedes Bus and travelled direct to Joondalup, the first stage terminus of the Northern Suburbs line then under construction. On board the bus we travelled with an Officer from Transperth Project Department, Mr Len Wallace, who was to be our guide for the tour of the project.

The NSR project (first stage) started at Perth and ended at Joondalup, a distance of approximately 26 kilometres with a further 2 - 3 kilometres to Currambine (second stage) being completed in 1993.

At Joondalup we saw the construction work for the new station where an interlocking system of concrete wall slabs was being erected. The slabs were of various sizes, according to their height in the walls [the larger slabs were at the bottom and the smaller ones at the top], and were held in place by a long steel rod attached at the middle of each slab and laid onto a sand pad. As each row of slabs was completed, sand was poured onto the rods and out from the wall for approximately 15 to 20 metres and compacted so that the bed of that layer of sand was at the level necessary for the next row of rods. The process was then started again for the next row of slabs. From the rail side, each row of slabs was laid so that it overlapped the row below, much like a brick wall and created a tunnel effect with the rail level and station at the bottom and the busway and stands at the top.

Various stations were designed to be bus/train interchanges, including Joondalup, the others being Whitfords, Warwick, Stirling and Glendalough (pronounced Glendalock). The general plan adopted was that the buses would arrive and depart on one level — either at ground level with the railway in a tunnel or cutting, or with the bus transfer level on a bridge structure above the railway. Glendalough, however, has the railway on a bridge over Scarborough Beach Road with the bus station below at road level

At Joondalup the buses entered on the eastern side of the complex from the main road which crossed the line by a bridge at the southern end of the station. The busway then ran parallel to the line until the station was reached where, at the north end, it crossed over to the western side by another bridge. The road then turned back towards the south to the bus stands from where the buses would depart to the main road.

From Joondalup we then followed the railway — which runs in the median strip of the Mitchell Freeway — towards Perth, pausing at each of the new stations being built to compare the different styles of architecture and facilities to be provided.

There are eight stations in all, being — from the North — Currambine, Joondalup, Edgewater, Whitfords [another of the major interchange stations and provided with a siding for turning trains back to the city], Warwick, Stirling, Glendalough and Leederville.

Stirling, Whitfords and Currambine were to be provided with points and signals for crossing trains from the Up to Down [or vice versa] tracks and with facilities to terminate trains. Currambine, when completed and commissioned in late 1993 was provided with stowing and cleaning facilities; it is utilised to stow 6 sets of trains overnight. Previously, trains had to run empty to Claisebrook EMU Depot for cleaning and stowing.

When full electric operation commenced on the Fremantle-Midland and Perth-Armadale lines in 1991-92, 21 sets of trains were available to traffic of the full 43 sets acquired for the total project, the other 22 sets coming onstream when the NSR was opened. Although the new sets could be used for trials and in passenger service, a maximum of 21 sets only were available to traffic.

When the NSR opened in December 1992, trial and free public trains were operated between Perth and Joondalup, partly for Driver and partly for Train Control training, but also to allow the residents of the area to experience train travel for the first time ever.

When the tour group arrived at West Perth, an inspection of the Roe Street Tunnel was provided. This tunnel allows the Up and Down NSR line to cross underneath the Up and Down Fremantle line. It is about 200 metres long, around 8 metres deep at its deepest point, and runs underneath both the Fremantle line and Roe Street [hence the name].

Tunnel construction was carried out by driving concrete piles into the ground. These piles were interlocked to form a wall on each side of the two lines, and also a middle wall. Once complete, the earth from between the walls was dug out, and long screw rods drilled horizontally through the outer walls into the earth to secure them. A concrete base was then constructed using several pours of concrete to build up the floor to a thickness of about 1 metre. Onto the floor were fixed rubber insulation pads to secure the rail to the concrete base.

After the inspection of the tunnel, we travelled to Perth Station where we left the bus and went to Sinatra's Tavern for lunch.

Following lunch, we boarded a chartered EMU for a run to Armadale on the South West Railway. Armadale is some 30 kilometres from Perth and is the terminus of the electrified line. Three storage sidings are provided for stowing but as yet this does not occur. Trains are permitted to travel at 110 km/h for much of this line and the high speed run was very quiet and comfortable.

2. EMU RAILCAR DEPOT, CLAISEBROOK

On return from Armadale we alighted at Claisebrook, where the party was split into two groups, one going to the EMU Depot and the other travelling up to Westrail Centre to view the Control Room from where the entire Suburban Area Signalling is controlled.

At the EMU Depot, we were met by Mr John Churchman, Foreman of the EMU Depot who took the party under, into and over [yes, even onto the roof] of a car which had been lifted up on jacks for our inspection. The group toured the cabs of the new trains, saw the equipment provided for the servicing of the trains and also how the isolation of the power for each road through the shed is carried out.

Also shown were new sets being fitted out with seats and other passenger facilities, the specially toughened glass which is used for all windows in the trains, and the control equipment, transformers, etc, [fitted under the cars] used to convert the 25 000 volt power supply to the voltage required for the equipment such as driver's two way radios, airconditioning and lighting.

The traction motors (6 fitted to each two-car set) are chopper controlled and allow a top running speed of 110 km/h; this is permitted on both the Armadale and Currambine lines. Sets can be coupled through an automatic coupling which houses connections for power and the Westinghouse air braking system. Trains can be run in 6-car sets but usually operate with 2 or 4 cars each.

During the peak periods, trains on the Armadale [SWR] and the NSR are of 4 cars while the Midland—Fremantle lines are run with trains of 2 cars only. The system has been designed, and the track layout at Perth set out, for trains to run from Midland to Fremantle and back and from Armadale to Currambine and back.

3. WESTRAIL TRAIN CONTROL CENTRE

After the tour of the EMU Depot, the party travelled to the Train Control Centre at Westrail Centre. The Control Room is split into two sections:-

- the Equipment Room; and
- the Control Room.

The Equipment Room is where the computer system is located. The whole system is called "Deep Thought" but has been nicknamed "Deep Throat" because at times it appears that anything that goes in there doesn't come back out again.

The are 3 systems provided to operate the signalling as follows:-

- the signalling control processor (SCP);
- the interlocking control processor (ICP);
- the panel control processor (PCP)

Each system is provided with a back-up so that, in the event of the failure of one, the other can continue the operations uninterrupted.

An Uninterruptable Power Supply (UPS) is also provided in the Equipment Room, with the emergency power being supplied from a Standby Power Plant located in the basement of the Building.

Normal power for the Control Room only is supplied from the same source as the Overhead Power Supply. This is subject to an agreement with SECWA [the controlling body for the generation and distribution of power within WA] that in the event of a dispute causing shut downs of power throughout the state, power for Westrail's EMU system [and the hospitals located throughout Perth] will continue to be supplied. However in the event of a breakdown in the supply lines between Claisebrook Distribution Terminal and the Westrail Building, then the standby plant automatically switches on so that power for the computers is maintained.

The SCP is provided to maintain the integrity of the Controllers' actions when routes are called, or points are set either normal or reverse, or when signals and/or routes are blocked to traffic for any reason, such as a power isolation for maintenance work, etc.

If the Controller calls for an incorrect route, or from one signal to another on routes which cannot connect (eg on parallel lines), then the SCP provides a response on the VDU which tells him and why the intended action cannot be completed (eg "Unavailable - Signals do not connect). If the operation by the Controller is accepted by the system, then an "OK" response is provided on the VDU.

The ICP ensures that the interlocking (ie points properly set as required and conflicting routes not set or called over an already set route) is correct. If the system permits the operation to proceed, acceptance is given to the Controller via the SCP.

The PCP is used to update the information displayed to the Controller on the Mimic Display Diagram provided on the wall between the Control Room and the Equipment Room.

The mimic display diagram shows the Controller the position of every set of controlled points and whether they are free to be moved or locked in either normal or reverse, and the condition of all automatic or controlled signals (ie at Stop or Proceed). The routes

that have been called and set and the position of every train and its gauge is shown.

When a route is called (or some other function such as moving a set of points etc), and the command is accepted by the SCP, then the instruction will be sent to the next stage of the system, the ICP. If the ICP is in a state or condition to accept the command, then the instruction is sent to the station or interlocking via modem and micro-wave depending on where the station is located. As a backup, a landline link is also provided. Stations such as Perth, Claisebrook, East Perth and Belmont Park, all within 5 kilometres of the Control Room, are served by landline, whereas Armadale, Midland, Fremantle and Currambine are served by microwave link. Stations on each line are served by landline from the nearest microwave receiving tower.

If the condition of the equipment in the field also permits the operation of the points and/or signals, then the signalling relays in the Relay Room will operate and the command is carried out. After the points or signals have been set to the required position, then a repeat of the new setting will be sent by return to the ICP in the Control Room. The ICP then updates the PCP which then updates the Mimic Diagram. As a general rule, the time taken between the command being entered by the Controller into his VDU and the updating of the mimic diagram to show that the command has been carried out, is about 6 seconds, for all stations on the system.

Each station or relay room within the system also is provided with two processors, each running together (although only one is on line at a time) so that a constant backup is provided.

In the Control Room itself, there are three Controllers on duty between 0600 and 2100 hrs, two between 0500 and 0600 hrs and 2100 and 2340 hrs and one between 2340 and 0500 hrs Monday to Friday. There are two between 0600 and 2240 Saturday and Sunday and one outside those times on the weekends.

Each position (ie one for each Controller) is provided with a VDU with mouse and keyboard. Each position mainly controls certain areas, but is capable of controlling all stations if required. The left looks after Midland to Fremantle, excluding Claisebrook and Perth, and Belmont Park to Armadale. The right looks after the NSR from Perth (exclusive) to Currambine and the centre looks after Claisebrook and Perth.

Each position is in radio and telephone contact with all drivers and station staff as necessary.

Also in the Control Room is the Electric Control Operator whose task is to monitor the overhead power supply, take immediate action in the event of disruption to power and arrange for power isolations when maintenance work needs to be carried out on the wire, track or buildings and other structures that fall within metres of the overhead.

He is supplied with a VDU, mouse and keyboard, and from the VDU can switch off or on any of the circuit breakers at the track distribution cabins situated at Claisebrook, Cannington and Gosnells (Armadale line); Bassendean (Midland line), Claremont (Fremantle line) or at Perth or Edgewater on the NSR. The Claisebrook EMU Depot can also be isolated from the main system as well.

Power from SECWA is received at Claisebrook and Edgewater with Claisebrook supplying the Midland—Fremantle and Claisebrook—Armadale lines and Edgewater supplying the NSR from Perth to Currambine.

All present on the tour were extremely impressed with the operations of both the EMU Depot and the Control Room.

TOUR:

THE PROSPECTOR RAILCAR TOUR — WEDNESDAY 3RD JUNE 1992

Robert Pearce
Perth Electric Tramway Society

The tour was arranged to show delegates and visitors some of the Avon Valley, and also to travel a section of line over which passenger trains normally do not run. It began at Midland, and went to Moondyne in the Avon Valley, Leighton Marshalling Yard (near Fremantle) and finished at Esplanade Station, Fremantle.

The Prospector is a Standard Gauge passenger train which runs between East Perth Terminal and Kalgoorlie. It completes the approximately 450 kilometre journey in 8 hours, although an express service also operates, taking just over 6 hours.

Our train departed Midland and headed east through open country and vineyards in the Swan Valley before entering the Avon Valley near Brigadoon, some 32 kilometres east of Perth. The Prospector railcars are permitted to travel at 100 km/h over this section, but the driver held back to about 80 km/h to permit a good view of the flowing Swan/Avon River, which was building up in water level as the result of the winter rains.

On the way to Moondyne (named after Moondyne Joe, the bushranger) we passed through Jumperkine, the first of the three crossing loops en route to Avon Yard, the last being Toodyay West which is also the junction for the Miling Line.

At Moondyne, while the driver was preparing the train for the return journey, the opportunity was taken to show delegates the dual gauge pointwork typical of all the crossing loops in the valley. The railway, which was opened in 1966, was constructed in both standard and narrow gauge track to permit the SG passenger, freight, iron ore and grain trains to operate and also the NG trains that previously operated on the now closed Eastern Railway between Midland and Northam via Spencer's Brook.

After leaving Moondyne, we were given our packed lunch and while partaking of the comestibles, the train returned to Midland but instead of entering the Suburban system, we turned left and proceeded towards Forrestfield, the major marshalling yard in Perth. All SG passenger trains are serviced here as well as all narrow and standard gauge freight trains. The driver told us that when we left Forrestfield, we would be able to get some high speed travel over the section to Cockburn Junction, where the line splits into a separate dual gauge single line to Kwinana to the left and separate narrow and standard gauge lines to Robb Jetty, from where the line again becomes dual gauge to Fremantle.

Owing to nearly all souvenirs on the train having been sold, it was decided to stock up at Forrestfield and while doing so, a standard gauge grain train was permitted to depart ahead of our train, meaning we would have to travel at only 60 km/h until Cockburn Junction was reached. Here the grain train would head to the left towards Kwinana, while we would head right towards Fremantle. Unfortunately, the maximum speed beyond Cockburn Junction is only 70 km/h so we did not get the high speed run we were looking forward to.

After passing through Robb Jetty, we travelled through the stopping places of South Beach, Fisherman's Harbour and Esplanade, built for the special trains that ran during the America's Cup defence held in 1987.

While travelling between Esplanade and Fremantle, we passed Fisherman's Harbour, the Round House (the colony's first gaol), and also the former Fremantle Municipal Tramway's Depot at the end of High Street. Only the facade remains, the building now consisting of town houses and a restaurant.

At Fremantle, the line becomes double line dual gauge again and heads parallel to the harbour until the east end of it where the line crosses the Swan River and passes North Quay and the industrial areas of North Fremantle. The Signal Boxes originally located at Fremantle and North Fremantle were closed when the new signalling control system was commissioned for the electric rail services.

We left the main line (from here it was narrow gauge only until Perth Terminal) and entered Leighton Yard, the first passenger Prospector train to do so. Leighton Yard is right on the ocean and serves the North Quay, oil depots and the grain silos at the harbour.

After a quick walk round for the benefit of the "Gunzels" on board, we departed for Esplanade where we alighted and headed off for the meal and drink houses that abound in the City.

We all agreed that it was a thoroughly enjoyable day.

TROLLEY WIRE REPORT

R. I. Merchant
Trolley Wire Editor

Trolley Wire over the last two years has proved to be both an interesting and frustrating job for its Editor, so I'll start where we left off in Wellington.

In July 1990, the small portable Bondwell computer of around 1979 vintage, which had been obtained from our printer to replace the typewriter previously used to prepare *Trolley Wire* material for photo-typesetting, literally blew up, complete with smoke, flame, nasty smells and melted bits inside. No *Trolley Wire* material was lost, but we did lose all the 1988 COTMA proceedings, which were being worked on when the disaster struck.

This small, limited capability, but useful machine was replaced by an IBM compatible personal computer in November 1990 with the view to proceeding to full desktop publishing of the magazine in due course. Disasters did not stop there although, thankfully, they no longer seem to come in threes. In April 1991, the new computer's hard disk was reformatted by a computer virus or Trojan Horse. A considerable amount of redone material for the COTMA Proceedings and some *Trolley Wire* material was lost.

This incident was the start of a real learning curve about personal computers, reformatting hard disks, viruses, reloading programmes and, more importantly, backing up all work as you go. In one sense, it could not have happened at a more convenient time as the Editor was off work for ten weeks recuperating from an illness. Having to go over the same work completely again for the third time was, however, a real pain. The production of the magazine using a computer publishing programme has not yet occurred but is likely to be phased in over the next eighteen months or so.

November 1990 marked the centenary of the introduction of experimental electric trams in Sydney. To mark this event, the November 1990 issue used black-and-white photos with a colour-tint background on the covers. The loss of colour on the covers was offset by the insertion of an additional eight pages, four of which were colour, inside the magazine. This also gave us the chance to feature some colour photos of Hobart trams among others, as Tasmanian subjects (other than the reproduction of the 41¢ stamp showing the Hobart double-deck car) had not appeared on our colour covers previously. The additional pages in this issue were partly offset by the lesser number of pages in the previous issue and all additional production costs were borne personally by the publications staff.

November 1990 was also the month in which we lost our concession rate of postage as we had a cover price over $5·00, the maximum allowed by Australia Post for magazines to qualify for the registered publication postal concession. Provision had been made for this change previously and the effect on the magazine was, fortunately, minimal. Australia Post plan to do away with the registered publication concession postage over the next two years or so and we will probably see a marked increase in the subscription rate for all rail enthusiast publications when this occurs.

With the full cost of postage now having its effect, *Trolley Wire*, for postal purposes, was just over the ideal weight, which took it into a higher postage bracket and was therefore exceeding our postage budget. To overcome this problem, the weight of the paper used to print the magazine was reduced from 100 gsm to 95 gsm from May 1991. This had the desired effect and the weight of an enveloped copy of *Trolley Wire* dropped just enough to bring it back to the lower postage rate and within budget.

I mentioned in my report to the Wellington Conference that our printer, John Meulen, moved to Canberra in semi-retirement but continued to do most of the phototypesetting and layout for us as a special favour, while his son David did the actual printing in Sydney. By August 1991, David had taken over full production of the magazine from his father. His first issue was marred by scratched photos and other problems, some of which even his father was at a loss to explain. David was also extending his business into the age of computer printing and some of the problems we experienced can be attributed to this.

The cost of printing is still our major expense and David Meulen still cannot be beaten for price by any other printer. David also now gives us a small discount for payment within seven days, certainly a sign of these financially difficult times.

The printing quality of the magazine has, over the two years covered by this report, varied considerably. Photo reproduction has ranged from very muddy to remarkably good, considering that colour prints are used extensively in the "Here and There" and "Museum News" sections. Colour prints generally do not reproduce well in black-and-white unless taken in bright sunlight and without shadow. Shadow areas reproduce very darkly and contribute to the muddy effect. It should be mentioned here that printers, screeners and platemakers view photos in a different light to us and it does take a long time for these tradespeople to be trained to our way of thinking.

The colour work has also varied somewhat. This is entirely due to the use of colour prints and whether suitable photographs were on hand at the time of

going to press. Many people, including some printers, will tell you that colour prints cannot be used for colour printing, but we have proved that acceptable results are possible.

Transparencies have been used from time to time; once for a cover, three times for back cover photos and for the interior colour in the November 1990 issue. The quality obtained when using colour transparencies is generally much better than using prints. Disadvantages are that the transparency has to be taken from the mount and there is a greater risk of damage or loss of a photo which may not be able to be replaced. Any colour adjustment problems between back and front covers are adjusted to correct the cover. Thus the colour reproduction of the back page may vary from the original print. Using a mix of colour prints and transparencies tends to accentuate colour adjustment problems. Our colour covers, however, are provided at a cost we can afford.

The use of colour on the covers of *Trolley Wire* led to some experimenting with postcards produced from the colour separations made for the back cover of the magazine, and six cards have been produced. Four turned out quite well, being equal to or slightly better than the colour on the back of the magazine, but the other two were only fair. It has, however, provided the Sydney Tramway Museum with a range of low print-run postcards at a time when the museum's sales section is trying to grapple with restricted sales and storage space, and restocking problems.

The increase in *Trolley Wire*'s coverage of Melbourne tramway events has resulted in an increase in sales in Victoria. This small increase means that *Trolley Wire* will cover its costs in the current year and thus we should be able to maintain the present subscription rates next year. Yes, the difference between covering costs and making a loss is very small.

The publishing of a "COTMA Diary" listing forthcoming events has proved to be a frustrating experience. No contributions were received for the Diary and even the Editor's own museum planned events of which he was not aware until after the appropriate issue, in which such items should have been listed, had gone to press. We will, however, persevere with the Diary. The quarterly publication of *Trolley Wire* is probably one reason for the low success rate of this item as it is likely that most events are not planned more than three months in advance.

Generally, *Trolley Wire* has to avoid union and politically sensitive issues where publication of such items may harm the reputation of the tramway preservation movement. Richard Youl's coverage of the tramway strike in Melbourne, a sensitive issue which appeared in August 1990, was shown to union representatives who were pleased with the coverage he gave to this unfortunate event and said that it was a very fair and unbiased coverage.

The Editor has tried to provide some variety in the major articles published, and has succeeded in breaking the monopoly of articles on tramways in New South Wales. This is entirely due to the magazine's interstate contributors and has resulted in articles featuring trams or tramways in Hobart, Brisbane, Adelaide and Melbourne. Conversely, it has also resulted in delaying the publishing of the last two instalments of Ken McCarthy's Manly series which will not now appear until 1993.

Ken McCarthy's current "40 Years of Trolley Wire" series was intended to be a brief coverage for the February and May 1992 issues, for which Ken supplied twenty photos. By the January press date, the article had grown considerably and so had the number of photos supplied, from the original twenty to sixty. Three weeks ago, another forty arrived! Needless to say, not all can be used to illustrate this series but, luckily, quite a number can be used to illustrate other articles ready for publication or on hand.

Our regular "Museum News" and "Here and There" contributors cannot be too highly praised. Their on-time submission of news helps considerably in preparing the magazine and getting it to the printer on time. It must be quite an onerous job remembering to write up the news and gather together suitable photos in time to meet the magazine's deadlines. My sincere thanks are due to them all.

TRAMWAY TOPICS REPORT

Alan Smith
Tramway Topics Editor

Tramway Topics is New Zealand's only national-focus tramway enthusiasts' magazine. It is published every two months by the Wellington Tramway Museum, and serves as the official journal of the three N. Z. museums — Western Springs Tramway at MoTaT, Auckland, WTM at Paekakariki and the Tramway Historical Society at Ferrymead, Christchurch.

1992 is the thirtieth year of publication of *Tramway Topics*. From 1962 to 1965 it appeared in the old imperial "foolscap" size, and since 1966 in its present format of folded A4. In the last two years the size has been set at 28 pages plus front and back covers.

The editorial scope was outlined in the July-August 1990 issue. It set the priorities in this order:

- N. Z. tramway museum reports
- N. Z. street tramway historical items
- N. Z. urban transport including any signs of "light rail" renaissance
- overseas tramway museum information
- overseas street tramways and rapid transit

New Zealand trolleybus coverage is treated as equal in value to tramway matters.

Production has been by the large Wellington firm of GP Print (the privatised Government Printing Office), printing offset from word-processed pages and original photo prints. Obviously computer technology now makes a quicker computer-generated layout possible and the retirement in May 1992 of the lady who has typed up the contents for the past three years' issues makes it essential to find a new process in any case.

From this year 400 copies of each issue are being printed. For the year ended June 1991, costs were $NZ7000 and a surplus of $NZ800 was achieved.

There are the usual editorial problems of drumming up enough articles and of getting Museum news reported in by the copy deadline dates. I have found it useful to reprint (with acknowledgments) articles from some of our kindred museum journals — WTM arrange for all exchange journals (about 20 from N. Z. and overseas) to circulate to me.

I am only too happy for any COTMA society journal to reprint any article from *Tramway Topics* — all I ask is that the source be acknowledged.

Tramway Topics has lasted 30 years and seems to have established a niche in the N. Z. market. The key to future success lies, I think, in keeping a good flow of previously-unpublished photographs, and in encouraging some original historical writing — especially of the reminiscence type. It is not the place for scholarly articles, but *Tramway Topics* can be a contributing source for this type of formal history. The other all-important role is in being a permanent record of the development of the New Zealand museums, each of which now has a considerable history of its own and has transcended more than one generation of members.

ELECTRICAL OPERATIONS RULES COMMITTEE REPORT

Craig Tooke
COTMA Electrical Officer

It is my pleasure, on behalf of the Electrical Operations Rules Committee, to present a report on our activities.

The Committee has met on six separate occasions at the PTC Electrical Testing Centre and we have successfully been able to formulate the draft copy of the Electrical Operations Rules to be voted on by the Museum Delegates at the Annual General Meeting.

The draft Rules have been developed from the Electrical Operations Rules of the Melbourne Tramcar Preservation Association as a voluntary code of practice for our Museums to follow and I wish, on behalf of the committee, to thank the MTPA for allowing the use of their rules as a basis from which we have been able to work.

We have attempted to place in writing what we believe should be the minimum standards in place at our Museums for the safe and efficient operation of our electrical networks. To this end it will be noted that some sections of the rules will not be applicable to all of the situations each Museum finds itself in, and therefore modification to suit local considerations and statutory requirements may possibly be required.

Whilst we have completed the draft of the Electrical Operations Rules the work of this Committee in our opinion is far from over. Throughout the course of drafting the Rules it has become apparent that a number of additional areas within the charter of the Committee remain to be concluded. These include, to name but some:

- Presentation of a copy of the Rules to the Group Manager Tram Infrastructure, PTC, for comment and suggestion.
- Presentation of a copy of the Rules to the SECV for comment and suggestion.
- Further research into applicable Australian standards for reference to within the Rules.
- Investigation into infrastructure requirements such as the provision of recommendations for operating equipment, earthing equipment, etc.

It is also very important to ensure that the Rules, if adopted, be reviewed within a time period of eighteen months based upon the experiences of the Museums in using them.

With the success of the work undertaken by this Committee we would like to request that we be allowed to continue to meet on an "as required" basis to address the remaining issues, and any subsequent issues that may arise, relating to the Rules.

The formulation of the Rules and the achievements of the Committee would not have been possible without the degree of dedication and professionalism that was shown, and I would like to pay tribute to the dedication and hard work of my colleagues on the Committee:

Bill Kingsley — Executive Officer COTMA
Noel Gipps — MTPA
Geoff Dean — TMSV
Richard Gilbert — BTPS
Harold McCarthy — BT
Noel Blackmore — PETS
Ian Cook — PTC

To conclude, we commend the Electrical Operations Rules to each Museum as a valuable asset and we look forward to their adoption.

CHAIRMAN'S REPORT 1992

John C Radcliffe OAM
COTMA Chairman

It is a pleasure to present to you the tenth report of the Council of Tramway Museums of Australasia at our eleventh Australasian Tramway Museums Conference.

PREVIOUS MEETING

The previous meeting of the Council of Tramway Museums of Australasia was held in Wellington, New Zealand on 4 June 1990.

MEMBERSHIP

Membership remains at 14 organisations, there having been no change in formal membership since the last meeting of the Council.

OFFICE BEARERS

At the last meeting of the Council, Mr Bill Kingsley was re-elected as Executive Officer. Mr Lindsay Richardson and Mr David Hinman were respectively elected as the Australian and New Zealand Executive members and have participated by correspondence in a number of policy issues during the past two years. Ms Carolyn Dean was re-elected Treasurer and has effectively maintained the Council's accounts during the past two years. Mr Robert Paroissien was once again re-elected as Auditor.

There is provision in the Constitution of COTMA for the Executive to appoint additional individuals to help with the conduct of business, and accordingly following discussions between the Chairman and the Executive Officer, an Operations Group was established in late 1991. The Executive Officer chairs this group, other members being Carolyn Dean, Treasurer, Keith Kings (Spare-parts Officer). Andy Hall who provides liaison with the "Met", and Craig Tooke as Electrical Officer. This group, based in Melbourne, but drawn from the four Victorian Tramway Museums, provides the range of skills necessary to attend to the increasing work being generated by the various COTMA-affiliated museums.

The Operations Group was developed to "get things done" but it does not have a policy role, which remains that of the elected Executive. I would express appreciation for the contribution that the members of the Operations Group have made to the continued endeavours of COTMA to assist its affiliated museums.

COMMUNICATIONS

Seven memoranda were issued during 1990-92, similar to the previous two-year period. However, your Executive Officer has made these memoranda particularly comprehensive, encompassing a wide range of technical information and policy information of interest to museums as well as giving details of parts and equipment which may become available for acquisition. Topics covered have included details from the Year Book of the International Association of Transport Museums, notes about taxation concessions available under a variety of aspects of Australian taxation law, the availability of workshop equipment from the "Met", and details of various managerial and tramcar disposal policy changes which have occurred in Melbourne over the past two years.

Following a number of changes in the managerial structure of the Melbourne Tramways following their incorporation into the Public Transport Corporation of Victoria, COTMA's Executive Officer and I met with the incoming General Manager, Tram & Bus Division of the "Met" (Mr Russell Nathan) in late 1991 to introduce COTMA and its museums to Mr Nathan. We were joined in this discussion by the Manager, Resources, Ms Biruta Bourke, having earlier in the day met with Mr Les Jean the Manager, Tram Fleet, at Thornbury. A portfolio describing each of the COTMA-affiliated museums was left with Mr Nathan. Discussions were held on current tramway disposal policies and likely future changes, being cognisant of an instruction then recently issued by the Victorian Minister of Transport that no further W-class cars were to be disposed of. The Chairman and Executive Officer obtained very useful insight into the problems now being faced by the "Met" with the continued delivery of new articulated tramcars whilst at the same time being unable to dispose of any obsolete vehicles.

COTMA office bearers have continued to visit constituent museums in the past two years. Executive Officer Bill Kingsley has travelled widely throughout Australia and New Zealand and has visited most museums in that period. I have had the opportunity of visiting museums in Sydney, Bylands, Perth, Adelaide and Christchurch since the last conference. I have also had the opportunity of inspecting a further overseas museum, that in Istanbul. As office bearers of COTMA, we have been most grateful of the hospitality which has been shown to us by representatives of the various affiliated museums with whom we have visited over the past two years, showing the continued strength of the museum movement.

EQUIPMENT

Soon after the last conference, several vehicles were obtained by constituent museums from Melbourne. The Perth Electric Tramway Society secured W5 class car 766, although without operational motors, and W5 class car 792 found its way to the Sydney Tramway Museum, albeit having been secured outside of the

Memorandum of Understanding between COTMA and the "Met".

Following the "classification" of Melbourne's W-class trams by the National Trust of Victoria and a subsequent decision that no further cars of this type were to be disposed of, exchange loan arrangements were made between the Tramway Museum Society of Victoria and the "Met" which resulted in W5 class 782, W5 class 795, SW6 class 902 and W7 class 1001 being transferred on loan to Bylands in exchange for the loan of a number of cars from the TMSV, including S164, X217, and T180 for use in the "Met" historic fleet. Similarly, the Bendigo Trust was loaned the use of SW5 808 in exchange for the loan of former Melbourne maximum traction car number 138.

The Perth Electric Tramway Society obtained the bodies of G35, D84, and Fremantle 28 for restoration, while the Sydney Tramway Museum acquired P1517 and has considerably advanced the restoration of R1971.

The Australian Electric Transport Museum at St Kilda was fortunate to secure a number of major items of workshop equipment, securing a Craven wheel lathe and a vertical boring machine from Preston Workshops, and the former Hackney Depot wheel press from the STA in Adelaide.

Over recent years, COTMA has accumulated a considerable quantity of Melbourne system spare-parts, which have been stored at the TMSV Bylands site. Over the past year, Spare-parts Officer Keith Kings has dispatched most of this equipment to various COTMA-affiliated museums as requested. These parts, which have been secured quite inexpensively from the Melbourne system, will prove valuable in the long-term continued operation of tramway museums in Australia and New Zealand.

Surplus mercury arc rectifiers which became available in Adelaide were made available to the Bendigo Trust and to the AETM for demonstration purposes.

CONSTITUTION

It will be recalled that incorporation was initiated at the 1986 Adelaide meeting. Subsequently, a number of drafts of a constitution for COTMA have been circulated, and during the past two years a final draft was provided for comment by constituent members. In the event, several members expressed concern about the proposed dispersal of assets in the event of winding-up of the organisation and a revised wording has now been prepared for consideration.

TRANSPORT HERITAGE DEVELOPMENTS

Since the time of the last conference, there have been a number of interesting developments in the field of transport heritage, as represented by COTMA-affiliated museums. It is noteworthy that the 14 COTMA museums between them now have conserved 258 tramcars, of which 122 are in working order. Of the total collection, 159 are from the local systems where the museums are located, 47 are from the Melbourne tramway system and a further 52 are from cities outside of the museums' locations or Melbourne.

The most potentially significant new development in Australia has been the success of the South Pacific Electric Railway Co-operative Society Ltd, as operator of the Sydney Tramway Museum, in securing the rights to run on the former National Park electric railway whose tracks run adjacent to that museum's depot at Loftus, past its former museum site into Royal National Park. This would represent a very significant extension to the operational potential of Australia's senior tramway museum. That group has also after a number of years, completed installation of the scissors cross-over and sealed much of the street adjacent to its display building.

The Brisbane Tramway Museum Society has recently acquired a building formerly at the Ferny Grove School with the intention of using it to provide interpretative displays about Brisbane's tramway system.

The Steam Tram & Railway Preservation Society at Parramatta Park has completed the restoration of its steam motor number 103, a very significant item in the heritage of Australia's tramways, being the last operating steam tram motor in the country.

The Ballarat Tramway Preservation Society has continued to develop interpretative displays in association with its museum, and has considerably advanced the restoration of horse-car number 1 from that city.

The Tramway Museum Society of Victoria has been busy in recent months with the arrival of a number of loan trams from the Melbourne system, details of which have been given above. Meanwhile, the Bylands track has been progressively moving towards McKerchers Road, while an extension of the Kilmore Tramway which has been operated with the motor driven cable car set, was opened in 1991.

The Melbourne Tramway Preservation Society has continued with overhauling of a number of its W class cars, and has been extending the rails around its depot.

The Australian Electric Transport Museum in Adelaide has completed the fitting out of its new body shop, in part supported by a capital works grant from the Department for the Arts & Cultural Heritage, which provided a new concrete floor within the workshop.

The Perth Electric Tramway Society has been developing a new workshop adjacent to its recently extended car depot and storage buildings.

Within New Zealand the most significant development has been the progressive installation of tram rails in Worcester Street, to form the Worcester Boulevard Tramway. The eventual completion of this line will take some of the Tramway Historic Society's trams out of their present environment at Ferrymead into the centre of Christchurch and will further extend the public's appreciation of New Zealand's tramway heritage. In support of this expected development, the restoration of Brill tramcar number 178 is now well advanced.

In Auckland, efforts have been primarily directed towards preparing to extend the museum tramway to Meola Road, whilst at the same time maintaining efforts on the very long term major project of restoring former Wellington double deck car number 47.

In Wellington itself, the Wellington Tramway Museum has continued to finish the flooring in its main depot and has carried out further track renewal along with additional vehicle restoration.

As outlined earlier, the Public Transport Corporation of Victoria, operating as the "Met", has begun a significant programme to assemble a heritage tram collection for use on its own large tramway system. As well as securing older vehicles on loan from COTMA-affiliated museums, it has refurbished a number of its older Y and Y1 class cars, has returned examples of W2 and W6 cars to their former MMTB livery, and has continued to operate tramway cavalcades, both as part of the Moomba Festival and over the Australia Day weekend. Victorian COTMA members have contributed to the success of these events by providing cars to operate in Melbourne for them, and Executive Officer Bill Kingsley was active in facilitating these arrangements.

Regular tramway museum operations have continued throughout the two years under review in Perth, Adelaide, Ballarat, Bendigo, Bylands, Sydney (Loftus and Parramatta Park) Brisbane, Auckland, Christchurch and Wellington. No significant traffic accidents were recorded on COTMA museums in the two year period although a steam railway accident in Sydney during 1990 has brought additional safety measures to bear on a number of historic steam operations. Security has also become of increasing concern, perhaps in consequence of the recession current in both Australia and New Zealand. The most significant problems have been in Adelaide, where a serious graffiti vandal attack damaged four cars, and where a portion of the overhead of the tramway was stolen, presumably for scrap.

Preliminary plans have been advanced on occasion for new heritage tramways in Sydney and Brisbane, but at this stage the likelihood of their development is unclear.

Australian, and particularly Melbourne tramcars, have become internationally renowned for their heritage value and reliability. In consequence, a considerable number of Melbourne cars, primarily of the W2 class, have been exported to overseas operations, especially in North America. In consequence of the listing by the National Trust of Victoria of W class cars as of heritage significance, the question has been raised as to whether recent exports of trams from Australia have complied with the requirements of the Commonwealth's *Protection of Moveable Cultural Heritage Act.* Despite the very considerable number of Melbourne W class trams already held within COTMA-affiliated museums, in addition to the heritage collection of the "Met" itself, the Australian Federal Police have visited a number of our Victorian affiliates to inquire as to whether COTMA museums have been engaged in international trade in tramcars without adequate formalities having been undertaken. The COTMA Executive Officer has provided full details of all COTMA-affiliated museums to the Australian Federal Police. I have been in consultation with the relevant offices of the Department for the Arts, Sport, the Environment & Territories in Canberra to help provide a perspective on the extent of tramcar preservation in Australia and New Zealand. Whilst it seems unlikely that this will cause any difficulties for Australian museums, it might present in the short run some problems for our New Zealand members but I have been maintaining contact with the appropriate officers to minimise any difficulties.

Operating Urban Tramway Systems

The two remaining public tramway systems have continued to operate in Melbourne and Adelaide. New articulated cars are continuing to join the Melbourne system, and recently plans were announced to put the bodies of approximately 50 of the W5 class cars into storage. The ultimate solution to Melbourne's need for improved ticketing arrangements has yet to be resolved. A significant new development, however, is the creation of a second tramway mall, this time in Swanston Street, which intersects the earlier mall developed in the Bourke Street some years ago. One of the new Melbourne articulated cars was recently displayed in Canberra to promote the possibility of developing light rail transit in that city. In Adelaide, a recent report again supports the possible extension of the Glenelg tramway through the centre of the city to North Terrace. Refurbishment of H-type cars has been continued with approximately six now being available for traffic out of the total fleet of 21 cars. Unfortunately, the restaurant car has been out of traffic for some time following the failure of the company which operated it. Of interest is the fact that the former city depot, built as a temporary structure in 1923, has recently been converted into a temporary magistrates court.

Future

Our museums are now entering a mature phase of their development. In most cases, it is many years since tramways operated in their respective cities. Most museums have now achieved high standards of vehicular restoration. They have regular education

programmes for visiting school children. They have developed historical research and archival facilities. Numbers of vehicles restored in the early days of operation are now having to be refurbished a second time for their continued use into the future. The museums are now operating in a more complex and competitive environment than when they were first established. They will need to operate more effectively and provide greater value for money than alternative competing enterprises if they are to survive and prosper. However, each has been driven by a dedicated band of individuals and their continued success is a reasonable prospect. However, as I have observed previously, they still depend to a considerable degree on the initiative and management of their founders. Transfer of responsibility to a new generation is becoming increasingly important as the years go by, though most museums are now getting a younger generation taking responsibilities of their respective management boards and committees.

ACKNOWLEDGMENTS

Ms Carolyn Dean has served as Honorary Treasurer over the past two years and Mr R G Paroissien has continued as Honorary Auditor. Keith Kings has maintained his long standing commitment to museums throughout Australia and New Zealand in his capacity as Spare-parts Officer. Bill Kingsley, as Executive Officer, has found an increasingly heavy demand on his time from our constituent museums, a demand which has been facilitated by his recent retirement. Nevertheless, we have been very dependent upon his enthusiasm and commitment to help facilitate our mutual development, and on your behalf I express our appreciation to Mr Kingsley and the other office bearers for their contribution to the successful operation of the Council of Tramway Museums of Australasia.

I would once again like to acknowledge the help received from officers of the various urban transit authorities in Australia and New Zealand – made the more difficult in the past two years by the extent of economic downturns which have influenced the economies of both countries. There have also been significant changes in the structures of public transport organisations in Australia and New Zealand during that period.

Finally, we must once again recognise the contributions which the various individual members of all of our constituent museums make to the successful continued development and operation of our heritage collections for the enjoyment of the Australian and New Zealand communities.

2 June 1992

COTMA OPERATIONS GROUP

Bill Kingsley
COTMA Executive Officer

This Group operates as an ad hoc Committee under the auspices of the COTMA Executive. I sought permission of the Executive for the formation of the Group on a formal basis for many reasons:

1. We were working together on an informal basis as individuals anyway.

2. The work of COTMA is burgeoning and I am having great difficulty in doing justice to it even though retired from teaching.

3. It seemed that whenever I was away from home for any period the work of COTMA stopped. A means was needed to depute tasks and responsibilities in such situations.

4. The COTMA desk is a lonely desk. I needed the support of a team in whom I could trust and with whom I could share.

5. There are others who have abilities and expertise that I do not have, and in Carolyn, Keith, Craig and Andrew there is talent which COTMA needed to use.

The Operations Group, although a necessity, is still an experiment. It may succeed. It may fail. If it fails we will just abandon it. But we need it to succeed. If the increasing involvement and sharing which was obvious at our first meeting continues then all the COTMA museums will benefit and we will feel rewarded in our tasks.

As a Group we are doers. We can recommend policy matters to the Executive and share problems with them. Executive members are welcome at any of our Meetings.

As a Team we can contribute to the total task, understand each other's tasks, assist and support each others, and deputise whenever needed.

It should all be a most worthwhile and major contribution to the vision of COTMA.

SPARE PARTS AND UNIFORMS REPORT

Keith Kings
COTMA Spare Parts and Uniforms Officer

The two years ended March 31, 1992 saw the backlog of spare parts orders virtually finalised. Unfortunately, most invoices were not issued until a few weeks before the end of the financial year, with three minor ones being issued after that date. The result is unpaid items as listed in "Sundry Debtors" (in the financial statements), but these will be paid in the ensuing months.

It is unlikely that more than a few items will be issued from the remaining small stock held, so future income will be very limited.

Uniform items sold for the two year period totalled $555·00, comprising 75 items. The progressive figures now show that 373 items have been sold and that 1 145 remain. Presumably a few more items will be sold each year, but the quantity and value could well diminish.

EXECUTIVE OFFICER'S REPORT

Bill Kingsley
COTMA Executive Officer

At the Wellington Conference in 1990 I made the sincere comment that it would be wonderful to carry my honorary leisure time work as Executive Officer to COTMA into my retirement. The real problem now is that I don't feel as if I have retired! Instead of spending all day on College matters at my Footscray desk, I am now spending all day on COTMA matters at my home desk. At least I now have a window to look out through, and there is no queue of students at the door. But I had never realised just how much COTMA work was waiting to be done, how much previously unidentified work was clamouring for attention. I had intended to be accessible 7 days a week. I had not intended to be flat out 7 days a week.

I soon realised that your work could not be done by a staff of one, so with the support of Executive, I gathered around me a team of hard working, dedicated, specialist people to assist me in it. We are your COTMA Operations Group. Our first official meeting (in the TMSV rooms at Malvern Tram Depot) went for nearly 3 hours. We dealt with 38 matters and then turned our attention to the Sessions and Workshops at the Perth Conference. To Carolyn Dean, Keith Kings, Craig Tooke and Andrew Hall I pass on my great thanks for your fine support in this work. (See Also Chairman's Report.)

My most important task of the last two years was to establish contacts with the new officers of The Met in Melbourne. Interwoven with this was the need for COTMA to co-ordinate the activities of initially 4, but finally just 2, Museums for the Melbourne Cavalcade of Transport (January 1992), and to provide leadership by liaising between those Museums, the Department of Premier and Cabinet, The Met and ATMOEA. The Cavalcade task became a most rewarding experience with The Met, COTMA and the Museums working together as a single unit to achieve shared goals. Those 2 Museums (TMSV and Bendigo), with COTMA, became an important support for The Met, instead of vice versa. We must record our very sincere thanks to Russel Nathan (General Manager, Tram & Bus Division), Les Jean (Manager, Tram Fleet), Biruta Bourke (Manager, Resources), Ray Wilson, Garry Poynton, Dave Thomas, Tony Cunningham and Sandra McLaren for their great support with the Cavalcade, to many of those same good people but also to Norm Grady, Owen Hicks, Mark Edwards, Graham Jones, Neville Woolnough, Phillip Johns and Norm Cross in our general liaison work with the many aspects of the PTC and The Met, and also to Lou de Gregorio at the ATMOEA.

It was unfortunate that my greatest single COTMA task over the last 2 years, the Cavalcade, eventually involved only 2 Museums. My thanks go to Dennis Bell (BT) and Geoff Dean (TMSV) for their total support in the many meetings and planning sessions. Certainly the co-ordination work with The Met will be of benefit to all our Museums through the co-operative spirit which has been created. But I was terribly aware that in any time I was successfully serving those 2 Museums, I had little time to provide direct support to all the other Museums. For this I can only apologise.

The Memoranda continue to be my major means of communication to Museums. READ each Memorandum and ACT ON IT. It is NOT a magazine, to be read by the Secretary or COTMA Representative and then simply filed or abandoned on the crew room table. Your lack of response to items that need your attention continues to be of negative inspiration to me.

Another matter that worries me greatly is the frequent cry from Museums of "What is COTMA doing for us?" If you are also hearing that cry, then know that the fault is YOURS. It is YOU who must spread the good word from Conferences. It is YOU who must reflect the good word from Memoranda. It is YOU who must publicly thank COTMA for work done for you and your Museum. There is only so much I can do to blow our own trumpet. the rest is up to you. But also, that cry that I hear is a selfish cry. Would it not be nice if Museum members ask "What can we do for COTMA?" All our Museums would be better for such an attitude.

A group that did ask "What can we do for COTMA?" is the Electrical Rules Committee. Formed according to your wishes from the Wellington Conference in 1990, it has completed its final draft for the attention of this Conference. I am very pleased with the professional way that this Committee has achieved its goals, and congratulate Craig Tooke (Chairman), Richard Gilbert (BTPS), Harold McCarthy (BT), Noel Gipps (MTPA), Geoff Dean (TMSV), Ian Cook (special adviser from the PTC) and Noel Blackmore (corresponding from PETS) on their work. It might well be that in the future we will initiate similar committees to look at Driver Training Procedures, Operational Practices and Standard Maintenance Programs. These are directions in which I see COTMA needing to lead.

Mention of the Wellington Conference reminds me that one of the Delegates at that Conference was Chris Jacobsen, then BTPS Secretary. Unfortunately, Chris has since passed away. He continued his work for the BTPS right until the last day and was an inspiration to those who worked with him. It would have been wrong to allow this Conference to pass without recognition of his unselfish service. Many of us from COTMA Museums and a bus load of his fellow workers from The Met and the ATMOEA attended a simple and moving ceremony at Fawkner Cemetery.

I have appended an "Incomplete List of COTMA Activities 1990-1992". Now that the operations of COTMA are shared by so many people, it is difficult to provide a totally conclusive list, but it will give you an idea of our activities. Incidentally, if we have not specifically done much for your Museum, perhaps it's because you didn't ask us.

Finally, let me thank Chairman John Radcliffe, Dave Hinman and Lindsay Richardson, as your Executive, for the privilege of working with them. Let me also thank those very good friends who have gone out of their way to provide for me on my visits to your Museums interstate and across the Tasman. I sincerely hope that my visits have been of help and benefit to you and to your members.

A Summary of COTMA Communications

by Bill Kingsley as Executive Officer

Totals are for 13 months:
1 March 1991 to 31 March 1992

Visits and Meetings	81
Sets of Memoranda or Minutes out	31
Letters out	140
Phones out	186
Letters in	118
Phones in	189

INCOMPLETE LIST OF COTMA ACTIVITIES 1990 — 1992

Completed

- Frogs and pans to PETS
- Repayments to creditors
- 77E trucks to THS
- Possible parts for R1 (R. Youll)
- Information for George Isaacs (USA)
- Overcome remaining problems concerning trams 456 / 792 (SPER)
- Check draft of COTMA CGM Minutes from Wellington
- Parts drawings to PETS
- Liaise in development of Tramway Hall, Malvern
- Assist with negotiations for exchange of 138 & 808 (BT)
- Assist with planning and development of Perth conference
- Cavalcade of Transport co-ordination
- Check SW6 878 for MTP&M
- Obtain new phone numbers for NZ personnel
- Distribute "Next Car" signs
- Advise Museums on SEC tariffs (Vic)
- Advise Museums on Transport Accident Insurance
- Form Operations Group
- Inability to supply Birney parts to USA
- Liaise with BTPS re 2000 Conference
- Future of works car 8W
- Costs of mass concrete track to MOTAT
- Update tramcar requirement list
- Inspect stored trams at Hawthorn Depot
- Establish new contacts at The Met
- Liaise re clashing dates of Melbourne tram tours
- Corrected Constitution to Tony Sell (COTMA Hon. Legal Officer)
- Update tramcar survey
- Update information of Member Museums
- Submission to Legal & Constitutional Committee
- Liaise with WTM re their Conference video
- Liaise with BTPS re their Conference video
- Determine situation re W2 mirrors for MOTAT
- Electrical Rules Committee
- Distribution of final Bundy clocks
- Distribution of destination boxes
- Audit of 1990-1991 and 1991-1992 finances
- EO personally visited WTM, MOTAT, AETM, PETS, BTMS, SPER, TTMS, TMSV, MTPA (and normal participation at BT, BTPS)
- Container loads of parts for THS (and further distribution)
- Assist interstate and overseas visitors in Melbourne
- W5 766 to PETS
- Finalise investigation re trucks from under SW2 426 for PETS
- Investigate possibility of bus/coach to Perth Conference
- Advise on greases
- New information sheet on COTMA
- Photos of 138 to Les Jean
- Assist inter-museum exchanges and sales, TMSV-AETM, BTPS-TMSV, SPER-MTPA, TMSV-MTPA, AETM-BTPS, AETM-BT, MTPA-PETS
- Unavailability of builders plates for PETS
- Liaise between BT and Bus Proprietors Association
- Assist in arranging for BT 17 and 19 in Melbourne
- Investigate possible trams from Museums for The Met's collection
- Prepare Conference reports
- Agenda for Conference General Meeting
- Produce video on Perth trams and trolley buses
- The Met route numbers to MOTAT
- Wheel lathe to AETM
- Initiate wheel grinder to SPER
- Unavailability of low floor LRV plans for Minneapolis
- Info to MOTAT re Australian Railway and Tramway Museums
- Ascertain locations of trolley bus parts and fittings
- Try to locate a BTH pedestal trolley pole base and various controllers for THS
- Failed attempt to establish a co-ordinating diary
- Mercury bulbs to BT ex STA
- Badges information to PETS
- Unavailability of construction drawings for PETS

Tasks in hand

- Reciprocal visit system
- Overhead trolley wire procurement
- Feeder cable procurement
- Compressors for MTPA and THS
- Telephone boxes for MTPA
- Problems created by National Trust/Friends of the Ws
- Tax Exemptions
- Incorporation (Winding Up clause)
- Tower truck for BT
- Sydney and Wellington proceedings
- Liaise with BT toward 1994 Conference
- Further W class trams to PETS, SPER, MTP&M
- Museum contacts listing
- Feeder panels for PETS
- Steel tyres for W2s
- Possible spare parts from Hanoi
- Pole collars for MTPA
- Request s for major tram parts
- Axle boxes for PETS
- Investigate winders of armatures
- Spare motors and trucks for 766 (PETS)
- Membership fees
- Spare parts for sale from P. Burden
- B-Van developments
- Affiliation with NFRS NZ
- COTMA Introduction card
- Exemptions from Draft Regulations for Electrical Work (Vic)
- Changes to invoicing procedures
- K 35 controllers for MOTAT
- E type valves for THS
- Brake system maintenance spares to PETS
- Liaise with AETA re Austransit '93

Tasks Continuing

- Liaise with The Met, IATM, NFRS NZ, TMS (UK), ATMOEA
- Liaise with Zig Zag Railway re Australian Rail Group
- Produce Memoranda
- Executive
- Operations Group
- Budget and Finance
- Follow up developments
  - Worcester Blvd (THS)
  - Newstead / New Farm (BTMS)
  - National Park (SPER)
- Reports for Trolley Wire
- Attend various Museum Board Meetings
- Sale of Spare Parts and Uniforms

TREASURER'S REPORT

Carolyn Dean
COTMA Treasurer

Over the past two years COTMA's profit has continued to grow.

Membership fees were increased to help cover costs. Some museums were late in paying their fees, which COTMA relies on to meet its day to day operating costs.

Uniform sales have steadied to a slow pace. Members' loans have been repaid and it is intended to repay the Acquisition Fund out over two years.

Sales of spare parts increased dramatically due to finalisation of many orders. I would request museums to pay their accounts within normal commercial trading terms after receiving their goods.

Good financial management should ensure that COTMA will continue to be financially self sufficient. My thanks to Bill Kingsley for looking after the treasury last year whilst I was overseas.

Carolyn Dean
Treasurer

POSSIBLE CASH FLOW BUDGETS 1992/93

Assumptions:

- Membership fees stay at same levels in options 1 and 4
- Expenditure on postage, telephone, printing and stationery rise slightly in Options 1 and 4.
- Purchase of parts $400
- Other expenditure $100
- Interest received $100

Option 1 (present situation)

Income:		
10 Large Museums @ $100 each	1000	
4 Small Museums @ $70 each	280	
Interest Received	100	
Sale of uniforms and parts	400	
Total		*1780*
Expenditure:		
Postage & Telephone	500	
Printing and Stationery	500	
Membership	50	
Purchase of parts	400	
Other Expenditure	100	
Total		*1550*
Excess Income		**230**

Option 2

Reduce expenditure on Postage etc., by 20%
Charge membership at $70 and $50.
Other Income and expenditure as above

Income:		
10 Large Museums @ $70 each	700	
4 Small Museums @ $50 each	200	
Interest Received	100	
Sale of uniforms and parts	400	
Total		*1400*
Expenditure:		
Postage & Telephone	400	
Printing and Stationery	400	
Membership	50	
Purchase of parts	400	
Other Expenditure	100	
Total		*1350*
Excess Income:		**50**

Option 3

As for option 2, with a charge of 10% handling fee on parts etc.

Income:		
10 Large Museums @ $70 each	700	
4 Small Museums @ $50 each	200	
Interest Received	100	
Sale of uniforms and parts	400	
10% Handling Fee on sale of parts	40	
Total		*1440*
Expenditure:		
Postage & Telephone	400	
Printing and Stationery	400	
Membership	50	
Purchase of parts	400	
Total		*1350*
Excess Income:		**90**

Option 4

As for option 1, with a charge of 10% handling fee on parts, etc

Income:		
10 Large Museums @ $100 each	1000	
4 Small Museums @ $70 each	280	
Interest Received	100	
Sale of uniforms and parts	400	
10% Handling Fee on sale of parts	40	
Total		*1820*
Expenditure:		
Postage & Telephone	500	
Printing and Stationery	500	
Membership	50	
Purchase of parts	400	
Other Expenditure	100	
Total		*1550*
Excess Income:		**270**

COUNCIL OF TRAMWAY MUSEUMS OF AUSTRALASIA

AUDITED FINANCIAL STATEMENTS

BALANCE SHEET AS AT 31 MARCH, 1991

1990 $				
	COUNCIL FUNDS			
3442	Accumulated Fund			4780
1200	Acquisition Fund			1200
4642				**5980**
	THESE FUNDS ARE REPRESENTED BY			
	Current Assets			
1526	Australian and New Zealand Banking Group Ltd.		2531	
234	Debtors		-	
315	Members Subscriptions in Arrears		100	
2372	Stock on Hand (at cost)		2670	
4447				5301
	Less current Liabilities			
297	Creditors		144	
1000	Members Loans (at call)		500	
1297				644
3150	*Working Capital*			4657
	Plus Non Current Assets			
1800	Electrical Former (at cost)	1800		
(1800)	Less Government Grant	1800	-	
1688	Storage Van (at cost)	1688		
(196)	Less Provision for Depreciation	365	1323	
1492				1323
4642				**5980**

COUNCIL FUNDS FOR YEAR ENDED 31 MARCH, 1991

1990 $		
	ACCUMULATED FUND	
562	Balance brought forward 1 April, 1990	3442
2880	Plus surplus for Year	1338
3442	Balance carried forward 31 March, 1991	**4780**
	ACQUISITION FUND	
1200	Balance brought forward 1 April, 1990	1200
-	Plus members deposits	-
1200	Balance carried forward 31 March, 1991	**1200**

INCOME AND EXPENDITURE ACCOUNT FOR YEAR ENDED 31 MARCH, 1991

1990 $			
	Income		
1425	Members Subscriptions		1280
10	Interest Received		71
2930	Sale of Equipment		596
4365			1947
	Less Expenses		
140	Affiliated Memberships	-	
6	Bank Charges Duties	3	
141	Depreciation	169	
644	Postage & Telephone	81	
182	Printing & Stationery	85	
372	Purchase of Equipment	271	
1485			609
2880	*Surplus for Year*		1338

AUDITOR'S REPORT

In my opinion the accompanying Balance sheet as at 31 March, 1991, and the Income and Expenditure Statement for the year ended 31 March, 1991, are properly drawn up to give a true and fair view of the affairs of the Council of Tramway Museums of Australasia.

R. G. Paroissien
AASA., CPA., ACIS.
Registered Company Auditor

24 June, 1991

BALANCE SHEET AS AT 31 MARCH, 1992

1991 $				
	COUNCIL FUNDS			
4780	Accumulated Fund			8075
1200	Acquisition Fund			1200
5980				**9275**
	THESE FUNDS ARE REPRESENTED BY			
	Current Assets			
2531	Australian and New Zealand Banking Group Ltd.		4547	
-	Debtors		1495	
100	Members Subscriptions in Arrears		510	
2670	Stock on Hand (at cost)		1569	
5301				8121
	Less current Liabilities			
144	Creditors		-	
500	Members Loans (at call)		-	
644				-
4657	*Working Capital*			8121
	Plus Non Current Assets			
1800	Electrical Former (at cost)	1800		
(1800)	Less Government Grant	1800	-	
1688	Storage Van (at cost)	1688		
(365)	Less Provision for Depreciation	534	1154	
1323				1154
5980				**9275**

COUNCIL FUNDS FOR YEAR ENDED 31 MARCH, 1992

1991 $		
	ACCUMULATED FUND	
3442	Balance brought forward 1 April, 1991	4780
1338	Plus surplus for Year	3295
4780	Balance carried forward 31 March, 1992	**8075**
	ACQUISITION FUND	
1200	Balance brought forward 1 April, 1991	1200
-	Plus members deposits	-
1200	Balance carried forward 31 March, 1992	**1200**

INCOME AND EXPENDITURE ACCOUNT FOR YEAR ENDED 31 MARCH, 1992

1991 $			
	Income		
1280	Members Subscriptions		1280
71	Interest Received		86
596	Sale of Equipment		4085
1947			5451
	Less Expenses		
-	Affiliated Memberships	50	
3	Bank Charges Duties	4	
169	Depreciation	169	
81	Postage & Telephone	316	
85	Printing & Stationery	516	
271	Purchase of Equipment	1101	
609			2156
1338	*Surplus for Year*		3295

AUDITOR'S REPORT

In my opinion the accompanying Balance sheet as at 31 March, 1992 and the Income and Expenditure Statement for the year ended 31 March, 1992, are properly drawn up to give a true and fair view of the affairs of the Council of Tramway Museums of Australasia.

R. G. Paroissien
AASA., CPA., ACIS.
Registered Company Auditor

10 April, 1992

TENTH CONFERENCE GENERAL MEETING

WHITEMAN PARK, PERTH

Tuesday June 2, 1992

The meeting commenced at 0830 hours.

ATTENDANCE

1. Present

Chairman	(Dr. John Radcliffe)
Executive Officer	(Bill Kingsley)
Australian Executive Member, PETS	(Lindsay Richardson)
SPER	(Richard Jones)
BTMS	(John Lambert)
AETM	(Christopher Steele
TMSV	(Keith Kings)
THS	(John Shanks)
BT	(Dennis Bell)
MTP&M	(Lewis Nyman)
MTPA	(Craig Tooke)
BTPS	(Richard Gilbert)
WTM	(Barry Ollerenshaw)
Treasurer	(Carolyn Dean)
PTC	(Les Jean, Special Guest).

Apologies

New Zealand Executive Member (David Hinman), MOTAT, STRPS

Observers

Moved Richardson/Ollerenshaw:
That all other Delegates present be admitted and welcomed as Observers. CARRIED

2. Minutes of the Ninth Conference General Meeting, Wellington, 1990

Moved Shanks/Jones:
That the minutes be accepted. CARRIED

Richard Gilbert queried whether the Treasurer was a member of the Executive and whether the position was an elected office. The Executive Officer replied that both of these questions were answered in the affirmative by the new draft Constitution.

BUSINESS ARISING FROM THE MINUTES

3. Proceedings

Sydney, 1988:

Bob Merchant (SPER) reported on difficulties with the computer system and hoped to have all in order by July 1.

Wellington, 1990:

Barry Ollerenshaw reported that the draft would be printed by July 1 also.

4. Statement of Rules and Purposes (New Constitution)

The Executive Officer reminded the meeting that all of the statement with amendments had been accepted at Wellington except for the Winding Up clause. He explained the problems of the intervening two years which had seen two recommended clauses fail to gain approval by mail vote of Council members. Those problems finally concerned the nature of COTMA wherein the members are museums, not people. The honorary Legal Officer Tony Sell (TMSV) had provided this meeting with a completely new clause which had been circulated. (Refer to Reports)

Following discussion it was
Moved Steele/Ollerenshaw
That this new Winding Up clause be accepted and submitted. CARRIED

It was then
Moved Gilbert/Tooke
That the constitution and Amendments from the Ninth Conference General Meeting, together with the previous resolution, be accepted and that the Council of Tramway Museums of Australasia be incorporated under the Associations Act of Victoria. CARRIED

5. Patterns

The Executive Officer explained that the work initiated by Allan Bradley (BTPS) required to be continued but a full inventory could not yet be compiled. An offer by Ric Francis (PETS) to assist was welcomed. It was determined that the Operations Group pursue this matter, collate returns via the Executive Officer, and forward to Ric Francis via the Secretary, PETS.

6. B Van

The Executive Officer explained that the quantity of spare parts held in store at Bylands had been very considerably reduced. These parts and uniforms were mostly now stored in TMSV buses. The TMSV, however, had recently needed urgent temporary undercover storage for building materials. The Chairman and Executive Officer had therefore approved temporary TMSV use of the B van on a mutual friendship basis. Council then discussed and approved this action.

7. Reciprocal Visits

The Executive Officer explained that suggested procedures were still being pursued and investigated. He had previously circulated a copy of a proposed Card of Introduction supported by the Operations Group.

Council then further proposed:

(a) A time limit be placed on the accreditation of the person to whom the card is issued.

(b) A limit of 20 cards per museum.

(c) A supporting Letter of Introduction from the Museum to accompany the accredited person.

(d) A note on the back of the Card requiring the member to telephone the host Museum ahead to advise of his/her coming.

(e) Executive Officer to publish a list of Contact Officers at host Museums.

(f) Amended wording on the Card, being the replacement of "active" with "current", and the addition of "For the financial year" and "Office held".

Moved Tooke/Lambert
That Cards of Introduction be printed as amended, made available to those Museums wishing to use them, and be signed by a responsible officer of the issuing Museum. CARRIED

8. Instruction Manuals

Determined that the preparation of a list of instruction manuals used by Museums also be placed in the hands of the Operations Group.

9. National Federation of Rail Societies of New Zealand Affiliation

The Chairman advised that he had written to the Chairman of NFRSNZ, which was meeting this weekend, and undertook to follow up the matter of affiliation of COTMA with NFRSNZ if necessary.

10. Tramway Museum Society (UK) Crich

Craig Tooke, as Australian Liaison Officer for the TMS, reported on progress with liaison, especially on its considerable collection of reference material and the information available from it. It was also noted that our Electrical Rules will be of use to it as it follows a similar exercise. All museums and members are encouraged to utilise this excellent liaison through Craig Tooke.

11. Co-ordinating Diary

The provision, in the Memoranda, of a calendar of forthcoming events, has proved to be impractical due to lack of dates provided by museums, but also to the irregular and often delayed publication of Memoranda. The Executive Officer asked that all Victorian Museums co-ordinate events through Tom Murray (Australian Railway Exploration Association) and the Victorian Co-ordinating Diary.

12. Motor Coach Museum Trust (Foxton, NZ)

Determined that the Executive Officer research out the statutory meaning of "research" as applied to this museum.

Moved Jones/Richardson
That the Executive Officer approach the MCMT (Ian Little) to find out if they (he) wish(es) to affiliate.
CARRIED

13. Spare Parts Pricing Policy

The Executive Officer explained that COTMA is not, nor must it be seen to be, a profit making body. However, it ought to be at least partly self-funding in order to restrain membership fees.

Moved Bell/Nyman
That COTMA charge a 10% administration fee on all spare parts, and a $5 handling fee on all parts transactions for which there was no purchase cost, and that this policy be reviewed at the next Conference.
CARRIED

14. Rockhampton

Peter Hyde (BTMS) reported that the Mayor who had been the proponent of the Steam Tram had lost office and that the Steam Tram was not operating.

REPORTS

15. Chairman

Dr. John Radcliffe spoke to his written and pre-distributed Report.

Moved Gilbert/Lambert
That the Chairman's Report be received. CARRIED

16. Executive Officer

Bill Kingsley spoke to his written and pre-distributed Report. Written Reports by Keith Kings (Spare Parts Officer) and Craig Tooke (Electrical Officer) had also been previously distributed.

Moved Nyman/Jones
That all three Reports be received. CARRIED

17. Treasurer

Carolyn Dean spoke to the audited Financial Reports 1990-1992.

Moved Richardson/Lambert
That the Treasurer's Report and the Financial Reports be received and accepted. CARRIED

The Treasurer then presented four possible Budgets for the year 1992-1993.

Following discussion it was
Moved Gilbert/Steele
That Option 4 be accepted. CARRIED

(Refer Treasurer's Report)

18. Publications

Reports by Bob Merchant (SPER) (Trolley Wire) and Alan Smith (WTM) (Tramway Topics) had been distributed and the Publications themselves had been discussed at a prior Workshop Session.

Moved Tooke/Ollerenshaw
That the Reports be received and that appreciation be expressed to the Editors who operate in a voluntary capacity and in difficult circumstances. CARRIED WITH ACCLAMATION

MATTERS ARISING FROM CONFERENCE SESSIONS

19. Electrical Rules

These Rules, as a Voluntary Code of Practice, had been requested by the Wellington Conference, and a Final Draft had been produced by the Electrical Rules Committee (which had been meeting regularly during the previous year), and had been presented to, and discussed at, a prior Workshop Session. Three Motions from that Workshop were put to Council:

Moved Tooke/Steele (for O'Hoy / Blackmore)
That the Final Draft Presentation of the Electrical Rules Committee be accepted by this Council Meeting as "The COTMA Electrical Operations Guidelines".
CARRIED with 1 abstention.

Moved Tooke / Ollerenshaw (for Ollerenshaw / Nyman)
That the Electrical Rules Committee be retained as a Committee of Review, to report to the next Council Meeting if, or as, required. CARRIED

Moved Kings/Bell (for O'Hoy/Blackmore)
That this Council thanks all members of the Electrical Rules Committee and Congratulates them on their work and diligence. CARRIED

The Electrical Rules Committee was confirmed as consisting for 1992-1994 of:

Craig Tooke	(COTMA Electrical Officer) (Chairman)
Richard Gilbert	(BTPS) (Secretary)
Harold McCarthy	(BT)
Geoff Dean	(TMSV)
Noel Gipps	(MTPA)
Ian Cook	(PTC)
Bill Kingsley	(COTMA) and
Noel Blackmore	(PETS) (by correspondence).

20. Driver Training, Testing, Medical Examination

This topic had also been discussed at a prior Workshop Session.

Moved Richardson/Nyman
That a Committee be established to provide advice and a set of Guidelines encompassing driver standards, training, and testing. CARRIED

It was further determined that Richard Gilbert should chair this Committee, which should include Tony Smith (MTPA), Dennis Bell (BT), and (by correspondence) Max Fenner (AETM). The three areas to be considered were Tuition and Training, Testing and Examination, and Medical Standards.

The guidelines are to be presented for approval at the 1994 Conference.

21. Accreditation/Operational Safety

This topic having also been already discussed, it was

Moved Richardson/Jones
That a Committee be established to provide advice and to prepare draft Operational and Safety Guidelines for Museums. CARRIED

It was further determined that David Rawlings (SPER) should convene and chair this committee, which should also include Lindsay Richardson (PETS), Dennis Bell (BT), and Troy Thomas (BTMS). The SPER Rules were suggested as a possible starting point.

These Guidelines to be presented for consideration and approval at the 1994 Conference.

MATTERS RECOMMENDED FROM THE OPERATIONS GROUP

22. General Meetings

It was agreed that, from 1994, Agenda Items for Conference General Meetings be sought from Museums, Executive and Operations Group, and a Draft Agenda be circulated before the Conference.

It was also Moved Gilbert/Shanks
That the first Annual General Meeting of the new Incorporated Association be held in Melbourne on a date to be advised by the Executive. CARRIED

23. Timing of Conferences

A proposal that Conferences not be held in winter lapsed due to the many considerations needed when establishing Conference dates.

24. Transactions

Moved Tooke/Jones
That all transactions between Museums, and between Museums and COTMA, be in writing. CARRIED

25. Requests from Museums for Parts

Council determined that all requests for parts be to the Executive Officer, who will pass such requests on to Craig Tooke (Electrical, Overhead and Power), and Keith Kings (Tramcar Parts), while Complete Trams and Trucks (Bogies) should remain with the Executive Officer.

All Museums are asked to advise the Executive Officer of surplus equipment. Ian Stewart has offered Auckland Trolley System Parts to be advertised by the Executive Officer.

GENERAL BUSINESS

26A Communications with the PTC (Vic.)

A Motion Without Notice was presented by Craig Tooke, created considerable debate and controversy, and was amended by the Representatives present without being put to the vote in its original form.

The amended Motion was then
Moved Steele/Tooke
That the Conference directs the Executive to draw up a set of written guidelines for negotiation with the PTC when appropriate for Museums to follow relating to:

1. The mechanism by which the acquisition of any spare parts and trams if available shall be carried out;
2. with whom such negotiations will be carried out;
3. how and by whom the price of such parts and trams shall be determined.

Such negotiations will be carried out with officials who are at Chief Executive level, or their delegated senior representatives. CARRIED 8-3

26B. Moveable Cultural Heritage Act

Keith Kings asked if any Museums present had been approached when the Act was being drawn up. There being no affirmative answers, the matter was further discussed as it was felt that our Museums could have made worthwhile contributions. The Chairman advised against any further follow-up action.

26C. COTMA Executive

Council felt that the Executive members might act as National Policy Co-ordinators, this duty extending into the general COTMA activity structure.

ADMINISTRATIVE PROCEDURES

27. Elections

Chairman.

Dr. John Radcliffe was nominated Jones/Lambert and elected unopposed.

Executive Officer.

Bill Kingsley was nominated Richardson / Ollerenshaw and elected unopposed.

Australian Executive Member.

Lindsay Richardson was nominated Gilbert/Tooke and elected unopposed.

New Zealand Executive Member.

The Executive Officer reported that David Hinman had indicated a willingness to be renominated. David Hinman was then nominated Shanks/Ollerenshaw and elected unopposed.

Treasurer.

Carolyn Dean was nominated Tooke/Kings and elected unopposed.

Auditor.

Robert Paroissien was nominated Gilbert/Lambert and elected unopposed. A letter of thanks was to be sent to Robert Paroissien for his continued and appreciated work.

28. Operations Group

The Executive Officer explained the need for, contribution by, and workings of, the Operations group composed of:

Bill Kingsley	(Executive Officer — Chair)
Carolyn Dean	(Treasurer)
Keith Kings	(Spare Parts and Uniforms),
Craig Tooke	(Electrical) and
Andrew Hall	(Met Liaison)

Details had previously been distributed in an explanatory sheet.

Moved Ollerenshaw/Richardson
That Council supports the continued operation of the Operations Group under the Chairmanship of the Executive Officer and the management of the Executive. CARRIED

29. Future Conferences

1994: Bendigo (BT). Confirmed at Wellington 1990.

1996: Christchurch (THS). Offered at Wellington 1990.

Moved Ollerenshaw/Tooke
That Christchurch (THS) be confirmed for 1996.
CARRIED

John Shanks foreshadowed a possible March date, which will be possible now that AGMs will be able to consider Financial Reports.

1998: Needs to be non-NZ and non-Victorian to achieve geographical balance and rotation. Jack Nyman for Maitland has indicated an interest. To be further considered in 1994. Council informed Lewis Nyman that the MTP&M offer was noted.

2000: Ballarat (BTPS) has offered to host this Conference, being the 25th Anniversary of the founding of COTMA at our first Conference in Ballarat, Anzac Weekend, 1975.

Moved Gilbert/Tooke
That the offer by Ballarat to host the Conference in the year 2000 be accepted and confirmed. CARRIED

30. Vale

All present observed one minute silence in memory of Chris Jacobsen who had tragically passed away since the Wellington conference which he attended as Secretary of BTPS.

31. Thanks

The Chairman thanked the PTC (Vic) for enabling Les Jean (Manager — Tram Fleet) to attend the Conference. In reply, Les Jean thanked Stuart Hicks (Director-General of Transport — WA) and Transperth for communicating the invitation to the PTC, and PETS for initiating the invitation. He commented that he had enjoyed the Conference greatly, and that he saw COTMA as a most professional organisation.

The Chairman also thanked Transperth and the Hotham Valley Railway for their involvement in the Conference, all special guests and speakers, but particularly Lindsay Richardson, Barrie King, the PETS Conference Committee and the PETS members as excellent hosts.

Lindsay Richardson, in reply, thanked all delegates for their great support, and expressed his real happiness with all that had been achieved.

It was then Moved Gilbert/Ollerenshaw
That the Delegates express their appreciation for the good work and valued judgements competently and articulately carried out by the Chairman, John Radcliffe.
CARRIED WITH ACCLAMATION

The Meeting was then declared closed at 1250 hours.

Winding Up clause

Our Hon. Legal Officer, Tony Sell (TMSV) has advised on a new replacement clause.

The Clause now reads as follows:

> In the event of the winding up or cancellation of the incorporation of the Council, the assets of the Council after payment of all its debts and obligations and any costs of winding up or cancellation shall be given or transferred to such Member or Members of the Council at that time whose Memorandum, Rules or constituent document prohibits the distribution of its income or property among its own members to an extent at least as great as the Council's (in Rule 2 but so that there is no such distribution to members on a winding up or dissolution howsoever called of such a Member), and if more than one equally between them.

In brief, this enables the distribution of COTMA's between those Members (Museums) whose statutes prohibit the further distribution to their own members (people).

This clause, if approved, will be inserted into our new Rules, the rest of which has already been determined. Incorporation as an Association will then be pursued.

COUNCIL OF TRAMWAY MUSEUMS OF AUSTRALASIA:

MUSEUM DIRECTORY

Chairman ..... Dr John C Radcliffe

Executive Officer ..... Mr Bill Kingsley

Member Organisations as at June 1, 1992:

Australian Electric Transport Museum (South Australia) Inc.,
Box 2012, GPO, Adelaide, South Australia 5001
(Museum: St Kilda Rd, St Kilda, SA)

Ballarat Tramway Preservation Society,
Box 632, Ballarat, Victoria 3353
(Museum: Wendouree Parade, Ballarat, Victoria)

Bendigo Trust,
80 Creek Street, Bendigo, Victoria 3550
(Museum: Hargreaves Street, Bendigo, Victoria)

Brisbane Tramway Museum Society
20 Tramway Street, Ferny Grove, Brisbane, Queensland 4055

Maitland Tramway Park and Museum Ltd,
Box 82, Jesmond, New South Wales 2299

Melbourne Tramcar Preservation Association Inc.,
Box 324, Prahran, Victoria 3181
(Museum: Haddon, Victoria)

Museum of Transport and Technology (Inc.),
Great North Road, Western Springs, Auckland 2, NZ

Perth Electric Tramway Society (Inc.),
Box 257, Mt Lawley, Western Australia 6050
(Museum: Whiteman Park, Perth, WA)

South Pacific Electric Railway Co-operative Society Ltd.,
Box 103, GPO, Sydney, New South Wales 2001
(Museum: Princes Highway, Loftus, NSW)

Steam Tramway and Railway Preservation (Co-op) Society Ltd.,
Box 108, Kogarah, New South Wales 2217
(Museum: Parramatta Park, Parramatta NSW)

Tramway Historical Society Incorporated,
Box 1126, Christchurch, New Zealand
(Museum: Ferrymead Historic Park, Heathcote, NZ)

Tramway Museum Society of Victoria Inc.,
Box 27, Malvern, Victoria 3144
(Museum: Union Lane, Bylands, Victoria)

Tasmanian Transport Museum Society Incorporated,
Box 867J, GPO, Hobart, Tasmania 7001
(Museum: Anfield St, Glenorchy, Tas)

Wellington Tramway Museum Incorporated,
Box 2612, Wellington, New Zealand
(Museum: Queen Elizabeth Park, Paekakariki, NZ)

Council Address:
51 Lenna Street, East Burwood, Victoria 3150