PROCEEDINGS OF

THE TWELFTH CONFERENCE

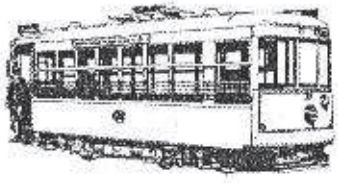
OF

AUSTRALASIAN

TRAMWAY MUSEUMS

BENDIGO, VICTORIA

2 - 6 December, 1994



Editor: K. S. Kings

PROCEEDINGS OF THE TWELFTH CONFERENCE OF AUSTRALASIAN TRAMWAY MUSEUMS

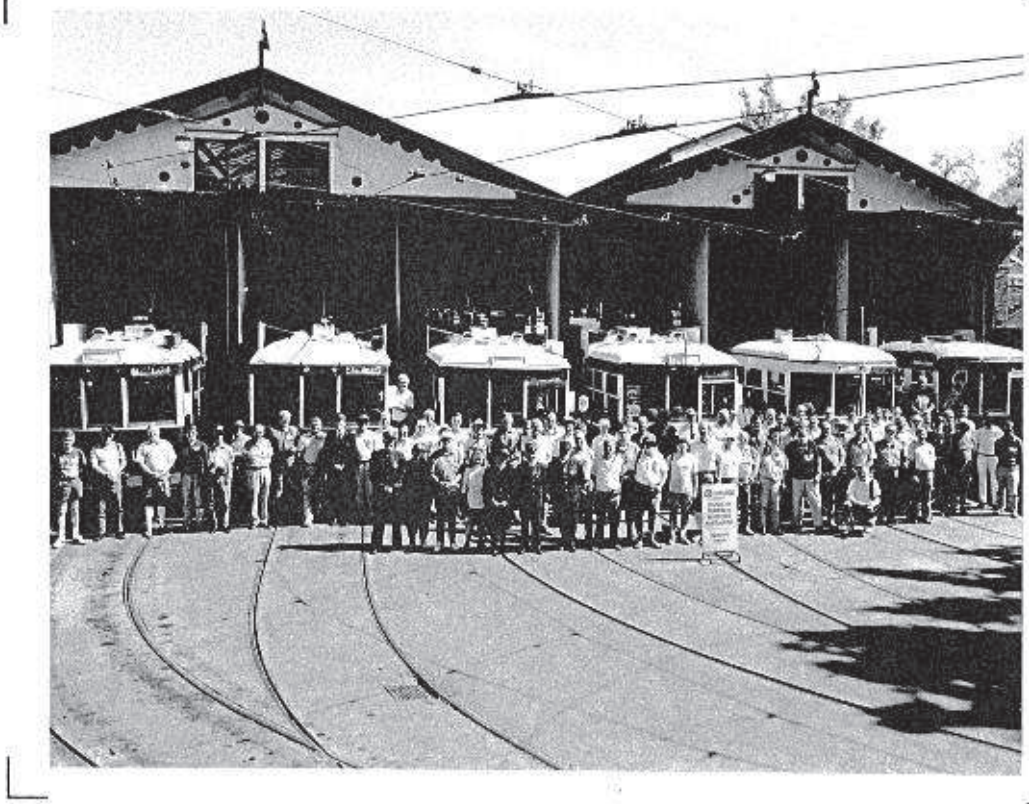
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Photograph: Robert A. Aulsebrook.

Conference delegates assembled in front of six Birney trams at Bendigo's 1903 electric tram depot, on Sunday, 4 December, 1994.

The trams are Bendigo nos. 11, 15, 28, 30, Melbourne no. 217 (The Tramway Museum Society of Victoria Inc.), Bendigo no. 29 restored as Adelaide no. 302.

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FOREWORD
COUNCIL OF TRAMWAY MUSEUMS OF AUSTRALASIA
CONFERENCE BENDIGO 1994

Dennis R. O'Hoy.
Chair, COTMA Conference Bendigo, 1994.

It only seems like yesterday when The Bendigo Trust delegates at the COTMA Conference in Wellington 1990 proposed that Bendigo could host the 1994 Conference. Following ratification at the COMTA Conference in Perth 1992 that Bendigo was to be the next venue, a committee was formed to undertake the planning, organisation and eventual implementation of the Conference. The committee at the outset established that the Conference had to be stimulating, enjoyable, full of varied activities and to utilise the distinctive features of Bendigo's historic assets. Furthermore, the Committee felt that the Conference activities should embrace all the other excellent Victorian tramway museums and groups, and to give all the delegates - particularly those from interstate and overseas a chance to visit them. (A factor which was appreciated by all concerned).

From the beginning to the end, all the planning and organisation went well, with the majority of delegates being met at their arrival points by a fleet of buses and conveyed to their first port of call at Bylands, before arriving at Bendigo and the LaTrobe University Bendigo Campus, Phoenix Conference Centre.

After renewing many friendships I was able to give a brief history of the Bendigo Tramways and the work of The Bendigo Trust.

On the Saturday, tours were arranged to The Bendigo Railway Workshops, Vintage 'Talking' Trams and lunch underground in the Gillies Crib Room at the Central Deborah Gold Mine. The afternoons activity was one of the highlights of the Conference with a cavalcade of 24 tramcars moving along the city centre. The evening meal was held at the historic Shamrock Hotel with Geoffrey Claydon giving the first of his informative talks followed by the first group of Museum Reports.

Sunday saw the official welcome and the commencement of the sessions and workshops, all of which were capably administered by Keith Kings. At the conclusion of the afternoon sessions, there was the visit to the Gasworks Museum and secondary Tramways Depot. Dinner was held at the Tramway Museum Depot, followed by an impromptu bus tour to Eaglehawk, and the second group of museum reports and a late evening tram ride on a Birney car.

Monday was a day of excellent multiple sessions and workshops, followed by the entertaining debate: "Buses are a more efficient form of passenger transport than trams". The advocates for trams winning the debate (I wonder why?). Dinner was held al fresco at the Central Deborah Gold Mine with the Honourable Minister for Public Transport Alan Brown M.L.A., The Honourable Max Turner M.L.A., Commissioners for the City of Greater Bendigo and the Chief Executive Officer in attendance. Delegates were treated to an excellent talk by Geoffrey Claydon on the wonders of National Tramway Museum at Crich U.K.

Tuesday saw the biennial COTMA Conference meeting and at this point I would like to acknowledge the past commitments of the outgoing Chariman, Dr John Radcliffe, and Executive Officer Bill Kingsley, and congratulate the incoming office bearers Lindsay Richardson and Richard Gilbert. The afternoon activities afforded all the delegates the opportunity to drive some of the Trust's tramcars and gain experience with derailments.

The final COTMA Conference Dinner at the Phoenix Centre marked the end of the Bendigo activities. The LaTrobe University Phoenix Conference Centre served the Conference well with its generous space, excellent facilities and affordable on site accommodation.

Wednesday saw the beginning of the Post Conference activities with visits to the Castlemaine and Maldon Railway, B.T.P.S. system Ballarat, and M.T.P.A. Haddon. Delegates will recall how cool the weather was in Ballarat - it even rained! A most welcomed contrast to the freak heat-wave that encompassed the continent - the only fault over which the Organising Committee had no control.

Further extensive Post Conference activities took place in and around Melbourne all of which was capably organised by Bill Kingsley (a real stalwart who carried a dozen or so tasks).

Acknowledgments

The success of the COTMA Conference Bendigo 1994 and the associated Pre and Post Conference activities were due to the valued efforts and contributions of many individual and organisations. From the onset many gave freely of their time and it is fitting that all should be gratefully acknowledged. I would therefore like to thank all those individuals and groups who:

* gave access to documentation for previous COTMA Conferences;
* assisted with the preparation of schedules and subsequent distribution and publicity;
* provided the transport and driving of buses;
* presented the papers, workshops and provided the related secretarial services and overall administration;
* drove trams and undertook guided tours;
* tended the bar and provisions of refreshments through-out the duration of the Conference;
* gave access to museums, facilities, buildings, plant and equipment.

Individuals

Geoffrey Claydon (keynote speaker), Phil A'Vard, Greg Dower, Russell Nathan, Les Jean, Eric Keys, Jim McCrum, Lou DiGregorio, Graham Jones, Dr John Radcliffe, Carolyn Dean, Richard Gilbert, Robert Merchant, Andrew Hall, John Phillips, Graeme Bennett, Timothy Borchers, Len Millar, Craig Tooke, Lindsay Richardson, John Shaw, Jim and Alyson Willcox, Ken Stringer, John Beckett, Robert and Dianne Aulsebrook, Daryl McClure, and Leo Trainor.

Organisations

* La Trobe University: Secretarial support: Susan Shearer, Madge Pinge, Suzanne Harvey.
  Media Services: Chris Muerer, Ivan Burge, Brendan Fletcher.
  Conference and Facilities: Zoe Hawley and staff.

* Bendigo Railway Workshops.

* The Public Transport Corporation

* The City of Greater Bendigo, Commissioners and staff.

* A Goninan and Co.

Museum Groups

Perth Electric Tramway Society.
Ballarat Tramway Preservation Society.
Council of Tramway Museums of Australasia.
The National Tramway Museum (CRICH).
Castlemaine and Maldon Railway Preservation Society.
Melbourne Tramcar Preservation Society.
Tramway Museum Society of Victoria.
Trolley Wire.
Puffing Billy Railway.

Parliamentarians

The Honourable Minister for Public Transport, Alan Brown, M.L.A., The Honourable Max Turner, M.L.A., and The Honourable Bruce Reid M.H.R.

The Bendigo Trust

Catering: Leo Trainor.
Central Deborah Gold Mine: Simon Desborough.
Gasworks: Edgar Harrison, Peter Worthington.
Tramways: Dennis Bell.
And all The Bendigo Trust staff and volunteers

The COTMA Conference Organisation Committee.

My heartfelt thanks and appreciation to a great team who deserve much of the credit:

Deborah Blake, Myra Potter, Keith Kings, Bill Kingsley, Dennis Bell, Jill Moorhead, Christine Nicholls and Michael Lowther. (Keith has worked continuously since the end of the Conference in order to organise the completion of these Proceedings).

Finally, I must thank all the delegates (a record number) who attended and whose participation was essential for success of the Conference. If I have omitted any names, it is unintentional and I beg forgiveness for my oversight.

I wish COTMA Conference Hobart 1996 well!

Dennis O'Hoy

Editor's Notes:-

I feel I must tender my thanks to a number of people for their help in facilitating the production of this volume:

most presenters for lodging their Papers before the Conference and the remainder for doing so at or shortly afterwards;

Session Chairs and Secretaries for agreeing to perform these tasks and for the notes the latter provided;

Bill Kingsley and Dennis O'Hoy for helping with proof-reading the draft;

Bendigo Trust staff Myra Potter and Mandy Singleton for a tremendous effort in typing, correcting, modifying and finally assembling and producing this volume.

My apologies for any errors and omissions that have not been detected.

Keith Kings, March, 1996.

CONFERENCE ORGANISING COMMITTEE OF THE BENDIGO TRUST

Chair	Dennis O'Hoy
Conference Secretary	Myra Potter
Assistant Secretary	Deborah Blake
Conference Programme & Liason	Keith Kings (Bill Kingsley, COTMA assisting)
Conference Activities Officer	Dennis Bell
Post-Conference Activities	Bill Kingsley
Activities for Partners & Guests	Jill Moorhead
Accommodation Officer	Myra Potter
Finance, Treasurer	Christine Nicholls
Publicity & Promotions Officer	Jill Moorhead
Facilities & Equipment Officer	Michael Lowther
COTMA Liaison Officer	Bill Kingsley

PARTICIPATING SOCIETIES/ORGANISATIONS - ABBREVIATIONS

Australian Electric Transport Museum	AETM
Ballarat Tramway Preservation Society	BTPS
The Bendigo Trust	TBT
Brisbane Tramway Museum Society	BTMS
Christchurch Tramway	CT
Council of Tramway Museums of Australasia	COTMA
Melbourne Tramcar Preservation Association	MTPA
National Federation of Rail Societies (N.Z.)	NFRS

Newcastle Tramway Museum	NTM
Perth Electric Tramway Society	PETS
Public Transport Corporation - Met Bus	Met Bus
Public Transport Corporation - Met Tram	Met Tram
Public Transport Corporation - Rail Vehicle Maintenance	PTC(RVM)
Public Transport Union	PTU
Puffing Billy Preservation Society	PBPS
Rockhampton City Council	RCC
South Pacific Electric Railway Cooperative Society (Sydney Tramway Museum)	SPER(STM)
Tasmanian Transport Museum Society	TTMS
Tramway Historical Society, Christchurch	THS
Tramway Museum Society (Crich) (National Tramway Museum)	NTM(Crich)
The Tramway Museum Society of Victoria	TMSV
Wellington Tramway Museum	WTM

LIST OF DELEGATES AND GUESTS

Phil A'Vard	PBPS
Rod Atkins	TMSV
Graeme Bennett	TMSV
Ray Blackmore	PETS
Tim Borchers	TBT
Henry Brittain	WTM
Marlene Burling	WTM
Trevor Burling	WTM
Don Campbell	SPER(STM)
Wayne Chaseling	BTMS
Geoffrey Claydon	NTM(Crich)
Bill Cox	THS
Les Crofts	Commissioner, City of Greater Bendigo
Carolyn Dean	BTPS/COTMA
Lou DiGregorio	PTU
Greg Dower	Met Bus
Earl Ewers	TBT
David Frost	TMSV
Martin Grant	PETS
Andy Hall	TMSV
Michael Hearn	TBT
Chas Huggard	TMSV
Peter Hyde	BTMS
Les Jean	PTC(RVM)
Russell Jones	TMSV
Stuart Keenan	SPER(STM)
Eric Keys	Met Tram
Barrie King	PETS
Bill Kingsley	TBT/COTMA
Don Lange	TTMS
Michael Lowther	TBT
Harold McCarthy	TBT
Jim McCrum	PTU
Len Millar	BTPS/TBT
Jill Moorhead	TBT
David Neish	RCC
Jack Nyman	NTM
Dennis O'Hoy	TBT
Chris Andrews	AETM
Dennis Bell	TBT
John Beckett	TBT
Deborah Blake	TBT
Ted Bowles	TBT
Alan Brown MLA	The Honourable, Minister for Public Transport
Julie Cain	TBT
Brendon Carter	THS
Howard Clark	SPER(STM)
Tony Cody	SPER(STM)
Dave Critchley	SPER(STM)
Norm Cross	PTC(RVM)
Bruce Dale	THS
Trevor Dennhardt	PETS
Frank Doherty	THS
Jack Evans	TBT
Dean Filgate	MTPA
Richard Gilbert	BTPS
Richard Gray	WTM
Greg Harris	THS/Southpower
Dave Hinman	THS/Chch City C
Darren Hutchesson	BTPS
Chris Jacobs	SPER(STM)
Graham Jones	A. Goninan & Co.
Peter Kahn	SPER(STM)
Russell Kent	THS
Helen Killick	WTM
Keith Kings	TMSV/TBT
James Lerk	TBT
Peter (Pal) Letheby	AETM
Norm Maddock	TMSV
Daryl McClure	TBT
Bob Merchant	SPER(STM)
Morris Moller	WTM
Kim Moorhead	TBT
Christine Nicholls	TBT
Lewis Nyman	NTM
Chris Olsen	SPER(STM)

Geoff Olsen	SPER(STM)	Glen Paull	AETM
Bob Pearce	PETS	Bryce Pender	WTM
Jack Pennack	AETM	John Phillips	BTPS
Roger Pierce	CT	Myra Potter	TBT
John Radcliffe	AETM/COTMA	Bruce Reid	The Hon., MHR.
Lindsay Richardson	PETS	Alan Robb	THS
Lloyd Rogers	MTPA	Peter Ross-Edwards	Chief Commissioner, City of Greater Bendigo
Murray Sanders	THS		
Bill Scott	BTPS	Peter Seamer	C.E.O., City of Greater Bendigo
Colin Seymour	AETM		
John Shanks	THS	Hadley Sides	Manager, Economic Development, City of Greater Bendigo
Maurie Sharkey	Commissioner, City of Greater Bendigo		
John Shaw	PETS	Christopher Steele	AETM
Les Stewart	NFRS/WTM	Jeff Stocco	TMSV
Ken Stockdale	SPER(STM)	Keith Stodden	TMSV
Mike Stukely	PETS	Craig Tooke	MTPA
Max Turner, MLA		Terry Verney	PETS
David Verrier	TTMS	Ray Webster	PETS
Ron White	AETM	David White	TMSV
Jim Willcox	TBT	Alyson Willcox	TBT
John Withers	MTPA	Les Withington	TTMS
Bruce Worthington	PETS	David Wright	City of Greater Bendigo, seconded as Administator of the Bendigo Trust

PROGRAMME OF ACTIVITIES

Friday 2nd Dec, 1994.

PRE CONFERENCE

Pick up Melbourne Airport and Spencer Street Railway Station
Early arrivals to visit Bylands TMSV for lunch, inspection and rides

5.30 p.m. REGISTRATION Phoenix Conference Centre (La Trobe University Bendigo - Osborne Street Campus)

7.00 p.m. Dinner - Burnett Lounge (Phoenix Conference Centre)

8.30 p.m. Orientation and welcome to Bendigo. Slides, videos - Dennis O'Hoy

Saturday 3rd Dec, 1994.

CONFERENCE

7.15 a.m. Breakfast
8.00 a.m. REGISTRATION
8.45 a.m. Buses depart Phoenix Centre
9.00 a.m. Tour of Bendigo Railway Workshops
10.15 a.m. Depart
10.30 a.m. Morning Tea - Gold Link Cafe
11.00 a.m. Vintage "Talking" Tram Tour
12.00 noon Start of tour of Central Deborah Gold Mine
12.30 p.m. Lunch - Gillies Crib Room
1.15 p.m. Complete tours of Central Deborah Gold Mine
2.30 p.m. Back on tram to Tramways Avenue
2.45 p.m. Grand Cavalcade Bendigo Tramways
Panorama Photographs
* Tower Truck - High Street
* Shamrock Hotel Balcony
* L.C.C. TAFE Balcony (Corner McCrae & Mundy Streets)
6.00 p.m. Buses Depart from Depot for Phoenix Centre
6.15 pm LATE REGISTRATION
6.45 p.m. Buses depart Phoenix Centre
7.00 p.m. Dinner - Historic Shamrock Hotel
8.30 p.m. Museum Report
10.30 p.m. Buses return to the Phoenix Centre

Sunday 4th Dec, 1994.	**CONFERENCE**	
	8.00 a.m.	Breakfast
	8.30 a.m.	REGISTRATION
	9.00 a.m.	Official Welcome (Conference Hall) President, The Bendigo Trust, Mr D H R McClure Commissioner, City of Greater Bendigo Key Note Speaker - Mr Geoffrey Claydon - The National Tramway Museum (Crich) and long time Secretary, THS, UK
	10.30 a.m.	Morning Tea
	11.00 a.m.	1st Session Papers/Workshops
	12.30 p.m.	Lunch - Burnett Lounge
	1.30 p.m.	2nd Session Papers/Workshops
	3.30 p.m.	Afternoon Tea
	4.00 p.m.	Buses depart Phoenix Centre for the Tramways Museum/Depot
	4.15 p.m.	COTMA Group Photograph Tours of Museum/Depot & Gasworks Depot (Weeroona Avenue)
	6.30 p.m.	Dinner - Tramway Museum/Depot - Spit Roast Night rides and refreshment on trams Museum Reports
	10.30 p.m.	Depart for Phoenix Centre
Monday 5th Dec, 1994.	**CONFERENCE**	
	8.00 a.m.	Breakfast
	8.30 a.m.	REGISTRATION
	9.00 a.m.	3rd Session Papers/Workshops
	10.30 a.m.	Morning Tea
	11.00 a.m.	4th Session Papers/Workshops
	12 noon	Lunch - Burnett Lounge
	1.00 p.m.	5th Session Papers/Workshops
	2.45 p.m.	Afternoon Tea/Museum Sales and Promotions
	3.15 p.m.	6th and Final Session Papers/Workshops
	4.00 p.m.	Sales and Promotions (Continued)
	4.30 p.m.	Debate "Buses are a more efficient form of passenger transport than trams".
	6.15 p.m.	Buses depart for the Central Deborah Gold Mine
	6.30 p.m.	Dinner at the Central Deborah Gold Mine - Guest Speaker, The Hon. Alan Brown MP, State Minister for Public Transport
	8.00 p.m.	Museum Report - The National Tramway Museum (Crich)
	10.30 p.m.	Buses return to Phoenix Centre
Tuesday 6th Dec, 1994.	**CONFERENCE**	
	7.30 a.m.	Breakfast
	8.00 a.m.	REGISTRATION
	8.30 a.m.	COTMA Conference General Meeting
	10.00 a.m.	Morning Tea
	10.30 a.m.	Continuation of Conference General Meeting
	12 noon	Barbecue Lunch - Phoenix Centre
	1.15 p.m.	Buses depart for Tram Depot
	1.30 p.m.	Tram Rides and Driving (a) Lower Bridge Street (b) Caledonia and Thunder Streets (c) Visit (by foot) to John Beckett's Miniature Tramways
	5.30 p.m.	Buses depart from the Tramways Depot/Museum
	7.00 p.m.	COTMA Conference Dinner - Burnett Lounge * Guest Speaker - Geoffrey Claydon Museum Reports
Wednesday 7th Dec, 1994.	**CONFERENCE**	
	7.30 a.m.	Breakfast
	8.45 a.m.	**OPTION 1.** Transport to Melbourne available on request **END OF CONFERENCE**

OPTION 2 POST CONFERENCE ACTIVITIES

8.30 a.m. Buses depart for Post Conference Activities

- * Wednesday 7th December
- * Thursday 8th December
- * Friday 9th December
- * Saturday 10th December
- * Sunday 11th December

} Refer to separate report at rear of this volume for a summary of activites on these days

DETAILS OF CONFERENCE SESSIONS

1st Session — 11.00 a.m. - 12.30 p.m. Sunday 4th December

11.00 a.m. Phil A'Vard (Puffing Billy)
Boards of Enquiry - "What to do until the Coroner comes"

11.45 p.m. Richard Gilbert (BTPS) for C. Britts
"Electric Motors - Good Housekeeping"

Dennis Bell (TBT), Mrs Judy Mott, Ms Heather Newnham
Driver Medicals

2nd Session — 1.30 p.m. - 3.30 p.m.

1.30 p.m. Eric Keys (Manager, Marketing & Planning - Met Tram)
"Tramways in Melbourne and expectations for the future from a managerial viewpoint"

2.15 p.m. Graham Jones (A. Goninan & Co)
Tramcar Restoration

John Radcliffe (COTMA Chairman)
"Professional staff in community museums"

2.45 p.m. Dave Hinman/Murray Sanders (THS)
"The Christchurch Tramway comes to town"

Richard Gilbert (BTPS/COTMA)
COTMA Driver Training Committee

3rd Session — 9.00 a.m. - 10.30 a.m. Monday 5th December

9.00 a.m. *Street and site scaping (D)*

Bruce Dale (THS)
"The use of vintage buses to supplement tram museum income"

9.30 a.m. Craig Tooke (MTPA)
"Turning your dreams into reality"

Bus and coach museums as COTMA members (D)

10.00 a.m. John Shanks (THS)
"Volunteers and the promotion of a new city tramway"

Developing social activities (D)

4th Session — 11.00 a.m. - 12 noon

11.00 a.m. Colin Seymour (AETM)
"Tell us your history"

John Beckett (TBT)
Tramway overhead

11.30 a.m. Don Campbell (SPER)
Tramway video productions

Bob Pearce (PETS) *"Axle box brasses - wear - causes and remedies"*

5th Session — 1.00 p.m. - 2.45 p.m.

1.00 p.m. *Fire Prevention (D)*

Richard Gilbert (BTPS)
"Are we talking to the right ministries"

Bill Scott (BTPS)
"Societal imaging - leaflets, postcards & guidebooks"

1.30 p.m. Les Stewart (NFRS/WTM) *"Rail safety legislation in New Zealand - impact on volunteer heritage rail operators"*

5th *Session Cont'd*	2.15 p.m.	Trevor Burling (NFRS) *"Skills development in the museum environment - an overview of the effect of legislative changes in NZ"*
6th Session	**3.15 p.m. - 4.30 p.m.** 3.15 p.m.	Don Campbell (SPER) *"Rail Safety legislation in New South Wales"*
	4.00 p.m.	Sales and Promotions
Debate	**4.30 p.m. - 5.30 p.m.** *"That Buses are a more efficient form of passenger transport than trams"*	

(D)= Discussion Sessions
Note: In some cases above, titles have been shortened in order to fit the tabular presentation

OFFICIAL WELCOME

Daryl McClure, President, The Bendigo Trust.
Session Chair: John Radcliffe — Session Secretary: Bill Kingsley

Daryl introduced himself as one whose Bendigo upbringing was spent in frustration by living beyond the tramlines in White Hills.

Daryl then pondered the problem of opening something that was already open. He reminisced on his childhood days when openings took place after things had nearly closed, and about one particular gentleman who was always expected to open The Show by buying everything that was left in the stalls.

Trams are great icons with a great relationship to people. They have personalities. The Birneys are cosy and cute. The Toast-Rack is the school type - sit up and face the front. The Truckers are just happy to be on the rails.

The rails are a significant means of holding the town together and providing a sense of permanency. By comparison, the White Hills bus was required by law to use a devious route to avoid the tramlines.

As a youngster, Daryl could never work out how trams could travel such long distances without the motor going.

On one occasion while still a youngster, Daryl's interest was awakened by the legendary Basil Miller. "Do you think you could drive it?", to which an eager reply of "Yes" was made, but Daryl's sister commented "But I couldn't steer it!".

It then gave Daryl "Pleasure and Pride" to declare the Conference officially open, in the knowledge that it would be of great benefit to Bendigo, all the Museums, and their Delegates.

KEYNOTE ADDRESS

Geoffrey Claydon, Vice President, Tramway Museum Society (U.K.)

Session Chair: John Radcliffe — Session Secretary: Bill Kingsley

G'Day. You must all be gluttons for punishment.

But it is great to be able to attend and address COTMA for the second time (The first being Christchurch in 1978).

In 1978 I had the privilege at seeing all the Museums first. Not so this time, coming directly from the U.S.A.

Note that Crich in Derbyshire is pronounced "CRYCH IN DARBISHEER".

The disused quarry of 1959 is now the National Tramway Museum, a charitable institution, with 50 trams, one mile of "1 in 20" track, 20 paid full time staff, 2000 members (of which 200 are active), 120,000 visitors per annum and an annual income of $700,000.

About marketing

At National Tramway Museum, the basic offering is a tram ride along the middle of the street that then goes into "the outback".

But the total product is much more and you must identify:-

1. Active participation by visitors (but beware the white knuckle ride - the pink knuckle ride is slightly more relaxing!).
2. Passive interpretive displays
3. Level of interest, especially with other attractions at the Museum.
4. The demand by - Local residents.
   - Tourists (especially those staying with local families).
   - Groups and Schools.
5. Weather and protection from the rain (the sun always shines in Bendigo).
6. Price.
7. Size of the market.

The National Tramway Museum identifies two isochromes of visitors, being those 'locals' who can travel to the Museum within 60 minutes, and the 'further afields' who are within 90 minutes. For each you must identify the numbers and types of households, ethnic groups, lifestyle, unemployment.

The better the marketing, the higher percentage of groups attend. Groups should constitute 12% to 24% of visitors.

Groups have booked in advance, so poor weather alternatives must exist.

School children will often bring their parents along later.

Coach drivers and operators must be given free meals and entry.

12.5% of net turnover is spent on marketing, But don't throw money away.

The lower the admission price the more people will come, but the more staff you must employ. The higher the price, the less will come, but the less you need to employ.

You must have a marketing officer, who does not need to know about trams, but must understand the press, T.V., and politicians.

Avoid paid press and T.V. advertisements. Utilise special events such as the millionth visitor, awards, special visitors, for free press and T.V. coverage. The annual National Tramway Museum Extravaganza is now too costly and the novelty has worn off.

Try car rallies, Yorkshire bus rallies, street entertainers, Santa Specials, Santa in his grotto (National Tramway Museum needs two Santas!).

Charge people to be taught to drive a tram - theory, practice, the lot. Then present a Certificate. Comments such as "A marvellous experience" are frequent.

About Membership

Seek more members. The active will mean a larger workforce. The inactive are unpaid marketers.

Try induction weekends for new members, and special days for all who joined in the previous 12 months, with hands-on driving and social events. Look after and care for your members.

Nothing succeeds like success. Enthusiasts will work for the body with a proven record, as they can expect to see results by the end of the day (eg., Festiniog Railway).

New Management

Restrict the use of the term "museum", for such brings needs for curators, collection policies, safeguarding of exhibits.

Beware of the competition "Conservation" versus "Replacement", such as "we must keep the original brake blocks" versus "let's put on new brake blocks". Preserving the past is also about preserving the motion and movement of vehicles. To this end the most important item to conserve is "skills".

Use audio-visuals, exhibitions, "expositions of the past", library and archives, research. Safety is important. One accident can affect the other museums too.

There is no such thing as "absolute" safety. Establish procedures, counter risks, recognise hazards, and the role of the coroner. Keep histories of cars and crews. Train new crews by syllabus. Keep records.

It is hard to keep people enthusiastic about safety. Sir Richard Clark stated, "If you are dedicating your life to a project, make sure the project is the greatest".

Craig (Tooke) has helped with a 60 page Code of Practice for overhead wiring. Even Blackpool has asked for a copy.

There is a role here for COTMA. Unfortunately, COTMA is unique in the world. There is nothing similar anywhere. The National Tramway Museum leads the United Kingdom. The American Rail Museum in America is not really effective.

The interest of Delegates at this conference, the width of agenda, the enthusiasm, the encouragement, is all indicative of success.

Best wishes for the future.

Discussion

To a question by John Radcliffe about museums in Britain, Geoffrey spoke of too many stuffed animals where "hands-on" is really needed. There are too many competing attractions fighting to maintain market shares.

Don Campbell asked about paid employees. Half the income at National Tramway Museum is for wages, but the Per-Way Department is entirely volunteer. Vast numbers of volunteers are essential.

To an inquiry by Daryl McClure about new tramways in the U.K., Geoffrey mentioned 6 foot deep track foundations, encasing rails to deaden sound and overcome electrolysis, massive overhead requiring more poles and reduced aesthetics, and highly sophisticated car maintenance.

Bob Pearce queried the undergrounding of power. Indeed A.C. had to go under the tracks.

WHAT TO DO UNTIL THE CORONER COMES

Presenter: Phil A'Vard
Session Chair: Dennis O'Hoy

Session Secretary: Bill Kingsley

In the late 1950s a small group of people in Wales started a movement which was to be copied all over the world.

A dedicated band of young enthusiasts proved to the Government and to the population of England, that a railway could be restored and operated by volunteers, i.e. by ordinary people working in their own time.

The late 1950s and early 1960s saw this urge to preserve railways and tramways spread into all points of the compass, with the result that there are now hundreds of rail guided systems of one form or another, preserved and operated by amateurs in almost every country.

In the 1970s and early 1980s we saw these groups develop into small businesses in which well-wishing amateurs give their labour free to the enterprise, allowing them to invest their fares in capital development and in the employment of personnel to service their equipment and, in some cases, to operate and market.

Development and consolidation was perhaps not as difficult as one might think. The organisers, i.e. the management, had years of tradition and practice upon which they could model the development of each enterprise. There were existing rule books, practices and laws which would guide them in the restoration of their relics and satisfy the nostalgic needs of their volunteers, club members and patrons. In many ways the 80s were perhaps the halcyon years of the preservation movement.

The 1990s however, are different. These are the years in which the preservation movement will have to grow up. Forty years after the first act of preservation, we find that our preserved relics are now operating in a different world. We are still offering enjoyment to patrons and to volunteers. Their expectations are no longer those of people of the 1950s. Patrons see the enterprise as a tourist attraction (i.e. as a business) and have much less sentiment for voluntary operation. Volunteers today are now in a second generation phase, without the same dedication and wisdom of their earlier brethren. Most cannot recall the preservation phase and have joined the organisations for reasons other than that of saving it.

Something else has happened however, and it may be time for amateur management of preserved railways and tramways to become aware of this. I refer to the fact that in the 1990s the environment in which our businesses operate has changed dramatically! The rules of a century ago are no longer relevant or are under challenge.

Since the mid 1980s we've seen at least three changes which will, in time, have enormous effect on our businesses. There are more to come! The first of these changes was the lifting of the bans upon the legal profession advertising their services. This means every newspaper one turns to, will have ads claiming that one solicitor or another can "get you money" by acting on your behalf against the perpetrator of an outrage against you. The net effect of this is that we are moving very quickly to the American style of economy where the first words that are uttered after the word "ouch" are "who do I sue?"

The second change and probably the most far reaching, is the Occupational Health and Safety philosophy. This had its roots in the U.K. and Europe many years ago and has the effect of taking from government authority the responsibility for ensuring safety in the work place and other areas and transferring it to the occupiers or the proprietors of the work places. Occupational Health and Safety Acts do not prescribe any specific safety procedures, yet they have the power to "hang" anybody who does not follow one. They also have the power to trace responsibility for any negligence or malpractice down to an individual, be it a volunteer or an employee of the organisation.

A third one is director's liability. We have seen in the last decade, the removal of corporate protection of decision-makers and it is possible now for individuals serving on the committee or on the board of any of our preservation businesses to be sued by shareholders (i.e. members), or by the Australian Securities Commission for negligence in exercising their directorial duties. This almost means that every member of a board can be sued if an error is made in a balance sheet and not detected by their vigilance. It can also extend to management at all levels.

There are more changes in the pipeline. Recently, there came across my desk, a draft of a new Victorian Act, the "Equipment Public Safety Act, 1994". This had been issued for comment before being proclaimed. After proclamation, it will have, I believe, a substantial impact on all of our operations. The object of the Act is to secure the health and safety of persons in relation to the design, construction, manufacture, installation, erection, alteration, maintenance, repair and use of prescribed equipment to protect people generally against risks to health or safety in relation to prescribed equipment and to eliminate at the source, risk to health and safety of persons in relation to the design, construction, manufacture, installation, erection, alteration, maintenance, repair and use of prescribed equipment.

The definition of the words, "prescribed equipment" is given as "any equipment which is declared by the regulations as "prescribed equipment"". I have yet to find any reference to qualify this further other than a

reference to the fact that The Governor in Council may make regulations declaring any equipment to be prescribed equipment.

What is it that we are operating other than equipment? Implications behind this are not unlike that of Occupational Health and Safety. It places the onus of ensuring that the equipment is safe upon the proprietor, the designer and probably, the operator.

Let me ask you now, does any of us really understand the full design parameters of the ancient equipment that we are now running? Have we added to it in any way? In so doing, did we undergo a full analysis as to the safety of the particular item that we added? Has it been appropriately stressed from an engineering point of view? Was the timber used in a repair, the appropriate structural grade for the job to which it was being applied? What were the qualifications of the person who decided to make the repair and/or what were the qualifications of the person who designed the improvement? How many times have we, as amateurs, done things to our equipment and then placed it into public traffic? That individual as well as the employer can be culpable under the Act.

Neither the Occupational Health and Safety Act nor the Equipment, Public Safety Act, 1994 gives any guidance or clear definition for their term "so far as is practicable" with regards to safety procedures. They do provide, however for the relevant Minister to approve a code of practice. Compliance with such a code absolves individuals or organisations from civil or criminal proceedings. However, the preparation of such codes is not prescribed by any Act and requires a vast amount of spade work to be done by the organisations concerned.

The existence of these Acts brings into question the rules, regulations and practices which have been used by the preservation groups since they began and since the enterprises they preserve began. They also highlight the risks to which volunteers expose themselves in undertaking roles in operating under these rules, regulations and practices.

All is not as gloomy as it may sound. Fortunately, these same Acts also apply to the professional railways.

In Victoria and New South Wales, most of the preserved railways are supervised by their respective public transport commissions. Both of these States have now introduced a system of accreditation against which railways, professional or amateur, can be assessed. The process refers to any gauge 2ft. and upwards. This Railway safety accreditation process examines safe working procedures, administration, engineering practices and standards, training and certification of staff competency, emergency procedures and management policies. In fact, almost every aspect of operating the rail enterprise is subject to detailed examination.

At present, the system is being administered through the Public Transport Corporations of both states and applies to railways only. I however suggest it is only a matter of time before a National Rail Safety accreditation process will apply to every railway and tramway system throughout the country. While such a system will not replace Occupational Health and Safety and similar Acts it will provide the mechanism for the establishment for Codes of Practice.

It would behove all preservation groups to adopt common practices, standards and procedures so that a common code of safety practice would apply across all preserved railways. Victoria has taken a step in this by adopting standard regulations and safe working procedures which apply to all preserved lines.

The amount of work involved in this however, is prodigious. The rail safety accreditation process is not one which specifies the practice. It is, as the name says, one which gives accreditation to the practices and procedures which are adopted by the organisations.

Every organisation can submit its own set of practices to the process and be given accreditation individually. I suggest however that we would be better served if we were to establish an industry Code of Practice which would be approved under Occupational Health and Safety and similar Acts. The great advantage of this would be in the mobility of volunteers.

If safety procedures were standardised throughout the industry, the transition of volunteers between preserved systems would simply involve certification in local knowledge and practice rather than the full scale training and certification for each organisation.

Having painted a part-picture of the environment in which our enterprises now exist, I now turn to a small aspect of the scene in order to justify the colourful title of this paper. That of procedures in an emergency!

A detailed examination of such procedures will be one of the first aspects of your operation to be considered under any form of accreditation.

In its forty years of existence, the railway preservation movement in Australia has led a "charmed life" in so far as accidents are concerned. However, as the insurance companies say, "the longer you go without an accident, the bigger it will be when it happens". In short, the next big one could be just around the corner.

Avoid complacency! It can happen on your railway at any time! Already we have had, to my knowledge, two fatalities on preserved rail systems. Last year saw a boiler incident on a railway in South Australia in which at least one person was killed. I believe in New South Wales some years ago, a footplate man was fatally injured. We are operating dangerous equipment and despite stringent operating precautions, anything can and invariably, will happen. When it does, the entire reputation of your organisation which may have been built up over forty or more years, will be put to the test. After the crunch, you only have a matter of minutes in which to save the reputation, the organisation and perhaps its directors, staff and volunteers from prosecution.

Let me now paint another picture.

It is a quiet Sunday afternoon during the January school holidays. Most of your regular volunteers are on vacation, as is most of the executive management. Despite their best efforts, the roster officers have been unable to fill all operating positions for the day, so you are running slightly short-staffed. As most of your skilled and experienced volunteers are absent, the operation is being performed by those of lesser skills and experience. These may be very willing and, in fact, qualified personnel who are second or third generation volunteers. Even though qualified, they may not have the experience of older members or full time employees.

This, I am sure is a familiar scenario. Now let's introduce an unfamiliar one.

Through equipment failure, a tram loaded with people derails on an embankment. The trolley pole entangles in the overhead and brings it down, the tram rolls on its side down the embankment. The nearest road is 500 metres away across a field. Trapped in the tram are injured children, people possibly killed. The tram driver is unconscious. The conductor, a youth.

If this was your tramway, what would happen next?

* Would the conductor know who to call for assistance?
* Is there a communication system available for the conductor to use?
* Is there a senior person on duty for the conductor to contact?
* Has that senior person been trained in what steps to take in this situation?
* Has that senior person the means to make that contact?
* Is there a suitable qualified person on hand to disconnect the power supply?
* Does that senior person (if any) have instant access to telephone numbers for emergency services?
* Will he lose valuable minutes rummaging through the telephone directory?
* Does the tramway have emergency breakdown equipment available and does it have people available who are trained in its use?
* Is there a system whereby the location of the incident, can be identified clearly to emergency vehicles? There is no sense in telling the emergency services that the incident took place at "Fred Nurk's Curve" on the tramway.

Let's now assume that someone has managed to make the right decisions and that the emergency services have been called, the State Emergency Services, ambulances and fire trucks et alia have all turned up on the scene and the dead and injured are being taken away. The police arrive!

* Who represents the organisation on the scene, to the police? Bear in mind, the incident took place on your own property and is not a road traffic matter.
* Is there a mechanism in place for the gathering of information and evidence which can be used by the organisation to determine the cause of the incident?
* Is the mechanism sufficient to be used as a defence in subsequent litigation in a court of law or in the Coroner's Court?

* Is there a mechanism to protect volunteer staff from incriminating themselves when making statements to the Police?
* Has anybody thought of bringing out their camera and photographing the incident from every possible angle?
* Is there a competent person available to handle questions from the press?

Let us now move to events after the incident. The wreckage has been cleared away, the damage has been repaired and it is time for the great wash-up.

* Is there a formal mechanism for the evaluation of the evidence which was gained from the site?
* Has the cause of the incident been identified?
* Has appropriate action been taken to ensure that it will not happen again?
* If there is any blame, has it been apportioned?
* What disciplinary steps if needed, have been taken?
* Has the organisation a policy of assisting volunteers when in court?
* Has the organisation any system where a volunteer, who has been traumatised by an incident of this nature, can be counselled? In this case, think of the driver or the conductor or the first on the scene, each of whom has witnessed death and serious injury.
* Has the administration of the organisation evolved a system whereby reports arising from incidents of this and any other nature are systematically recorded?
  And last, but certainly not least;
* How far is the organisation prepared to go in supporting a volunteer whose negligence contributed to the accident and to the deaths of the people concerned? Employees generally, have their Unions. What support do volunteers have?

Most of the points covered above are sufficient to make our collective hair stand-on-end but I assure you they are real.

As mentioned at the beginning of this discussion, the emergency services vehicle will probably run neck and neck with the legal profession trying to get to the victims and law suits will follow an incident of this nature like waves on a beach.

"But that then, is the job of the insurance company", I can hear you saying. That may well be. The insurance company will certainly research behind the scenes, will take advantage of all the information you gather and will fight on your behalf, but it involves an enormous amount of input on your part. Volunteers will be called to give evidence. The integrity of your organisation will be called into question by the prosecution. The press will be in court seeing what dirt they can get upon you. Prosecuting barristers will have a field day about "amateurs playing trains or playing trams". The insurance company will certainly look after their interests in the case. They will not necessarily seek to protect volunteers or your organisation and they are not necessarily interested in "hosing down" the press. This leads to my first question - has your organisation the executive resource to oversee its interests in such a situation?

Now that's a grim picture and it's on the cards for every one of us. So, having terrified you, I hope, I'll now give you some examples of what my organisation has sought to do in these matters.

It's not possible to cover every contingency in planning emergency procedures, but with an incident such as that described, any procedures that have been laid down are going to save precious seconds, will save lives and may, in the long term, save your reputation and credibility as an operating entity. I ask you to use these ideas and examples not as a total solution to your problems but as a basis for you to form your own procedures.

Firstly, we have in place a system of incident reporting. Located in the kit of every guard on every train, in every signal box, in every station, in every office is a blue form or "The Incident and Defect Report" - the ubiquitous "I.D.R.". This is a form, which, if followed correctly, will note most important details surrounding an incident. We have conditioned our workforce, both voluntary and professional, that they must complete one of these forms when any incidents occurs that could cause injury, be of any embarrassment to the organisation, or be of potential damage or injury. These are collected by the station master every day and transmitted to the relevant divisional manager. After action, they are filed.

Secondly, we have invested heavily in communications. From the beginning, we had a telephone line which ran adjacent to the right of way between the terminal stations. Very early in our history, we went to train-to-

base communications by the installation of portable radios in each guard's van. We have latterly installed a far more flexible and wide reaching system and are encouraging now all drivers and guards to carry hand-held radios to supplement the main train-to-base system. The telephone line has been retained with a more sophisticated exchange system and we have installed telephone boxes along the track at approximately every 500 metres. Telephones are also located at every level crossing. As a backup to our own system, Telecom telephones are located at every station along the line. It is possible therefore for an officer on the train to have access to some form of communication within minutes of any incident happening.

Thirdly, we have evolved a system of identification for places along the railway. The poles of the old telephone system have been placed to good use. Starting at Belgrave, every telephone pole along the right of way has been numbered. The location of each pole has been recorded on a strip map of the railway line. Copies of this strip map have been distributed to the emergency services in the district, namely, the Fire Brigade and Ambulance services. Hence, it is possible for an officer of the railway to indicate to the Ambulance or the Fire Brigade the pole number at which their attention is required.

The service is then able to locate that number and its adjoining road by reference to the plan provided for their reference.

Located in every station along the railway line where they are constantly in view to senior personnel, are copies of the folder labeled "Emergency Procedures Manual". Personal copies of this manual have been issued to every Station Master on the roster along with instructions as to their use. Fortunately, from the very beginning the Puffing Billy organisation instituted an hierarchical structure where the station master of the Belgrave station was to be the key person in the day's operation. The station master is always in attendance at Belgrave whenever the train runs and therefore is a logical focus for the first point of call in an emergency. The emergency procedures manual defines incidents or accidents in a series of three categories.

The first being simple derailments, with no injuries being involved or simple level crossing collisions.

The second being incidents which occur on the property which result in injury or death to any person but not which we consider to be a disaster of major proportions.

The third is any incident or accident of major proportions such as a major derailment, major level crossing accident, fire, flood, landslide or other "Act of God".

The manual lists a set of contacts which must be made by the officer in charge or the station master for each of these categories. These range from a "call out" of staff for the first category, through to a major call out of Board members and senior management in the category three. It also indicates the emergency services to be called out in each category and lists the numbers of the services in the area.

Attached to the three main pages of the manual is a comprehensive listing of senior management, all operative staff and all Board members. With this manual the station master is able to assess the scale of the incident and contact the appropriate people to take the matter in hand thereafter.

The railway has invested heavily in a breakdown resource. Working on the premise that there are parts of the railway which are inaccessible for road vehicles containing heavy salvage equipment, a special van has been fitted out with jacks, oxy-cutting equipment, tackle, winches and other materials which may be required to move, re-rail or perhaps wreck equipment involved in an incident. This is located at the middle point of the railway line i.e. Emerald where, on most occasions, a small shunting locomotive is available to move the breakdown van to any part of the railway.

The senior management of the railway holds workshop sessions among themselves as to what would be required in the event of a disaster. At present, this takes the form of general discussions between people who are likely to be concerned. However, it is proposed in the future to conduct actual mock exercises.

We put our mechanisms to the test. In early 1994, the Emerald Tourist Railway Board co-operated with local authorities in staging a "disaster" which involved local police, local ambulance, local fire brigade and local emergency services. Thus, a mock accident was staged which involved a car colliding with a locomotive and a petrol tanker subsequently colliding with the side of the stationary train at a road crossing. Naturally, the exercise was conducted out-of-hours. The exercise was useful to all concerned as we all found the flaws in our arrangements, particularly in communications. I won't go into details with this paper; there is a handout in the

form of a reprint of an article from our magazine "Narrow Gauge", which will give a brief description of what took place on the day.

We have in place, mechanisms of inquiry into incidents and the reason for their happening, to make recommendations to see that they do not happen again and to apportion blame, if necessary.

These are on two levels. The lower level inquiry coincides with incidents in category one of the Emergency Procedures Manual. This takes the form of an inquiry conducted by the manager of the relevant division concerned with one other manager from a totally uninvolved area. The other form is a formal "board" of inquiry which is set up for incidents under categories two and three.

Each of these requires the gathering of written evidence generally on the I.D.R. forms mentioned above and interviews with people concerned with the accident or with eye witnesses. These reports are gathered, numbered and filed in chronological order on a master file which is kept permanently in the main office. Under the Act of Parliament which controls the Emerald Tourist Railway Board, the result of any board of inquiry i.e. for categories two and three, must be submitted to the Minister for Tourism.

I turn now to the item I was first asked to address in this paper; the matter of a Board of Inquiry.

In the event of a category two or three disaster on Puffing Billy, the role of the senior board member when summoned by the station master, is to attend the site and appoint as quickly as possible a board of competent people to inquire into the cause of the event. This board is generally made up of two members of the Emerald Tourist Railway Board, at least one manager of a division of the railways management whose division is not involved in the incident, if appropriate, the manager of the division involved and a person/persons with skills which relate to the perceived cause of the incident. For example, if the incident was caused by a safe-working misdemeanor, the appropriate person would be the railways safe-working officer.

To assist this group of people, some person with stenographic or secretarial experience is recruited. One of the board members selected for the board of inquiry is nominated as the convenor.

The board is convened as soon as possible after the event. This is necessary for obvious reasons, the closer to the event, the more accurate is the evidence to be obtained, recollection is sharp and the less opportunity there is for collusion. It is quite surprising that the longer the time lapse between the incident and the inquiry, the more identical does the evidence from all participants become.

The first role of the board is to examine all written submissions received and decide which witnesses should be interviewed. The conduct of the inquiry is done on much the same way as for a job interview. The person is brought into a full, formal interview situation and quietly asked questions with regard to what took place. Questions are based upon the previously obtained written submissions and other oral evidence received. Over a period of time, the board gains a fairly clear picture as to what took place at the event and where any faults may have lain. On occasions, a board has adjourned to inspect certain aspects on the site. In one case, a separate meeting was held on the site of a derailment along with the manager, mechanical engineering to check the gauge and cant of the curve at which the derailment took place.

Once the board has processed all the information and is satisfied that it has sufficient evidence, it then formulates its conclusion and any recommendations that it may see fit. This is then written and presented to the management of the railway.

The board is required to determine the reason for the incident and to apportion blame and to make any recommendations it sees fit to see that such an incident may not happen again.

The board does not discipline anybody. That is left to the management which may choose to withdraw qualification, suspend volunteers or reprimand staff. The report is generally signed by the convenor of the board and is forwarded to the Chairman of the Emerald Tourist Railway Board. The Emerald Tourist Railway Board then may accept the report and forward a copy to the Minister for Tourism as is covered by the Act of Parliament. Recommendations made by a board of inquiry become very important and must be acted upon or consciously rejected by management. If rejected, there must be very good reasons because obviously, if a board of inquiry has examined an incident and detected a fault in the system and if the fault should happen again and result in serious injury or death to a passenger or volunteer, the management itself will become culpable.

The Emerald Tourist Railway Board has a policy that in the event of an incident involving death or serious injury, its solicitor will be appointed as a member of the board of inquiry particularly to make certain that the correct questions are asked of all witnesses. This, of course, is in the interests of the Emerald Tourist Railway Board as the report from the board of enquiry is bound to finish up as evidence in a coroner's examination.

I see that the number of pages I have taken up in this paper is now approximating to a number of small trees. I will therefore finish.

I hope I have given you enough nightmares to keep you going for the rest of the year, but I'll leave you with just a number of questions which I hope you will mull over and may keep you awake for a few nights more.

How would your operation stand up to an "Occupational Health and Safety" audit? Does your organisation have a disaster plan? Have you documented your engineering, operating and training standards and have they been certified by some competent person? Have you developed a policy as to how much you would support a volunteer who has to confront a Coroner's court inquiry or in the case of litigation against your organisation? Does your first aid policy conform with the present day codes of practice?

If any of these or any of the questions I have asked throughout the paper cannot be answered in the affirmative, then I suggest my last question should be: "Have you taken out Director's insurance to cover the liability of your executive and management members?"

Editors Note:- The following article appeared in "Narrow Gauge" March 1994, the official journal of The Puffing Billy Preservation Society. It reports on their 'dry run' in graphic detail! We reprint it here with thanks to, and the permission of, the Editor of 'Narrow Gauge', Phil A'Vard.

RECIPE FOR DISASTER

By Don Marshall

At approximately 5.00pm on Saturday, February 5th, 1994, a special passenger train travelling in the Down direction collided with a car at the School Road Level Crossing at Menzies Creek.

The car, carrying two occupants, had been standing at the crossing waiting for the train to pass when it was struck from behind by a petrol tanker which lost its brakes coming down the steep hill on the approach to the crossing. The car was propelled by the impact onto the rails and was then struck by the locomotive of the train. The force of the second collision drove the car to the extreme down end of the crossing where it eventually came to a rest jammed under the front pilot beam of the locomotive.

The petrol tanker, after colliding with the car, slewed sideways, striking the first and second carriages of the train. The force of the impact derailed both carriages and turned the first one on its side. The second carriage, although badly damaged, remained upright and attached to the rest of the train.

The results of the collision were as follows:

1. MOTOR VEHICLE: badly damaged with occupants injured and trapped inside.

2. (a) LOCOMOTIVE: slight damage to front end. Front pony wheels, Front driving wheels and centre driving wheels all left the rails.

   (b) CREW: Both driver and fireman were dazed and shocked. The fireman had a burnt arm after making contact with the boiler backhead during the collision. The driver experienced a severe blow to the head.

3. (a) PETROL TANKER: Although relatively undamaged, the tanker came to rest alongside the two derailed carriages. Extensive damage, however, occurred to the control valve assembly and fuel discharging from the tanker ran down-hill from the Down side of the crossing to the Up side where it flowed down the embankment towards houses and the Selby-Aura Road. Fumes were evident.

   (b) TANKER DRIVER: Although injured in the collision was conscious.

4. (a) 1st CARRIAGE: This vehicle took the main force of the collision and was badly damaged. The carriage was derailed and tilted over on its side supported only by the Automatic Couplings. Injured passengers were still trapped inside while others were thrown out onto the ground and down the embankment. Petrol from the damaged tanker flowed underneath this carriage.

   (b) 2nd CARRIAGE: Although derailed, this carriage remained upright. The force of the collision, however, forced the doors open throwing injured passengers onto the ground and down the embankment.

5. REMAINING CARRIAGES: There were a large number of people in the remaining carriages behind the 2nd carriage.

Some of these people suffered minor injuries (bruising etc) but were able to walk.

The location, the terrain and the leaking fuel made it impossible to bring these passengers forward to School Road for alternative transportation.

The stuff nightmares are made of? Most certainly. Fortunately it didn't really happen on this occasion - but it could.

It all started one evening in September 1993 when the local fire brigade captain wandered into my home workshop where I was drilling holes and said "what about this emergency exercise we are always talking about?"

I eventually ran out of excuses and agreed that the Railway would be happy to participate. Following several meetings with representatives from the local emergency services e.g. Police, St John Ambulance, Fire Brigades and the S.E.S., the date was set for 5th February, 1994.

It was agreed that I would write the scenario, and pick a location which would present a degree of difficulty for all concerned.

In addition to testing the capability of the emergency service groups, the scenario was also designed to test the Railway's emergency procedures and expose operational staff to the problems which could be encountered should a real emergency ever eventuate.

The great day arrived and the "Disaster" train left Belgrave at 3.40pm on time to cross the last Up train from Lakeside at Menzies Creek.

Travelling on the train were 180 guides and scouts, many whom were made up to look like accident victims.

Following receipt of the ACRE message from No.20 Pass on its arrival at Belgrave, No.7A propelled the "Disaster" train in the Up direction clear of the School Road Level Crossing.

Fire Brigade workers then unloaded the collision car (a wrecked ....) and placed it in position at the Down end of the crossing.

The "Disaster" train was then bought forward so that 7A's cow catcher was in contact with the car.

In order to ensure authenticity, Driver Graeme Daniel gave the car a hefty nudge with 7A's auto coupling.

The petrol tanker was manoeuvred into position on the high side of the crossing to lie roughly parallel with the first two carriages. The control valves were then opened to allow coloured water to leak out of the tanker.

"Accident" victims were strewn out on the grass and down the embankment beside the train.

The locomotive crew, Graeme Daniel and Andrew Marshall, were suitably made up to reflect their injuries.

The scene was now set and four long blasts of 7A's whistle brought guard Tony Stratford to the front of the train to assess the problem and take appropriate action.

After absorbing the basic details of the accident, Tony called Belgrave Station Master Rob Emmerson from the Trackside phone at the crossing, relaying essential details and requesting assistance.

Utilising the Emergency Procedures Manual, Rob then triggered the exercise by calling the various emergency services.

In a short time the accident site was a hive of activity as the fire brigade attempted to deal with the problems of leaking petrol, the St John Ambulance attended to the "injured" passengers and the S.E.S. tried to assist the passengers of the wrecked car.

Residents turned up to survey the goings on, presenting police with a real problem of crowd control.

Back on the train our two Conductors, Errol Hermann and Doug McLeish, were attempting to control the remaining passengers and stop them from leaving the carriages.

In order to test the Railway's safeworking resources it was arranged for the Train Staff to be "lost".

Because in theory the remaining passengers could not be brought forward past the leaking fuel tanker a request was made to Belgrave for a relief locomotive to rescue the rear portion of the stranded train and to take the passengers to buses which would be waiting at the Selby Aura Road crossing.

With the Staff "lost", the Belgrave Station Master now ably assisted by personnel from the "Commissioners' Special" Train, instituted a form of Pilotman working in order to dispatch D21 to the accident site and return with the rear portion of the train. At Belgrave the "Commissioners' Special" crew moved to set up a "Damage Control Centre" to cope with public enquiries and enquiries from relatives of those travelling on the train.

From the accident site a request was made to the Station Master at Belgrave and to Signalman Peter Walker at Menzies Creek to make arrangements for the breakdown van to be bought down from Emerald.

This was done and in due course the breakdown van propelled by NRT1 and crewed by Alan Johnstone and Alan Gardner with Workshops Foreman Neil Mathieson in attendance made its way under the protection of a red flag to the accident site.

At the rear of the train, Guard Stratford, having protected his train in the rear, was guiding D21 onto the rear portion of the stranded train.

D21, crewed by Ron Gunn and Ian Newman together with co-opted Pilotman Chris Raggett, arrived at the accident site at 6.33pm, approximately one hour and twenty minutes after the emergency started which was a very creditable effort considering that the Driver was called from home.

Also at the accident scene were the Railway's Chairman and Vice Chairman who commenced to gather material for the Board of Inquiry and who provided support for the Railway's operating personnel where necessary.

Many other actions were of course taking place but which are too numerous to mention in this brief report.

By 8.30pm the accident site had been cleared and the remains of the "Disaster" train were moved to Menzies Creek where the train and emergency crew members were fed.

What did we get out of this?

As was intended, the exercise revealed a few weak spots in the emergency services activities.

These weaknesses ranged from poor, and at times, difficult communications with their own control HQ and each other, to simple matters such as the injured tanker driver who was left by himself without attention for a long period. Our own Driver and Fireman were also left unattended for a long period of time.

From where I sat, our Railway acquitted itself quite well.

There were problems with communications, particularly in the use of the trackside phone to contact Belgrave. Once the exercise got under way the Belgrave phone was continually engaged making phone communications difficult.

Radio communications using the small hand held portables was difficult but acceptable, at times requiring Menzies Creek to be used as a relay station. It was thought that the use of a mobile phone in this type of situation would have made communications easier. The lack of a PA system through our carriages made crowd control difficult for the train crew and is a matter that will need to be addressed in the future.

It is obvious that our Rules and Regulations need to be made more flexible in certain areas to allow easier provision of rescue trains.

The accident scenario made it almost impossible to institute Pilotman working in strict accordance with the existing rules.

All in however, a very satisfactory exercise and one from which we can all learn because that is, after all, what it was all about.

I would like to acknowledge the efforts of everyone who participated in the exercise and to especially thank all the volunteers and staff who gave freely of their own time to make it happen.

PUFFING BILLY PRESERVATION SOCIETY

CATEGORIES OF INCIDENT OR ACCIDENT, APPROVED REACTIONS AND PERSONNEL TO BE INVOLVED

Category 1

(a) Derailment of locomotive or carriage in station yards. No injuries
(b) Derailment of locomotive or carriage on Main Line. No injuries.
(c) Level crossing collision. No injuries.
(d) Any other incident involving E.T.R.B. property which could result in injury to the E.T.R.B.'s passengers or staff includes BUSHFIRE.

Category 2

Any incident or accident which occurs on E.T.R.B. property and which results in injury or death to any person but which would not be considered to be a disaster of major proportions, e.g.,

(i) Suicide
(ii) Level crossing accident involving a train and a passengers carrying motor vehicle.
(iii) A person or persons struck by a train operated by the E.T.R.B.

Category 3

Any incident or accident of major proportions which results in death or injury to more than one person, e.g.,

(i) Major derailment
(ii) Major level crossing accident
(iii) Fire, flood or landslide

CATEGORY 1 - Minor derailment, collision or other incident. NO INJURIES.

Final requirement:
1. Board of Inquiry
or
2. Managerial Investigation

CONTACT:

Weekdays:

1.	(a)	Nearest available Management Member	
		ON SITE Belgrave - Office	754 6800
		Internal - Don Marshall (713), Graham Archer (715), David Eaton (717)	
		Emerald Carshops	059 68 4548
		Pager 016030 number 357260	
		Internal - Mel Elliott (767)	
	(c)	Workshops Foreman - Neil Mathieson	B: 754 6522
		Internal (732)	
	(d)	Road Foreman - Tom Kilner	H: 756 7649
		Pager 264 1800 number 20038	B: 754 6522
		Internal (742)	
2.		FIRE BRIGADE (IF NECESSARY) - Belgrave	754 2992
3.		POLICE - if road vehicles involved	11444
		Belgrave	754 6999
		Ferntree Gully (24 hour)	758 3333
		Emerald	059 68 4422
4.		DIVISIONAL MANAGER concerned if not already co-opted in 1 (a) above	DIRECTORY
5.		Signal Fitter - if level crossing accident	DIRECTORY
6.		A Board member	DIRECTORY

Weekends or Holidays

1.	(a)	Nearest DIVISIONAL MANAGER at home	DIRECTORY
	(b)	Manager S & T - Mel Elliott	H: 874 5665
		Pager 016030 number 357260	
	(c)	Workshops Foreman - Neil Mathieson	H: 059 42 7218
	(d)	Road Foreman - Tom Kilner	H: 756 7649
		Pager 264 1800 number 20038	
2.		FIRE BRIGADE (IF NECESSARY) - Belgrave	754 2992
3.		POLICE - if road vehicles involved	11444
		Belgrave	754 6999
		Emerald	059 68 4422
4.		DIVISIONAL MANAGER concerned if not already co-opted in 1 (a) above	DIRECTORY
5.		Signal Fitter - if level crossing accident	DIRECTORY
6.		A Board member	DIRECTORY

CATEGORY 2 Injury or death to person or persons on E.T.R.B. property but NOT a disaster of major proportions

Final requirements:
1. E.T.R.B. Board of Enquiry
2. Possible Police Investigation
3. Possible Coronial Enquiry

CONTACT:

Ambulance		11440
DOCTOR(S)	- Belgrave	754 2019
	- Emerald	059 68 3733
POLICE	- Emergency (24 hours)	11444
	- Belgrave	754 6999
	- Emerald	059 68 4422
	- Ferntree Gully (24 hours)	758 3333
State Emergency Service - Sherbrooke		754 2981
Fire Brigade - Belgrave		754 2992

Hospitals (if necessary) - William Angliss	764 6111
Nearest available DIVISIONAL MANAGER	DIRECTORY
Nearest available BOARD MEMBER	DIRECTORY
Workshops Foreman - Neil Mathieson	B: 733/754 6522 H: 059 42 7218
Road Foreman - Tom Kilner	B: 742/754 6522 H: 756 7649
Signals & Telegraph Manager (if level crossing accident) - Mel Elliott Pager 016030 number 357260	B: 767/059 68 4548 H: 874 5665

CATEGORY 3 Incident or Accident of Major Proportions

Final requirement:
1. Board of Enquiry
2. Police Investigation
3. Probable Coronial Enquiry

CONTACT:

Ambulance		11440
DOCTOR(S)	- Belgrave	754 2019
	- Emerald	059 68 3733
POLICE	- Emergency (24 hours)	11444
	- Belgrave	754 6999
	- Emerald	059 68 4422
	- Ferntree Gully (24 hours)	758 3333
State Emergency Service - Sherbrooke		754 2981
Fire Brigade - Belgrave		754 2992
Hospitals William Angliss		764 6111
All available DIVISIONAL Managers		DIRECTORY
All available Board Members		DIRECTORY
Workshops Foreman - Neil Mathieson		B: 754 6522 H: 059 42 7218
Road Foreman - Tom Kilner		B: 742/754 6522 H: 756 7649
Local Shire		Pager 2641800 no 20038 212 8222 (Sherbrooke)

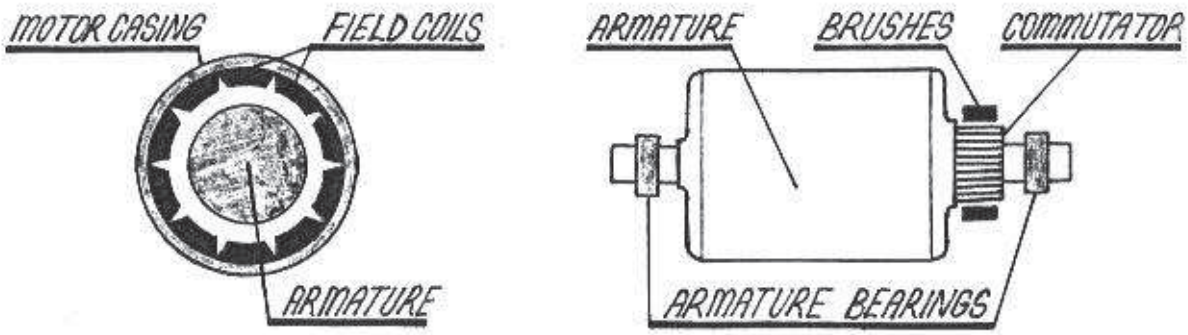
Refer to Appendix A for Incident or Defect Report Form (pg 126)

GOOD HOUSEKEEPING OF TRACTION MOTORS

Presenter: Richard Gilbert
Session Chair: Ray Blackmore
Session Secretary: Craig Tooke

The paper I am presenting is on behalf of Colin Britt of the firm AC - DC Electric Motor Repairs of Edwardstown, South Australia. That firm specialises in rewinding all makes of electric motors. I am pleased to present this paper because I feel the housekeeping of traction motors is something that is not high up on the priority of most museums. Too often the policy is one of a corrective solution and not one of a preventative solution.

We need to develop a better understanding of traction motors and their maintenance requirements. Generally our motors are very old, but they are the heart of the tram and without due regard to their well being the museum can be up for a big repair bill. Colin Britt is a great advocate of good housekeeping of traction motors in the form of preventative maintenance and should a motor require repair he aims to do the job properly as he does not intend the motor to be back with him again.



Simplified Diagram of a Motor

The motor has 4 main parts: Armature, Commutator, Field Coils, Brushes. The principle of the motor is to cause a strong magnetic field from the field coils to react with a strong magnetic field of the armature to cause the armature to spin freely to drive the tram. We use electricity under a lot of pressure to achieve this. Once we open the controller, electricity has to go somewhere. If the motor has a fault the electricity will take the most convenient path and there is a risk of damage to the equipment.

It's a case of some simple housekeeping rules or maintenance schedules.

Have the commutator clean. Modern tools for the job make these tasks more easily accomplished. An abrasive stick can be used to remove carbon build-up from the commutator. This stick is held over the commutator whilst the motor is slowly turned. The brushes should be checked to see they have sufficient length and are fitting the full face over the commutator.

Armature bearings should be in good order. An armature having ability to move about within the motor could strike the field coils and cause a major fault.

There should be a regular inspection schedule drawn up as part of the routine tram maintenance schedule. Colin Britt is keen to advise museums to contact him on these matters.

What causes an electrical fault? A flashover on the commutator is generally caused by carbon build up on the commutator. The electricity takes the shortest path and jumps across the commutator from one brush to the other.

Faulty armature coils. This can be due to a breakdown of the insulation through age or moisture collecting in the armature. Moisture can be a concern in museum operation because trams are not working hard and are not used day after day continuously.

We have all stood beside a tram, or train, that has been working hard all day and can feel the dry heat and electrical smell radiating from the motors. Our museum operation rarely achieves this.

Faulty Field Coils. Like an armature can break down due to age or moisture, the armature striking the field coil will cause a fault. This happens when the armature bearings are worn allowing the armature to move about.

When the Ballarat Tramway Preservation Society sent the traction motor from No.40 for repairs we were enlightened by Colin Britt to just how poor the condition of the motor was. The insulation of the wires entering and within the motor casing was well broken down, as was that on the field coils.

The point of concern is that the motor at the other end of 40 looks the same as do many of ours, and they are still working - but, for how long?

This is not a statement meant to frighten people, but a visit or telephone call to Colin to discuss issues would be enlightening. Our Society has been most impressed with his work, personal interest and understanding of the requirements of the museum and the vintage electrical equipment we use. His firm winds the motors for 'Trans Adelaide' (the MTT) and Australian National Railways.

His address: AC - DC Electrical Motor Repairs, 8 Deloraine Road, Edwardstown South Australia 5039, Postal Address: PO Box 255, Melrose Park SA 5042, Telephone: 08-2775166, Fax: 08-2776667

Questions/Comments

1. D.Lange - What happens to the commutator stick material as it is ground away on application to the commutator?
   Answer: C.Tooke - The material, which is a fine particle and is non-conductive, tends to fall out via the motor ventilation. A small amount remains inside the motor case, however, it is not harmful.
2. T.Burling - How often is it necessary to bed in motor brushes?
   Answer: R.Gilbert - I believe it is generally only necessary when the brushes are new.
3. M.Sanders - We experienced a motor problem with Brisbane Drop Centre (234) and repairs were carried out by the EMD Co of Dunedin.
4. R.Gilbert - Another possible poor practice is to regularly practice 4th emergency by pulling the reverse key back when the tram is in motion. The B.T.P.S. train drivers in the technique but not whilst the tram is in motion.
5. J.Pennack - Lower supply voltages at museums are also a good practice for museum operation and had proved successful at the AETM.
6. J.Phillips - The V/Line locomotive simulators which we will be inspecting as part of the post conference activities is capable of illustrating emergency brake stops by pulling the controller key back.
7. J.Nyman - Asked what delegates thought of GEC Alsthom as a repairer of traction motors?
   Answer: In general, museums had not had any work done by this company so were therefore unable to comment.

Conclusion

J. Shanks (THS) on behalf of the group moved a vote of thanks to R. Gilbert for the presentation, R. Blackmore for chairing the session and C. Tooke for recording the details.

DRIVERS MEDICAL REPORT

Presenters: Dennis Bell - Bendigo Tramway Superintendent.
Mrs Judy Mott - Occupational Therapist.
Driver Rehabilitation Program
Vic. Roads Registration 88-8-1.
Ms Heather Newnham - Optometrist.

Session Chair: Dennis Bell

Session Secretary: Russell Jones

Dennis Bell: Bendigo Tramways Superintendent - Gave reasons for the need of a Drivers Medical Report. Explained how the current Medical Report evolved (based on VicRoads Medical report for bus drivers).

Mrs Judy Mott: Occupational Therapist -Explained how health and age effects our reaction time. Spoke on the Driver Rehabilitation Program.

Ms. Heather Newnham: Optometrist - Explained the importance of vision in regards to driving and problems and diseases effecting vision.

Refer to Appendix B for copy of Medical Certificate (pgs 127-128)

The following notes were provided by Session Secretary Russell Jones.

Dennis Bell: The Bendigo Trust

The Bendigo Trust originally required volunteers to undergo a medical examination and on the basis of this, classified applicants into appropriate possible occupations. It was then decided to tighten up the process with respect to drivers. Both the systems used by the Metropolitan Transit Authority and Perth suburban rail system was examined, but the method selected was the VicRoads report used for examination of bus and coach drivers, as modified by The Bendigo Trust in conjunction with a General Practitioner.

The second edition of this Bendigo Trust report is now in use, the major addition being a requirement for annual examinations between ages 60 and 70, with drivers being suspended from the age 70.

Mrs Judy Mott: Occupational Therapist

In 1987 Occupational therapists (O.T's) were enabled by legislation to make recommendations to VicRoads on a person's ability to drive a motor vehicle after serious illness or injury. This is primarily achieved by observation of a person's performance whilst driving a vehicle. The ageing process does degrade a person's ability to drive, but this can be compensated for by a number of factors:-

In cases where this is the case, due to ageing or illness/injury, it is the O.T's role to investigate and make recommendations to VicRoads as to what can be done to enable the person to continue to drive.

A person is evaluated through the medium of the VicRoads Driver Medical Report. This covers the following sections:

* Vision - 6/12 in one eye is the minimum legal requirement to drive a private motor vehicle either aided or unaided by spectacles.
* Hearing - no legal requirement but this can provide an important component of the overall assessment.
* Communication - the ability available in both verbal and written form, to express information and events, which is particularly important in the case of an accident or incident.
* Upper limb function
* Lower limb function
* Head/neck mobility
* Balance - both static and dynamic
* Mobility aids requirements - e.g. walking stick, frame, wheelchair etc.
* Cognitive skills - information processing and decision making.

Mrs Heather Newnham - Optometrist

Visual standards for driving are based on four different visual functions.

* Visual acuity - This is effectively the ability to distinguish detail. The minimum legal requirements are:-
  - Private vehicles - 6/12 in one eye
  - Bus and coach drivers - 6/12 in both eyes and 6/95 in binocular vision.

* Binocular vision - This is the ability to determine the depth of vision based on the resolution of parallax through both eyes.

* Peripheral vision - the minimum legal requirement for bus and coach drivers is 170 degrees.
  This can be affected by loss of vision through glaucoma or strokes. The issues that can affect the ability of a drivers in this area is double vision, which rules out driving, or a squint, which may not necessarily be the case, providing that the image provided by the good eye dominates or overrides the other image.

* Colour blindness - there are two tests to determine the degree of colour blindness - the Ishihara test, which requires the test to differentiate numbers amongst coloured dots, is used to indicate if there is a problem. If four examples are failed, then the person is classed as colour blind. A more discriminating test is available which if passed, allows persons afflicted by this disability to drive motor vehicles, but not under current Public Transport Corporation policy, trams.

The major diseases affecting vision are:-

Cataracts - this is a loss of transparency in the vitreous material in the eye. This causes light shattering leading to a loss of contrast and problems with glare. The effect of this can be reduced during daylight hours by use of tinted glasses and/or sun visors. This can be improved by appropriate surgery.

Glaucoma - this is the loss of visual field as a result of optic nerve damage usually caused by excess pressure within the eye. It affects the periphery and leads to tunnel vision. It can be treated by a combination of medication and surgery. Sufferers should not drive at night.

Malculopathy - this is also a loss of visual field but affects the centre of the field. It results from actual damage and is not treatable, but laser surgery has shown some success in preventing further loss of visual field due to this condition. This condition is exacerbated by high glare/low contrast conditions. It leads to particular difficulties in operating at night or dawn/dusk conditions.

Diabetes - this disease causes loss of visual function as a result of reduced flow through blood vessels supplying the optic nerve and retina, leading to a loss of retinal function. This damage is permanent. The ageing process tends to gradual loss of visual function, commencing usually in the mid 40s. This degradation can be corrected to some degree with the use of glasses, but performance is lost in low light conditions, particularly with respect to recovery times in situations such as exposure to bright head lights at night.

However, each museum should treat each problem on a case by case basis, to assure the most appropriate outcome.

TRAMWAYS IN MELBOURNE AND EXPECTATIONS FOR THE FUTURE FROM A MANAGERIAL VIEWPOINT

Presenter: Eric Keys, Manager, Business Planning and Marketing, Met Tram, Public Transport Corporation
Session Chair: Dennis O'Hoy Session Secretary: Peter Hyde

The views expressed in this paper are those of the author and are not the views or the policy of the Public Transport Corporation.

Introduction

The Public Transport Corporation has and is continuing to undergo significant change as a direct result of the Government's transport reform program, 'From a System to a Service'(1). This program is a two pronged approach to revamping Victoria's public transport system. First reducing the cost of providing public transport and then by improving the quality of the services provided.

One outcome of the reform program was the creation of Met Tram. Met Tram is the business unit within the Public Transport corporation responsible for providing Melbourne's tram services. As a business unit, Met Tram has the responsibility to develop tram services that both meet the needs of the travelling public while ensuring that services provided are at the lowest possible cost.

This paper briefly outlines some changes that are currently occurring to Melbourne's tram services and some issues or changes that the Author believes may arise in the future.

Part A - Current Developments

Melbourne's Icon

Melbourne's tram system has a long and interesting history with the first cable services opening in 1885 and the network expanding as the inner part of Melbourne grew. Unlike many cities Melbourne has 'stuck with it' and it is not surprising that trams are seen as more than just a means of providing transport. The decision to retain an extensive tram network has set Melbourne apart from most other large western cities. Even in this age when cities are re-introducing light rail or tramway systems the Government's commitment to retaining and promoting many of the historical elements of the tram system continues to be a distinctive feature of Melbourne.

No transport system as extensive as Melbourne's would survive without a purpose. In 1993/94 Melburnian's made 98 million tram trips on our peak fleet of 405 vehicles (2). Usage is growing and with the urban development occurring within the inner metropolitan areas the future for the Tramway is assured.

The Tram System

The tram system provides an extensive network of routes throughout the inner metropolitan area with some routes extending to newer areas including Bundoora and East Burwood. Over the last four years key additions have been made to the network; extensions have been undertaken to Airport West and East Burwood, a City

Circle tram loop created and a new extension is underway on the Bundoora line to Mill Park terminating at RMIT's new campus.

Several programs are underway to renew the tramway infrastructure. This includes replacing rotatory converters and mercury arc rectifiers with solid state equipment, converting the overhead to pantograph operation and ongoing renewal of trackwork.

The Tram Fleet

The composition of the tram fleet was reviewed in the early part of the reform program. This review considered the current condition of the existing vehicles, the passenger needs and importantly the need to preserve a working fleet of W class trams. This review concluded that the fleet should be reduced to a total of 472 vehicles.

The fleet includes 53 W class trams dedicated to operate on the City Circle, Toorak, St Kilda Beach and South Melbourne/St. Kilda Beach services. These routes will be promoted as Melbourne's heritage routes where visitors can ride these historic vehicles through areas which themselves have been largely preserved. These services will also continue to provide for the needs of regular customers.

These W class trams have been overhauled and repainted. The City Circle trams have a distinctive burgundy livery while the remaining 43 have been repainting in their 1950s livery. Work is continuing on these trams to enable the introduction of one person operation and automatic ticketing. A further 50 W class trams are being stored 'on system' as a ready reserve to meet any future demands for services beyond the capacity of the service fleet.

The eventual fleet also includes 102 Z1/2 class, 115 Z3 class, 70 A class and 132 B class trams. The Z 1/2 class trams are currently being overhauled to extend their life for at least a further 7 to 10 years. The Z3 class is planned to undergo a major overhaul once the work on the Z 1/2 is completed.

Automatic Ticketing

All trams will be converted to one person operation and fitted with automatic ticketing equipment. This equipment will include a Ticket Vending Machine located in approximately the centre of each tram and four (six on LRV's) 'Check in' or validating machines located close to each door. The driver will be able to control and monitor the ticketing system through a console in the drivers cab. Data for the ticketing system will be passed to and from the tram via a portable memory 'key' carried by the driver.

Route Ownership Strategy

Met Tram is progressively devolving much of the management of the tram system to individual depots. This allows a much flatter business structure and one which encourages staff in all levels of the organisation to participate in the development of the business.

For this to be effective it has been necessary to ensure each depot is given clear responsibility for particular parts of the tram network. A route servicing strategy has been developed which allocates each route to a particular depot eliminating shared routes. To further streamline the business the number of classes of tram kept at each depot had been reduced to a minimum.

This strategy is currently being implemented progressively as part of a general review of tram services. The route servicing strategy is changing the means by which services are provided and so there is no impact on customers other than paving the way for on-going improvements in quality of the services provided.

Part B - Future/Emerging Issues

High Technology Modes

The biggest task for new technology is how it will be used to improve the quality of the existing service provided by the established modes. Melbourne currently has the advantage of being able to choose between three established public transport modes to meet any particular transport task. It is the Author's view that high technology modes (such as mono rails or automated people movers) will only prove to be viable in few limited

applications for specific purposes. The O-bahn bus technology may find some application as means to improve bus services utilising existing freeways or other corridors to avoid the congested 'bottlenecks'.

Areas where technology is currently being utilised to advantage and will continue to do so includes computerised rostering, monitoring of trams, the provision of information and the current Automatic Ticketing System project.

People with Disabilities

The Minister for Public Transport has required that the PTC implement the recommendations of the Mobility Enhancement Strategy (3) which contains a number of initiatives to improve services for people with disabilities. This includes visible edge strips, announcements of stops and next stop buttons.

A major issue that all transport operators face is the question of wheelchair access. In the U.S.A. many buses are now fitted with wheelchair lifts and the trend in Europe is for low floor buses and trams. The low floor vehicles have proven to be of benefit to all users and the operators benefit from the faster loading times. For operators such as Met Tram with large fleets of older vehicles there will be increasing pressure for retro-fit programs.

In addressing wheelchair access it should be noted that vehicles are not the only aspect, and consideration also must be given to facilities provided at stops.

Passenger Facilities

Met Tram is currently improving the quality of the facilities provided at tram stops. Shelters are being upgraded and new shelters are being issued through a cost off-set arrangement with Australian Posters. A highly reflectorised stop flag is being installed at all stops which not only promotes the tram service but also warns motorists of passengers boarding and alighting. Full timetables are also being installed at every stop.

We have recently trialed the use of dynamic passenger information using the information from the Automatic Vehicle Monitoring System. The first permanent installation is expected to be operating by the end of the year at the new Elizabeth Street terminus. Over the next few years I hope that this installation may be extended to other busy locations.

Passengers will also benefit from good quality interchanges and services that are designed to facilitate interchange between services and modes. This must include changes between public modes as well as private modes including cars and bicycles.

Integration With Urban Development

There is growing awareness of the need to integrate public transport with urban development. The pace of change is slow and much of the current urban development continues to occur on the outer edges of the city away from convenient access to public transport. Nevertheless, there is a growing awareness of the advantages gained from access to good public transport both for the individual and for the community.

Of particular interest to Met Tram is the recent trend towards apartments in and around the central area of Melbourne. This process is, in many cases, transforming underutilised sites into high density urban developments and in the process providing new customers for our services. In many cases one of the main attractions of a site is the availability of good public transport. One such example, is the Bayside developments at the end of the Port Melbourne line. Not only does this development offer the attraction of bayside living but it is only ten minutes from the city centre by tram which leaves every eight minutes.

In the future, extension of the tram system is likely to be strongly linked to urban developments. Proposals such as the extension of City Tram to the casino and Docklands services are designed to encourage and take advantage of these new developments.

In the existing urban areas on the edge of the tram system which have largely been designed assuming a predominance of the motor car, extensions into these areas may occur but they are unlikely to be as attractive as extensions to areas which will be designed with public transport in mind.

Conclusion

Melbourne's tram system is undergoing major changes. These changes are occurring because of the need to reduce the cost of public transport to the taxpayers. These changes, however, are being done in a way to ensure that the quality of services to customers is improved and also that the history of the Tramway continues to be a feature.

References

1. *From a System to a Service*, Minister for Public Transport.
2. Public Transport Corporation, Annual Report 1994.
3. Department of Transport, Mobility Enhancement Strategy.

Questions

Bill Kingsley:- When might tram services be extended to Knox City?

Answer: The need for service is recognised, but solution is depended on funding. Most recent extensions have been paid for by the Commonwealth Government. The likelihood of funding for this is small in the absence of schemes such as 'Better Cities' which provided for City Circle etc.

Bob Pearce: Asked concerning the 'origin' of projects, whether they are conceived by The Met or imposed or suggested externally?

Answer: Both. The Met needs to look 10-15 years ahead to arrange provisions of rights of way as wider median strips in roads. Other things like City Circle are government initiatives which the Met implements.

Keith Stodden: Asked what the future of the Heritage Fleet would be if it is unable to be contracted out?

Answer: Referred to Minister on Monday.

John Shaw: Observed the problem of rough riding of Z1 class cars on route 64.

Answer: Two problems exist. First, Z1 & Z2 cars have poor suspension (which is being upgraded during the current major renovations). Second, track replacement is being done on life-expired sections. Track which is almost life expired can be quite rough.

John followed up with a second question. As to what is being done for the customers during this period of bad track/bad suspension?

Answer: Past customer relations have not been good but MET is becoming more customer focused. Complaints are being answered individually. A newsletter for customers will commence in approximately January 1995 and be published 3 or 4 times each year. As an aside, though, there is some worry about telling the public that their problems will not be fixed for 5 years or so!

Ron White: Does PTC see Grand Prix as an opportunity or a problem?

Answer: Both. Plans are being developed. Albert Park does not have a lot of parking capacity and there is some worry about the impact of a large influx of visitors. Discussions are being held with organisers to plan for the event.

TRAM CAR RESTORATION

Presenter: Graham Jones
Session Chair: Lindsay Richardson Session Secretary: Keith Stodden

Introduction

The topic on which I have been asked to talk to you, today, is "Tramcar Restoration". My paper perhaps, deals more with the Bodywork than Painting and the Electrical side of the Restoration.

Starting The Project

Restoration really starts when the decision is made to actually restore the Tramcar. The main decision to be made is which period to restore it to. This will depend on historical documents, such as drawings, photographs, and any written articles that are available. You should make it known to all other museums that have the same class of tramcars, or modified versions, asking for information that they may have.

If a Restoration Project is to proceed smoothly it must be organised. One person should be made Project Leader with a responsible person to lead each group (i.e. Electrical, Mechanical, Body and Paint.). The Project Leader would be the one to collect the information, sort and pass on to each Section Leader.

Quality or Standard should be set to ensure that the vehicle is as near to the condition it would have been in when first entering services.

Research

Three points:

1. The Tramcar itself.
2. Photographs of the actual tramcar or similar tramcars from other services.
3. Drawings, Documents, Colours of the system the vehicle served.

The Tramcar

As the Tramcar is dismantled, its life will be shown, as new timbers, timber splices, replaced panels from wooden to metal, will tell of collisions or other repairs carried out through its working life.

Photographs

Every photograph you can obtain of the tramcar, or of similar design, should be obtained from all sources; your museum archives, the collections of private individuals, or again from other museums which have similar vehicles.

Drawings, Written Documents

It is of great assistance if you can obtain a copy of the original drawings, specifications, or other documents relating to the tramcar being restored. Unfortunately drawings for most of the old vehicles being restored do not now exist.

Drawings often differ from the tramcar being restored as some modifications done have not been recorded.

Dismantling Of Tram

This can often be mistaken as the easiest part of the restoration project. If this attitude is taken, then the rest of the restoration program will have many problems.

Care should be taken when removing every piece of the body, as it can tell many stories of the past life of the tram, such as collisions or modifications, carried out over the years.

Pieces broken on removal should be glued and nailed back together as they then are used for patterns when rebuilding commences. Each piece on removal should be correctly numbered or marked to make assembly easier.

Melbourne and Metropolitan Tramway Board practice was standing inside the centre of double bogie cars facing number one end - parts are Left Hand and Right Hand. On facing number two end - parts are Left Hand and Right Hand.

On Melbourne's later built Comeng vehicles, it is outside facing number one end is Right Hand, Left Hand, and facing number two end, Right Hand, Left Hand.

When dismantling of the tram starts, the decision as to how much is to be removed has to be made.

All interior woodwork and other items should be removed to prevent damage.

When dismantling it pays to only remove the portions of the body you can work on in the immediate future. In most cases trams have two of everything and by working on a limited area you always can check on the remaining parts for guidance.

In coach making all joints should be tight. In the body framing glue should not be used. In original body frames red or white lead was used. As this practice is not now allowed, I would suggest that a thick coat of paint or pink primer be used.

When joinery is required I believe the old animal glue is the best for sashes and interior doors.

The body work, electrical and air, should all be completed prior to painting. Then interior stripped and refitted on completion of painting.

You now have completed the restoration task and hand it back to your Traffic Section to put into service.

Questions

L Millar asked whether a tram should be restored for use in road traffic, or to look good as a static exhibit?

Answer: It was stressed that the decision must be made at the start, but that the quality must be the highest possible.

THE EMPLOYMENT OF PROFESSIONAL STAFF BY COMMUNITY MUSEUMS

Presenter: John Radcliffe
Session Chair: John Shanks
Session Secretary: John Phillips

Most community-based museums including the tramway and railway museums in Australia and New Zealand, have their origins in community groups who have established incorporated associations or similar bodies for the purpose of developing and operating museums in their fields of interest. These museums operate with voluntary contributions which are made by their members who give their skills to achieve the goals which the museum members have set through the endeavours of the committee members whom they will have elected at annual general meetings.

Tramway museums in the English-speaking world have traditionally been developed by volunteers through processes which have been described for North America by Andrew Young (1983) and for Britain by Tony Bacon (1982). This usually involves a progression encompassing the collection of cars, the ultimate establishing of a collection policy, the housing of the vehicles, their operation, their progressive restoration/conservation, and the interpretation of their role within the social fabric of the society in which they operated.

While many projects have operated for considerable lengths of time solely based on volunteer labour and management, opportunities can arise, such as by grants from government, allowing the museum body to employ staff to carry out major projects which might take the volunteers a considerable length of time to otherwise complete. In recent years, unemployment relief schemes, and sesquicentenary and bicentenary celebrations in Australia and New Zealand have provided examples where this has been possible. In addition, the museums may be able to generate sufficient revenue to employ staff to carry out basic operating activities, with supplemental operations and often the longer term developments such as high quality restoration projects being undertaken by volunteers.

However, the introduction of paid staff to a volunteer-based and managed museum can involve both considerable delicacy of relationships and the potential for substantial and unforeseen debt to be incurred. Furthermore, the volunteer management of the organisation may not have ready access to the industrial

relations expertise to ensure the appropriate and equitable employment of paid staff. There are a number of issues to be considered as follows:

Terms of Employment

There should be clearly established terms of employment with duty statements which are accepted by the museum executive on behalf of its members and are accepted by the employee at the time of commencement. To whom the employee is responsible should be made clear and other members must understand that they do not have the right to give instructions (which may be contradictory) to the employee. The "chain of command" must be well defined. This applies both ways between staff and volunteers.

Salaries and Wages

Wages and/or salaries should be paid at an appropriate rate in line with established conditions and awards for that type of endeavour. Recognition should be taken of the need for casual loadings (often 20%), any special shift conditions, weekend rostering obligations, the extent of use of awards, enterprise bargaining or the need for "market parity" , taking into account whether the work is to be carried out in regulated or deregulated employment environment.

Additional supplementary costs including workers compensation, annual leave entitlements, long service leave entitlements, superannuation, payroll tax and other sometimes unexpected costs must be included within budget calculations before staff are taken on.

In some cases, it may be possible for recompense to be provided by other means than by direct payment of wages or salaries, but if this course is taken, fringe benefit tax (FBT), may be payable by the employer.

Where the employee is being reimbursed for specifically incurred costs, for example in the use of their motor vehicle as part of transport on the job, appropriate rates should be agreed before commencing. Note that if a lump sum is given to cover any likely transport costs and no acquittal for actual expenses is required, FBT may be an additional cost payable by the museum as the employer.

The frequency of payment, and whether it is by cash, cheque or bank deposit should be resolved before commencement. Paying by cash can often be relatively inconvenient for a small organisation whose office bearers can be distant from the point of payment. Direct credit to a bank account is increasingly acceptable. However, it is essential for audit purposes that appropriate time sheets, records of attendance or other measures are retained. Provision will need to be made for direct payment of income tax, insurance policies, payroll tax, etc, by the museum treasurer, accountant or finance manager.

Selection Processes

Vacancies should preferably be advertised, recognising that this may be an additional employment cost. Hiring should be on a basis of selection on merit using processes which are, in the jargon, "transparent". These processes must allow for equal opportunity without discrimination against age, sex, religious belief or disability according to local state or national legislation. Any hiring should be free from potential criticisms of nepotism (hiring of friends or relatives of the committee, or of "mates" from among the museum membership where the merits of the appointment may not be apparent to other members). Where applicants are from both sexes, it will be desirable to have members of the selection committee drawn from both sexes.

There should be a clear understanding between the museum and its potential staff member as to whether the employment is on a casual, indefinite, contract or other basis. A written offer of employment should be given to the prospective staff member who should formally accept it in writing by either counter-signing the offer or by accepting with a separate letter by return mail.

Occupational Health and Safety

Appropriate provision should be made for occupational health and safety on the job, including provision of training, where necessary, in the use of any equipment with which the employee is not familiar. (The same provisions must in any case be provided for volunteer members working in the museum).

Cash Flow

A particular problem often faced by small employers including museums can be that of cash flow. Depending on the nature of the source of income, payments to the museum which form the basis of employment of staff may be erratic or may be received on the completion of "milestones" in the project.

Staff employed under short term grants may have to be paid before payments are received from the granting organisation for work which has been completed. The need to pay staff in advance of receipt of the grant monies may result in additional costs, particularly if funds have to be borrowed from the bank. The job of the "paymaster" in keeping all these issues on the "straight and narrow" should not be under-estimated. The museum treasurer may need some additional assistance over that normally required to operate the museum finances. Construction of a month-by-month income and expenditure budget for the entire financial year is very helpful as a means of identifying when museum finances are likely to be stretched.

Similarly, where income through the gate is quite seasonal, serious problems can arise if staff continue to have to be paid when in the low season the income through the gate becomes significantly less than the cost of paying the staff. This can also result in the museum running into liquidity problems. It may be possible to secure overdraft facilities from your bank, but this can be expensive in additional costs, and may be difficult to secure because the museum offers little security. Accordingly, staff should not be taken on until the museum has sufficient working capital to tide it over the peaks and troughs of its annual income cycle.

Sources of Advice

It may well be advisable for the museum to have access to appropriate sources of advice before entering into or during the course of employing staff. This advice may come from consultants (who are fond of charging money), the government Small Business Corporation, or local industry associations such as the Chamber of Commerce, which may be worth joining if they have special business advisory services and industrial relations or legal services available to members.

The Long Term Cash Flow

In working out the budgets for a new museum development, care should be taken to recognise the probability of declining visitor attendance and income after the initial "novelty value" of the new museum has passed by. For example, the National Gallery of Victoria on St Kilda Road received ten million visitors in its first year, but by ten years later, its annual visitation had fallen to two million visitors. Similarly, the Port Dock Station Railway Museum at Port Adelaide initially constructed a budget when it changed from a two Sundays a month volunteer operation at Mile End to a full time part professional operation at Port Adelaide showing that it would be able to employ six staff. Five years later, the staff which were by then three and a half full time equivalents, had to be reduced to two full time staff. This ensured that there were sufficient surplus from the operation of the museum to provide the resources for the volunteer members to undertake restoration and development projects without having to go through a substantial and discouraging haggling process to get even small funds to undertake activities.

Skills Required

It should also be recognised that as the museum develops, a change may be needed in the skills required for its continued operation. If a manager is being employed, a fixed-term employment contract of, say, three years may be desirable. In the initial stages, a high level of initiative and entrepreneurship may well be the attributes needed, whereas in later years, management, museum development and negotiating skills may become paramount. However, the primary skills needed in the type of museums in which we operate is that to have effective inter-personal relationships between the professional staff and the volunteers.

Conflict

Frequently there can be conflict between the paid staff who "know what to do", and the volunteers including the committee, representing the members of the museum and who through their annual elections, determine the objectives which the museum is seeking to achieve. The paid staff must be prepared to accept that they are responsible to the museum organisation. At the same time, they must be prepared to work with volunteers in a co-operative manner, recognising the diversity of skills which the volunteers bring and having the ability to ensure that the volunteers continue to enjoy their participation in the museum's activities and its achievements.

Unlike staff employed in an employer-employee relationship, the volunteers cannot be "made" to do anything. They will only undertake the work if they are motivated by the satisfaction of the achievements they can produce. The effective employee will recognise this and seek to facilitate what the volunteers are doing. Too often, there can develop an "us versus them" relationship between the paid staff and the volunteers. This becomes a managerial issue, and frequently has its origins in inadequate setting up objectives, and in inadequate communication between the staff and the management of the museum which is almost invariably the elected committee drawn from the membership. Just as a wide diversity of skills is required in running a tramway, a wide variety of skills is required in ensuring that a diverse range of volunteers and paid staff can work harmoniously together. This is the challenge to be faced by the management committee of the museum.

The Bottom Line

Finally in continuing the employment of staff, it is absolutely essential to ensure that the income which the museum is continuing to receive is sufficient to maintain the employment of any staff who have been hired. If there is any doubt in regard to this issue, further expenditure through employment must be reduced or terminated as soon as possible to ensure that the museum is not placed in a position of no longer being able to service its debts. Should the museum be left with a surplus of liabilities which have been incurred over the extent of the cash assets at its disposal, it becomes a prime target for the appointment of receivers who will be entitled to sell any of or all of the Museum's assets in order to recover any unpaid debts. This can result in the disposal of the very vehicles which the museum was established to preserve in perpetuity for the benefit of its members and all mankind.

References

Bacon, A.D. (1982) - "Restoring the Tramcar", Paper 13, (Tramway and Light Railway Society: London) 32pp.

Young, A.D. (1983) - "Trolley to the Past - A Brief History and Companion to the Operating Trolley Museums of North America" (Inter-Urban Press: Glendale, California), 158pp.

Questions

Lewis Nyman: Asked if there are problems when sacking people?

Answer: Yes there are problems e.g. Redundancy and disputes re payments.

Geoffrey Claydon: Talked on contract for services as answer to those problems?

Don Campbell: Enquired about the responsibility of income tax re contract employers.

Answer: Yes, after $3000 you must deduct tax.

Geoffrey Claydon: Continued about the problems of permanent staff and volunteers being under different arrangements.

Phil A'Vard: Spoke on where do you stop in regard to volunteer and permanent staff re work safety (WorkCare) claims.

Ray Webster: Continued on an incident that happened in Perth re the above question.

Lewis Nyman: Expressed his thanks to John Radcliffe on his presentation.

THE CHRISTCHURCH TRAMWAY COMES TO TOWN - BUILDING A HERITAGE STREET TRAMWAY IN THE 1990s

Presenters: Dave Hinman and Murray Sanders
Session Chair: Les Stewart
Session Secretary: Tony Cody

Synopsis

This presentation, to be illustrated with overhead transparencies, looks at the steps taken and the problems overcome in realising the dream of bringing trams back to the streets of Christchurch after a forty year absence.

In the limited time available, it will not be possible to more than briefly touch on the major features and issues of this project as it has developed over the past four years.

The major areas include:

* The Beginning - the Worcester Boulevard
* Economic and Marketing Analysis
* Environmental Issues
* Finding a Tram Shed Site
* Safety System
* The Extension Study - Route selections
* Political Commitment - Budget
* The Eastern Extension
* Detailed Track and Overhead Designs
* Tram Refurbishment - including vehicle modifications

Background information on a number of the matters listed above are attached and following a general overview presentation by Dave Hinman, Murray Sanders will present a more detailed case study of (a) Electrical Supply System and (b) Electrical Modifications made to the trams to update them for use on city streets for the 1990s, noting the Safety System and Safety Audit provisions and procedures adopted.

Attachments

1. Extracts from "A Tourist Tramway for Christchurch".
2. Route Map.
3. The Economic and Marketing Analysis - Extracts.
4. Extracts from key Council Reports.
5. The Eastern Extension.
6. Track and Overhead Design Details.
7. Tram Shed Information.
8. Safety System - Extracts
9. Tram Vehicle Modifications.
10. Electrical Audit Report.

A TOURIST TRAMWAY FOR CHRISTCHURCH

A report on proposed extensions to the Worcester Boulevard Tramline

1. Executive Summary

1.1 The concept of the Worcester Boulevard from Rolleston Avenue to Cathedral Square including the provisions of an electrified tourist tramway was approved by the Council in 1990. Construction is now proceeding on an annual basis.

1.2 It has been apparent that the present tramway proposal is too short to be viable as a tourist tramway and in September 1991 the Council requested a study be undertaken to investigate options for extending and expediting the construction of the tramway.

1.3 Consideration was given to the purpose of having a tramway, with some views being expressed that it should form the basis of a future commuter line or light rail system. However the study confirms that a tourist tramway, with an historic emphasis, is the appropriate approach, and that a light rail/commuter tramway option for Christchurch is unlikely at least in the short to medium term.

1.4 Some 22 options have been considered with a "short list" investigated in detail by the Tourist Transport Working Party and Officer Project Team. With the focus of tourist activity to the north and west of Cathedral Square, route options in that part of the City were favoured.

1.5 A short list of options considered by the Working Party concentrated upon a loop line incorporating Victoria Square and Armagh Street with options extending into Hagley Park, through the Gardens and around Victoria Lake. While the Gardens Loop in particular had many advantages, it was agreed that there could be substantial public opposition to it and that it should not be further pursued in the meantime. A more acceptable medium term option could be an extension into Hagley Park as far as the Gardens carpark and bridge.

1.6 The preferred option therefore is the Armagh Loop and the report identifies a number of forms its construction might take. The need for two-way operation as far as Victoria Square is emphasised, but the remainder of the route (ie along Armagh Street and Rolleston Avenue back to Worcestor Boulevard), would ultimately be one-way in a clockwise direction.

1.7 Planning, environmental and traffic issues were identified and the report suggests that the preferred option can satisfactorily fit in with other central city initiatives such as the Cathedral Square redevelopment proposal. Potential environmental effects such as appearance and noise are identified, but the conclusion is reached that these will be acceptable on all parts of the route including residential areas.

1.8 The problems of a single line operating in two directions in a traffic street are acknowledged, and various ways of overcoming this, including partial double track, are discussed.

1.9 The need for secure covered storage for the trams which will operate the service is confirmed. Various sites have been identified, but at this stage the glass walled pavilion in the Square is favoured. The need to agree on and complete construction of a tram storage building prior to operation commencing is noted.

1.10 Details of future tramway operation require more investigation, but the need to confirm arrangements with the Tramway Historical Society for the supply of historic tramcars is recognised. The question of who will operate the tramway is addressed, and it is again noted that private enterprise involvement should be sought. A longer route that the initial Boulevard line is seen as necessary to attract private investment.

1.11 A preliminary exercise has been undertaken on patronage based on projected capacity, operating costs and a conservative estimate of likely users. To achieve an operating surplus, the break-even annual ridership for one tram is 90,000 and 97,000 for two trams. It is conservatively estimated that 150,000-250,000 passengers will use the tram per year, and while this preliminary work needs further checking, it does seem that the tramway will be a viable operation.

1.12 The various legal requirements are identified, and it is noted that present outdated legislation is due to be replaced by a new Act, currently before a Parliamentary Select Committee. Submissions made to the Committee should ensure that there are no serious legal impediments to the tramway development proceedings.

1.13 Depending on the form of construction (ie the amount of double track or passing loops) the initial total cost estimate for the Armagh Loop extension beyond the present approved single line to Cathedral Square is between $2m and $2.4m. Further costs which have been identified and not so far budgeted for include a sum of about $150,000 for further tramcar restoration plus funding for transporting vehicles to and from Ferrymead.

1.14 Part of the brief of the Working Party was to find ways of expediting the construction of the tramway and the report suggests that this may be the best achieved by seeking private enterprise involvement in the project. Following the adoption in principle by the Council of the Armagh Loop extension, an active search for investors and sponsors should be undertaken, assisted by an economic and marketing feasibility study. The report argues that the Council should continue to contribute towards the development of the tramway project but seeks the views of the Council on the extent to which it should be self-funded.

1.15 The report identified a minimum lead time of two years before operations can commence. In addition to the need to complete the track at least to Cathedral Square and to construct a tram storage building, the obtaining of any necessary legal approvals and the upgrading of the tramcars to street operation standard is expected to take this amount of time.

1.16 This report has been examined by the Melbourne based specialist consultants, Melbourne Transport International. The consultants broadly confirm the thrust of the report and its recommendations but have raised a few issues of detail which will require further examination. In particular, they have suggested that the projected tramway construction costs may be excessive.

1.17 The report concludes by noting the considerable interest and support of the tramway so far, and its potential to become an important element in the central city and a significant tourist attraction in its own right.

1.18 The following specific recommendations are presented for the Council's consideration.

(a) That the Council adopts in principle the "Armagh Loop" option of extending the tramway.
(b) That the funding of the tramway extensions include private enterprise involvement as well as the Council.

(c) That a realistic target date for the opening of the first section of the tramway be set as soon as possible.

(d) That if practicable, following the completion of the tramway to Cathedral Square and the commencement of operation, the complete Armagh Loop be constructed in a single stage. Should funds not permit this however, and in order to improve the viability (and thus attract investment) and public acceptability, the project be constructed and opened in stages. The first stage would be Cathedral Square to Victoria Square, the second stage Victoria Square to Rolleston Avenue/Armagh Street corner and the final stage completion of the loop.

(e) That an economic and marketing feasibility report be prepared for presentation to potential investors.

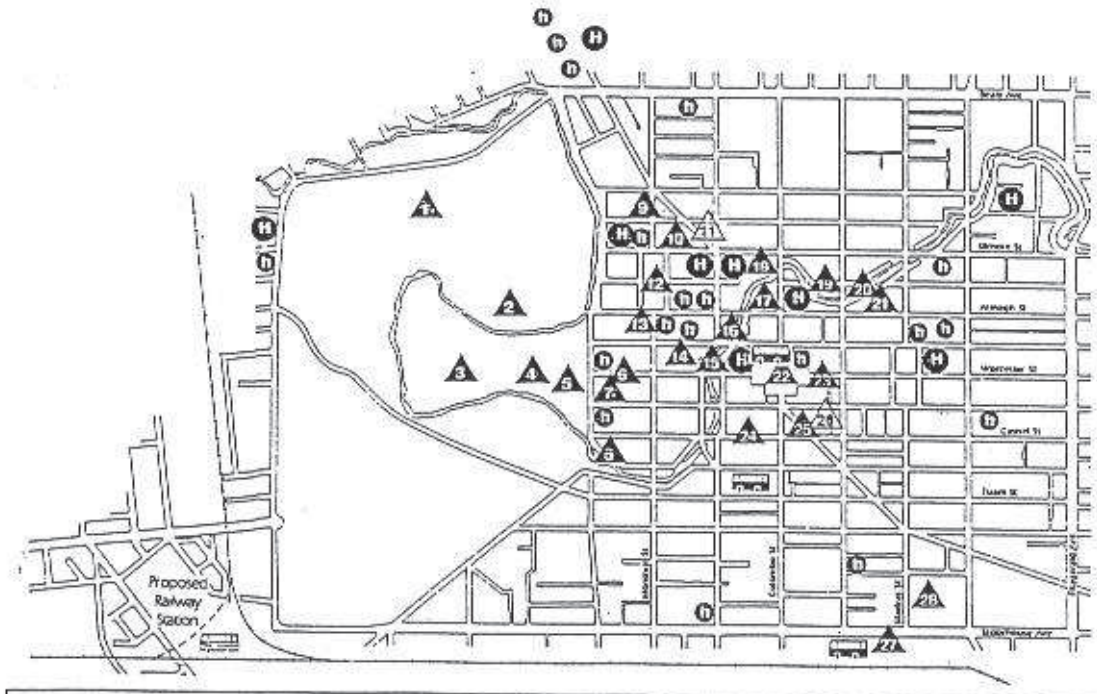
(f) That discussions be held with interested local organisations including retailers, residents groups and other landowners.

(g) That discussions proceed with the Tramway Historical Society concerning arrangements for the provision of tramcars for the tramway.

(h) That the question of further extensions (eg to Hagley Park), be the subject of future study by the Tourist Transport Subcommittee.

4. Tourism Focus

4.2 The following diagram plots the location of central city hotel accommodation, other tourist facilities such as bus terminals, and major tourist and civic attractions. It will be noted that there is a significant concentration to the north and west of Cathedral Square. The present Worcester Boulevard Tramway proposal recognises this and goes some way towards linking the concentration of attractions around Rolleston Avenue with those in the Cathedral Square vicinity. It follows that any extension of the tramway as a tourist line servicing the greatest number of and most significant tourist attractions and facilities, should be to the north and west of the Square.



KEY

Major Hotels

Other Hotels / Accommodation

Transport Terminals

Tourist Attractions (excluding Shops, Restaurants)

1 Hagley Golf Course
2 Victoria Lake / Entertainment Area
3 Botanic Gardens
4 McDougall Art Gallery
5 Canterbury Museum
6 Worcester Boulevard
7 Arts Centre
8 Antigua Boatsheds
9 Arts Centre (Peterborough)
10 Cranmer Courts (Old Normal School)
11 Proposed Casino Site
12 Cranmer Square
13 Arts Centre (Cranmer)
14 CSA Gallery
15 Information Centre and Punt
16 Provincial Government Building
17 Victoria Square
18 Town Hall
19 Edmonds Band Rotunda and Punt
20 'Poplar Avenue' (River)
21 Centennial Pool
22 Cathedral Square
23 Government Building
24 - 25 City Mall
26 Proposed Casino Site
27 Science Centre
28 Roman Catholic Cathedral

Central Christchurch Tourist Atrractions and Hotels

5. Criteria for route selection and design

5.1 The following matters were seen as significant when assessing options for extensions to the Boulevard Tramway:

(a) Proximity of the line and stopping places to significant tourist attractions, facilities, accommodation and parking.
(b) Suitability for continuation of 'historic' theme.
(c) Compatibility with local environment.
(d) Conformity with Cathedral Square redevelopment proposals.
(e) Provision for tram storage building.
(f) Separation from other traffic where possible (particularly in heavily trafficked streets and particularly if 'contra flow' is necessary).
(g) Ability for streets to incorporate tram line without significant impact on parking or access, and minimal loss of service to regular traffic and street users.
(h) Passing or run-around facilities.
(i) Ability to operate the tram in either direction (assuming single line). In the case of a circular route which may ultimately be in one direction only, the ability to also operate in the other direction during staged development is desirable unless the whole circuit is to be built before operations commence.
(j) Allowance for future line into or around Hagley Park, including a Botanic Gardens link.
(k) Compliance with present and possible future legal requirements.
(l) Design and operational simplicity, including stopping areas.
(m) Reasonable costs.

6. Earlier Investigations

6.1 Taking into account ideas expressed from a variety of sources, some 22 options for extending the Worcester Boulevard tramway had already been investigated prior to the appointment of the Working Party. These were reported to earlier meetings of the Tourist Transport Sub-Committee and are summarised in the diagram opposite and in the following Table.

Tram Extension Options

1. No change.
2. Extended Square terminus.
3. Victoria Square (Armagh Street).
4. Victoria Square (Colombo Street).
5. Armagh St Loop.
6. Kilmore St Loop.
7. Oxford Tce Loop.
8. High St, Ferry Rd to Ferrymead link
9. New Regent St via Gloucester St Loop.
10. New Regent St via Worcester St Loop.
11. Worcester - New Regent - Armagh Loop.
12. Museum to Armagh St (Rolleston Ave).
13. Armagh Bridge to Gardens Bridge.
14. Museum to Science Centre (via Antigua St and Railway)
15. Colombo St shuttle.
16. Worcester, Manchester Sts to Science Centre
17. Armagh, Manchester Sts to Science Centre.
18. Gardens Loop.
19. Victoria Lake Loop.
20. Mona Vale through the Park
21. Mona Vale around the Park.
22. New Christchurch Station via Antigua St and Hagley Ave.

6.2 From those studies it became apparent that the most sensible and potentially viable options were those which concentrated on an area to the north and west of Cathedral Square close to major tourist facilities (eg hotels) and attractions. In particular it became apparent that at the very least the line should be extended to Victoria Square, thus linking not only this attractive area with Cathedral Square and the Museum but also the major hotels in the vicinity (Parkroyal, Quality Inn, Hyatt-Kingsgate), and the Christchurch Town Hall.

Editor's Note: Mr Hinman's paper also included a considerable quantity of attachments. It is felt that they cannot be included as part of this publication due to constraints of space reasonably available in this volume. Anyone interested may care to contact the Presenters direct.

Questions

Geoffrey Claydon: Posed the question regarding provision of street lighting on span poles as this would be forbidden in the U.K? For example, there would be problems with people from other authorities maintaining their equipment.
Answer: Advised that there should be no problems.

Carolyn Dean: Asked whether provision existed for turning the tramcars?
Dave Hinman: Replied that there was provision for a triangle in the development at the eastern end of the loop. This could be installed in the future. There could be a problem if open cars are to be turned if one side has to be enclosed for safety reasons.

COTMA DRIVER TRAINING COMMITTEE

Presenter: Richard Gilbert
Session Chair: Chris Steele
Session Secretary: Bill Kingsley

Report of the Committee established to provide advice and a set of Guidelines encompassing Driver standards, training and testing.

The Committee was established at the General Meeting at the last Conference with its aim to provide advice and a set of guidelines encompassing Driver Standards, Training and Testing. The Committee consisted of a representative from each of the four Victorian tramway museums. Members of the Committee were:-

Richard Gilbert - Chair and BTPS Rep
Dennis Bell - The Bendigo Trust
Tony Smith - Melbourne Tramcar Preservation Association
Andrew Hall - Tramway Museum Society of Victoria
Max Fenner - Australian Electric Transport Museum

The Committee met a number of times and developed a set of Guidelines which we emphasise are not Rules. They are recommended Guidelines. To call them Rules is walking into a minefield. Tram Driving Rules and Standards would have to be the most jealously guarded and coveted standards that a museum holds. The pinnacle of being a member of a tramway museum is the permission to drive the trams.

If this Committee is going to achieve its 'Charter' then it can do so if the report is packaged acceptably. It will be up to Delegates at this session to offer final input, based around the responses received and then agreeing on a final draft to be presented at the 'General Meeting' for acceptance by the COTMA organisation.

A questionnaire and a copy of the Guidelines were sent to all museums and there were seven respondents.

QUESTIONAIRE
TO ASSIST WITH THE DEVELOPMENT OF GUIDELINES FOR TRAM DRIVING FOR TRAMWAY MUSEUMS BELONGING TO C.O.T.M.A.

1. Requirements for selection of candidates
   Do you conduct a medical?
   What requirements do you have for members to be eligible for entering the driving scheme?
   i.e. Length of time as a member
   Must they be a Conductor first
   Must they complete a certain number of hours in any area
   Any other criteria before they are selected

2. Method of Training
   Do you have a set number of hours of practical driving or a set number of trips?
   Are the trainees endorsed on all trams in the fleet immediately they are passed or are they endorsed on certain trams progressively?

3. Fault Finding
   Do the qualified tram drivers investigate faults that may occur on a tram in traffic and as a result attempt to rectify it, or do you have a policy of 'Don't touch a thing' as someone who is qualified at the workshop will attend?

4. Customer Relations Skills
   Do you have this as a part of the tram drivers criteria?
   Do you have regular ongoing training in it?

5. Validation of Drivers
   Do you have an outside body for Driver Validation?

6. Going over time
   Is there a minimum attendance time observed in retaining qualification to drive?

7. Age limit for Drivers
   Do you have a minimum and/or maximum age limit?

8. Re-exams
   Do you have re-exams or revision on fault finding and tram driving skill and if so at any set interval of time?

YOUR MUSEUM:
YOUR NAME:
POSITION:

THE SUMMARY OF THE ANSWERS IS AS FOLLOWS:-

Question					Total responses
1a	Yes	4	Drivers licence	3	7
1b	No	5	Yes	2	7
1c	Yes	5	No	1	6
1d	No	4	Yes	2	6
1e	No	1	Conductor applies for driving	4	5
2a	Yes	3	No	3	6
2b	Progressively	3	Overall	3	6
3	Drivers investigate fault	4	don't touch	1	5
4a	Yes	3	No	3	6
4b	Yes	2	No	3	5
5	No	6			6
6	Yes	5	No	1	6
7	Minimum 21:	3	No Retirement Age	3	
	Minimum 20:	2	Max age 70:	1	
	Minimum 18:	1	Max age 64:	1	6
8	No	3	Yes	3	6

RECOMMENDED MINIMAL GUIDELINES FOR TRAM DRIVING RULES FOR TRAMWAY MUSEUMS BELONGING TO C.O.T.M.A.

Selection Of The Candidate For Tram Driving

It is the business of each museum to set the selection criteria, bearing in mind individual museum policies, laws between States and New Zealand law.
The one criteria that must be standard is that the Candidate must have a current Medical Certificate.

Selection Of The Tram Driving Course

It is the business of each museum to set the course, as this is outside the scope of this Working Party and as each museum has a total variance of tramcars different from each museum. It would simply mean reproducing each individual museums own rules, which in turn would be useless knowledge to all other museums.

The Driver Trainer or Trainers should be separate from the position of Examining Officer. They should not be the same people.

Driver Trainer

A Driver Trainer shall be selected and endorsed by the individual museum committee. Practical experience and teaching ability are part of the selection criteria of the Driver Trainer.

Examining Officer

To be appointed by the relevant museum. The selection of the Examiner is subject to any National, State or Local Government regulations. If the Law of the land overrides the museum being able to appoint the Examining Officer, obviously the law is upheld.

Examination

The exam can be written, or oral, and a compulsory practical. Each museum is to keep a copy of the written exam by the candidate. If there is no written exam a written report on the oral exam is to be completed by the Examining Officer and kept by the museum.

Certification Of The Candidate

Individual certificates of competency are to be issued by the museum for which the candidate drives. Each museum is to have the responsibility to design and supply the certificate.

Regular Attendance At Tram Driving

A tram driver must drive at least one shift every 6 months to retain the qualification.

Retraining And Regular Performance Tests

Each individual museum will set its standard for retraining drivers who go over the 6 months without driving and develop a standard to monitor the standard of tram driving skills.

Medical Certificates

Members of a museum undertaking tram driving courses have to obtain a Medical Clearance from a Practitioner, to the standard provided for on the Medical Certificate enclosed. The Medical Certificate is valid at all other COTMA museums should someone change active membership from one museum to another.

The renewal period for these certificates is 3 years which is in step with normal road traffic authorities in regard to commercial passenger carrying vehicles. Persons over the age of 60 years must have a yearly Medical up to the age of 70 years. The age of 70 years should be a retirement date from public driving.

Implementation

It is proposed to implement these standard rules within 12 months from their adoption.

****

That is the Report of the Committee and I would like to thank all of them for their time spent at meetings and developing the Guidelines. I now throw the meeting open to comment with a view to adopting a final proposal to present at the General Meeting.

Discussion

Craig Tooke: Has the Committee fulfilled its own expectations?
Richard Gilbert: Yes. But the real test will be to see how many museums accept the Guidelines.

Phil A'Vard: The Preserved Railways in Victoria have a model where 'reserved sections' exist in guidelines where local arrangements can be introduced.
Richard Gilbert: Thanks Phil - agree.
Lindsay Richardson: Retirement at 70 is too arbitrary. Museums should be able to monitor drivers closely beyond 70 but not have to arbitrarily retire them.
Trevor Burling: It is discriminatory to talk of specific ages.
John Radcliffe: 70 it is at Crich. In South Australia it is illegal to require retirement due to an age.
Darren Hutchesson: Is there a minimum age. Can drivers start at 15?
Chris Steele: Asked if we are getting younger?
John Shaw: Based on TransPerth, there should be no licence under 21. Could give youngsters a turn in non-public times.
John Radcliffe and John Pennack both spoke of restricted licences, and the need to "earn your stripes".
Don Campbell: SPER has no policy on "time behind the pick'.
Chris Steele: Do we require a separate medical certificate if we already have one from our normal work?
Peter Hyde: Concern that doctors depend on information from patient. Perhaps a Statutory Declaration from the driver is relevant. Would reduce 3 year to 1 year.
Thanks were expressed to Richard and his Committee for their good work.

Voting on Propositions

Results of consensus voting on propositions:-

1. Retirement Age for museum drivers?
   (a) Compulsory at 70 years of age - 1 vote.
   (b) Subject to annual re-examination over 70 years of age - majority.

2. Medical Certificates for museum drivers?
   (a) Compulsory to qualify - 10 votes.
   (b) Motor car drivers licence or job accreditation (bus, tram or train) sufficient - 11 votes.
   (c) None of (a) or (b) available, so a statutory declaration can be submitted - 2 votes.

3. Alcohol and drugs limitation by drivers?
   (a) Complete ban on both when public operations are being conducted - majority.

4. Restricted licences for drivers?
   (a) To be issued, with discretion, to persons not normally permitted to drive for public operations - majority.

The following amendments were voted for by the majority of the members at the Workshop Session.

PROPOSED AMENDMENTS TO THE RECOMMENDED GUIDELINES FOR TRAM DRIVING RULES FOR COTMA MUSEUMS

Selection Of The Candidate For Tram Driving
Medical Certificates

These two sections of the Guidelines be amended to read:-

The criteria for medical fitness in that the candidate must satisfy a fitness criteria based on either of the following:-

1. A current Medical Certificate must be held by the candidate.

2. A current valid recognition of fitness from an employer must be held that allows the member to operate passenger carrying vehicles used for public transport employment, including trams, trains, aircraft, ships and the like.

Alcohol and Drugs

The laws relating to zero blood alcohol level and freedom from drugs which could potentially impair the operation of tramcars or machinery under appropriate O.H.S. regulations, be acknowledged and followed.

Restricted Licence

A Restricted Licence be developed to allow members who are not accredited to drive under the formal criteria to operate trams under 'Restricted Circumstances' with regard to their particular circumstances and the relevant museums decision on the matter.

Retirement

This section to be fully amended as follows: Persons over the age of 70 years must provide a yearly Medical Certificate to be able to continue to hold a full driving qualification.

Editors Notes:- The Consolidation of "The Recommended Minimal Guidelines for Tram Driving Rules for tramway museums belonging to C.O.T.M.A.", and the "Proposed amendments to the Recommended Guidelines for Tram Driving Rules for C.O.T.M.A. museums", appears near the end of this volume, after the Minutes of the 1994 Council Meeting. The final version was discussed and, as noted in item 20 of the Minutes, voted on and accepted.

STREET AND SITE SCAPING - DISCUSSION SESSION

Session Chair and Secretary: Bill Kingsley

Geoffrey Claydon introduced the topic by discussing "the quarry" at Crich. It was no Melbourne or Bendigo but needed to show trams in their proper environment and setting. It was difficult to acquire appropriate buildings and people to put those buildings in place. Pavements (cobblestones, setts) and drainage are essential for engineering and heritage reasons. At Crich the "Assembly Rooms" are but a facade, the rest being destroyed by fire at the original location. Toilet blocks, cafes, bits and pieces of ironwork are all important. The arch bridge was donated and serves as a sense of enclosure to the Stephenson Place streetscape. The cottages could pay for their own existence by being occupied by retired members.

John Pennack asked if Crich had a caretaker and was answered in the negative (did, but left).

Don Campbell asked about the "Red Lions". It, being brick and permanent, will provide meals and replace the wooden cafe.

Don Campbell also wanted to know how the setts were laid with such quality, being a slow labour process. There were some enthusiasts, but mainly government schemes.

Jack Nyman was impressed with Beamish, with people in original uniforms, a rapid wire system, row of miners cottages, cat flaps, a chapel for services.

Lindsay Richardson spoke of Whiteman Park, the forest, craft village, sheep shearing, kangaroos, lots of scenery variation along the tramline.

Geoffrey Claydon compared this to Crich having a working quarry beside the line.

John Radcliffe noted the advantages of commercialising shops and restoring motorbikes.

Geoffrey Claydon. Street vendors are important, especially when crowds are expected.

Murray Sanders. The bakery at Swan Hill Pioneer Settlement is financially self-supporting.

Don Campbell. The Royal National Park Railway Station is a problem. The umbrella type roof is of use if it rains, but the platform is too high. A lower section within the high level platform is possible. The streetscape at STM is deliberate, from the entrance gate to the depot complex. There will be three shops in King St,

Newtown style, working, with one as a residence. The entrance will be a bank where you can pay your fare. Traffic bollards are stored. There is a NSW police call box. It is important to keep down dust by using macadam and bricks.

Bill Kingsley closed the discussion by posing a question for the future, "Where do we put the car park?", which drew some gasps of obvious relevance.

THE USE OF VINTAGE BUSES TO SUPPLEMENT A TRAMWAY MUSEUM INCOME

Presenter: Bruce Dale
Session Chair: David Verrier
Session Secretary: Peter Kahn

Editor's Note: This presentation was illustrated by colour slides.

In this paper, I am going to outline briefly the way in which the Society's 'Vintage' Bus fleet complements and works with the Tram fleet and tramway to increase the income the Society generates. The Society has had a policy for many years of endeavouring to preserve examples of urban public transport, from the early horse, steam and electric trams, to cable cars, to early modern trolley buses and to early and modern diesel buses.

The Tramway Historical Society has been very fortunate in its motor vehicle operation in the good working relationship the Society has with Christchurch Transport Limited and its predecessor, the Christchurch Transport Board. This relationship commenced back in the early 1960s when horse Tram No 43 was being restored for running at Papanui. Working with the then General Manager of the Christchurch Transport Board, Mr John Fardell, the Society proved its worth, and this then led to our activities being accepted by the then Engineer, and later General Manager of the C.T.B., Mr Max Taylor. Max is now President of the T.H.S.

The acquisition of our vehicles is interesting - In 1974 the Society was in a position to purchase - for $5000.00 - an ex-London RT double-decker bus from the women members of the English Commonwealth Games Team after the Games finished in Christchurch. Prior to operating the RT, a protocol was drawn up between the Society and the C.T.B. for back-up services that could be activated at short notice should this become necessary.

After full Ministry of Transport certification of the Double Decker, and after being granted certain exemptions from regulations which the bus could not comply with (eg the width of the tread on the spiral staircase was not uniform), the Society obtained a Transport Services Licence which enabled fare paying services to be run to and from Ferrymead and also at specific School Fairs. The bus was made available to the C.T.B. for sub-charter work.

During this time, negotiations were going on with the C.T.B. (now with the new General Manager, Max Taylor) regarding the acquisition of AEC Regal Mark IV No 290. 290 was the class leader of the imported British-built tram replacement diesel bus fleet, and, as such, had been mentioned by the Society as being worthy of preservation. The vehicle was finally made available on permanent loan to the Society at the COTMA Conference in Christchurch in 1978. While the Double Decker was the most popular vehicle, the addition of 290 now gave us the capacity to carry nearly 100 passengers and this was put to good use with some charter work.

1989 saw the formal abolition of the C.T.B. with local authority reorganisation in New Zealand, and, to mark this occasion, the Society was donated a 1967 AEC New Reliance, No 452 as well as the Mark IV and some other vehicles which had been on a permanent loan basis. AEC Short Reliance No. 410 of 1958 was gifted to the Society in 1991 in a very sad state by Mr Ian Fisher of Rununga on the West Coast and has now been fully restored (by our own members working in the C.T.L. workshops). 410 has been repainted into the original 1958 livery and has since been re-engined, again with the help of the workshops.

With transport de-regulation and the breaking up of the former CTB fleet and services, the Society felt that we were essentially three vehicles short of having preserved a class representative of all the major groups of C.T.B. buses since 1952. Accordingly, a submission was made to the Christchurch City Council (which inherited the ex-C.T.B. bus fleet at deregulation) for a Mark 1 Bristol (1974), a Mark II Bristol (1978), and a Bristol/Hess (1979) to be donated to the Society for preservation. This was approved, and suddenly our working preserved bus fleet was seven. While this seemed a large number of vehicles to keep certified and in working order, it

also gave the Society the flexibility to carry out many charters requiring a number of vehicles - work which could not have been contemplated earlier.

The seating capacity of the fleet is now 318, and this being utilised to its fullest by conventions, as well as the Banquet Section of the Christchurch Parkroyal - who use our vehicles because of their novelty value - to transfer Incentive Conference Delegates to various venues all over Christchurch. Many other groups and organisations such as schools, pensioner groups, kindergartens and social groups also use one or more vehicles at a time for outings, dinner transfers, progressive dinners and trips to and from Ferrymead.
Up until this point, much of the maintenance work carried out on our vehicles was carried out by the C.T.B. on a very non-commercial "when time permits" basis. However, C.T.L. was now in the real commercial world, and the Society was getting more bookings which required vehicles to be available on time. It was jointly decided to enter into a commercial arrangement with C.T.L. to carry out our maintenance - C.T.L. was chosen because many of the staff had worked on our vehicles and were familiar with the little vagaries such vehicles could throw up now and again. After successful negotiations a favourable charge-out rate was struck so that, from that time on, the vehicles have been maintained mechanically by C.T.L. but crewed in service (where possible) by volunteers.

You will be able to see that this operation now has all the elements together to enable it to earn income for the Society. As you will appreciate such ventures never make a profit, but suffice it to say the monies generated are not kept specifically for bus restoration, but may be used on the tramway. Last year we were fortunate to carry out heavy maintenance on one vehicle and repaint three others commercially (and still make a slight profit). It is interesting to note that last year the income from both the trams and the buses was very similar.

The key to this operation is six-fold:-

1. We now have a good fleet in place;
2. We have a transport licence in place;
3. We have a good maintenance arrangement with a large local operator in place.
4. We have a wonderful pool of Society members who are interested in buses, as well as sympathetic, retired drivers who help out on a volunteer basis and enable us to keep the fleet moving.
5. This operation accords with the long-standing society philosophy that all exhibits should operate and carry passengers, rather than being merely static and "lifeless" museum-pieces.
6. We have a "co-ordinator" available who has a full time work phone available for Kaiapoi Depot outside contacts. We still have one major hurdle to overcome - that of permanent covered storage for the vintage bus fleet. An ex-C.T.B. building was available, but unfortunately we were unsuccessful in obtaining this. We are now actively searching for a suitable building within our budget.

While I am very aware that each State in Australia has different rules and regulations, I have presented this short paper in order to stimulate some lateral thinking to encourage groups to consider if there are any methods by which vehicles that a number of groups are already holding in their collections could be used to generate more income for their museums.

Finally, all transport museums, like all transport operators, realise that the bottom line, is to get more "bums on seats". I feel it will be good for all of us to go away reflecting on this cartoon from the 1960's which featured the then General manager of the M.& M.T.B.

Questions

Lewis Nyman: Asked re basic costs of the buses?
Answer: $1.50 per hour. Dollar per km based on C.T.B. day hire (no drivers wages). T.H.S. could undercut (with volunteer crew) but has not the intention to do so. The cost with crew supplied was $42.00 per hour.

A question was asked about advertising on buses. Cosmetic or revenue?
Revenue - through submissions of advertising proposals (with the profile of T.H.S.). All over advertising was considered. Suggested costs of $250.00 per year for a small panel.

One had to prove oneself to get a track record. The attraction of the double-decker bus for use by advertising was a major spinoff.

Chris Steele: Spoke (as a bus driver) that the experience appeared to be that people are attracted to drive the buses rather than advertise the Museum.

Bruce Dale: Recounted his experience - he joined the T.H.S. for the trams but then got involved with the trolley buses and then motor buses by default.

The T.H.S. bus crews are in T.H.S. generally for the buses.

The promotion of the buses was twofold:-

1. To the public
2. To the bus companies.

Communication with the bus companies was necessary to ensure an awareness of the reasons for having buses, but not as competition.

The "English Connection" with the double decker bus was promoted as a specific sightseeing tour. The bus was chartered by the C.T.B./C.T.L. for six weeks for city-sights tours. It is now operated as a private double-decker tour.

Alan Robb: Mentioned that at times in the early days the Authorities were concerned about the proposals ; however T.H.S. obtained a license to operate and subsequently have shown a proven track record.

Frank Doherty: Commented about overhead dimensions.

David Verrier (Chairman) thanked Bruce Dale, noting that the THS had been very business-like in their promotion of their buses.

PROJECT MANAGEMENT-TURNING YOUR DREAMS INTO REALITY

Presenter: Craig Tooke
Session Chair: Michael Stukeley
Session Secretary: Jeff Stocco

Introduction

As the President of the Melbourne Tramcar Preservation Association I am often asked the question how is your Association able to achieve so much in such a short time with relatively few resources on hand.

The answer invariably lies in good project management and planning for which the results of our efforts often reflect.

The purpose of my presentation is not to discuss in great depth the academic side of project management, but more some of my practical thoughts and experiences in the hope that they may be of assistance to you in your endeavours at your respective museums.

What Is Project Management?

Project management as it's name implies is the successful management of related tasks directed towards a single goal.

Planning - A Vital And Effective Tool

Before the actual management of a project can begin, the key to success is planning. By it's very nature planning can be either very simple or very complex, however in all projects regardless of their nature the following key elements must be identified if planning is to be successful. These elements are as follows:

*Who	*What	*When
*Where	*How	*Why

Very often the failure to either complete a project on time or successfully can be put down to a lack of poor planning and preparation in one of the above areas. How often have you attempted a project at your museum only to find that you have wasted considerable time and effort for lack of proper planning? I am sure everyone can relate to this experience in one way or another.

The key to attempting any project is to break it down into a series of smaller tasks or objectives each of which are clearly defined and have a beginning and an end which can also be identified.

Once each of the tasks related to the project have been identified then questioning can begin to identify the six critical elements to any project, who, what, where, when, how and why.

It is a very good idea to actually list the tasks down onto a piece of paper as headings and provide answers to each of the six elements as they are determined. For example, let our project be to place a pole in the ground and the specific task to dig the hole. Your list on paper could perhaps look like this:

PROJECT: To place a pole in the ground
TASK: Dig hole in ground

* Who? Craig Tooke
* What? To dig hole 1 metre deep in the ground for the erection of a pole
* Where? 2 metres north of the north corner of the workshop building
* When? Work to commence on 5/12/94 at 13:00 hours
* How? Using the largest spade available
* Why? Hole necessary to allow the pole to be placed in the ground

Once you have clearly identified the above six key elements for each task in the project then you must critically examine each of the details that are provided for the six elements.

For example, questions such as are there any underground services in the way? Do any of the tasks have to be completed before one of the others can be started? Have we clearly identified all of the information that is required for the task elements?

Once you are certain that all of the elements for each tasks are clearly identified then it is possible to identify the materials and man power that are required to complete the project.

As with identifying the elements of the task it is a good idea to commit your thoughts to paper for reference.

Using our above example of digging a hole, a list of man power and materials required to complete the task would perhaps look like:

MANPOWER	MATERIALS
1 person x 4 hours	Large shovel
	Tape measure
	Depth gauge

Once the man power and materials list has been completed it should be carefully reviewed to ensure everything has been included.

The next stage in the process is to identify the order in which the tasks have to be undertaken. To use an old adage, "there is no use having the cart before the horse". For example, in the case of our sample project, the erection of a pole, there would be no point in attempting to erect the pole without having first dug the hole in the right location and of sufficient depth, therefore time spent carefully analysing the order in which tasks have to be undertaken in order to successfully complete a project is well spent before commencing work.

With all the necessary financial resources in place the final step in the planning process is to actually work out when work can and should commence on the project. Most museums, of which the Melbourne Tramcar Preservation Association is no exception, do not have finite human resources and as such we have to be very careful that we do not attempt projects requiring high involvement of many members at the one time. This is not to say that we do not have a number of projects on the go at the one time but rather we do not attempt

projects requiring large membership involvement simultaneously unless we have sufficient members available to successfully complete the project.

To assist us in this project we actually prepare a quarterly works schedule for work that will be undertaken at the museum. This works schedule encompasses all facets of our activities at the museum and is prepared for presentation at our Committee Meetings by our General Manager. At our meetings we review, modify and approve the works schedule and this then becomes the plan to which our activities at Haddon are directed towards for the next quarter.

At the Committee Meeting prior to the expiry of the current quarterly works schedule we ensure that a new schedule for the next quarter is ready and that it contains any new items and outstanding or continuing items from the current quarterly schedule.

Mention at this stage should perhaps be also made of the possible use of a personal computer in the planning and preparation stage of a project. Although not absolutely essential or indeed at times necessary, depending upon the complexity of a project, the use of a personal computer and project management software such as Microsoft "Project", Symantic "Time Line" or other project management software can at times assist in the planning and preparation phase of a project depending upon the complexity of the project.

Project management software can also be used to advantage in the management of a project particularly if the project is extremely complicated or involves a large number of tasks.

Another management tool in project management can also be the use of CPM which stands for Critical Path Management or other similar mathematical tools, however further discussion on the use of a computer or these mathematical tools is outside the scope of this presentation and people interested in these fields are directed towards the wealth of published literature that is available on the subject of project management and planning where the use of computers or mathematical models is covered in depth.

Project Management - Reviewing A Project As It Is Happening

We are now at the stage where after careful planning and preparation we commence our project so why bother continuing to keep abreast of our progress?

This stage is as important if not more important than the planning process for without reviewing our project as it progresses we cannot see if our project is on track and our planning for other tasks involved in the project still accurate and more importantly realistic.

Every project regardless of it's complexity will always suffer from variation or delay in our plans due to unforeseen difficulties which for example could be the lack of material or the need to divert resources to other more urgent pressing tasks which in the case of our museums is very often the case.

It is therefore important to review our plans as we progress to ensure that our planning for future tasks remains accurate, thus ensuring the successful completion of a project.

Using our example of the erection of a pole, should we have been unable to complete digging the hole in time, and we had allowed for no delay in our plans there would be no point in the cement to hold the pole in place arriving at the determined time, particularly if the pole could not be put in the ground on time because the hole had not been dug.

The reviewing of our progress on a regular basis to ensure time lines can be met is the key to ensuring success.

Project Completion

Well we have reached the stage where our project is now complete and we can give ourselves a pat on the back for a job well done, however this is by no means the end of our project management cycle.

Critical review of our planning, execution and results for the project that we have just completed is important because we would not want to fall into the same traps with our next project or would we?

Careful analysis will help build on our achievements and, like any skill, project management is one that has to be developed and this only comes with practice and learning from our mistakes.

I will pause my presentation for a moment as we view part of a video titled "The Plank", which I believe highlights many of the points I have mentioned so far. I ask you to bear in mind as you watch the video.
(Video "The Plank" 15 minute duration)

Conclusion

Perhaps much of what I have spoken about is common sense, however the point I am trying to get across is that if we undertake careful preparation, execution and review of all our efforts at our respective museums then we will be surprised in the quality and quantity of the outcomes for our efforts.

We are all striving to achieve excellence in the preservation of our tramway heritage and quality project management can and does go a long way to the fulfillment of our goals and avoids unnecessary wasted effort or resources which although when reviewed in hindsight can appear comical, just as we have seen watching "The Plank", I am sure it is not the way in which we currently do or want to run our museums in the future.

Editors Note:- At the end of the Speaker's address, the time available for the session had expired. Therefore it was not possible for any discussion or questions/answers on the subject.

BUS AND COACH MUSEUMS AS COTMA MEMBERS - DISCUSSION SESSION

Session Chair: John Radcliffe Session Secretary: Bill Kingsley

Bill Kingsley related his visit to the Historic Commercial Vehicle Association (HCVA) at Tempe, Sydney, with Peter Kahn and of his discussions with HCVA Secretary David Wilson. The HCVA is seeking to be part of a larger 'umbrella' organisation. No such yet exists in the bus and coach preservation field. COTMA's achievements encourage HCVA to look in our direction. They do have two Trolley buses so are eligible for full membership. But does this set a precedent? Do we accept pure petrol/diesel bus/coach museums? Should we move towards being COSTMA - Council Of Street Transport Museums of Australasia? We should note that many of our tram preservationists are also bus preservationists - people with feet in both camps.

John Radcliffe. Individual bus owners come and go. The BTMS abandoned its bus committee for lack of interest.

Peter Kahn. Ownership of vehicles is important. Even within bus/coach museums, a lot of vehicles are privately owned.
John Radcliffe. It is core ownership of vehicles which is important.
Don Lange. How many tramway museums have buses?
John Radcliffe. Many have exhibits but few are operational. A majority have buses but it is not part of the core business.
Les Stewart. There are problems in using an umbrella to lobby governments (eg the narrow gauge steamers). There are problems in diversifying from one activity. There is a danger of take-over. Traction engine preservationists are also trying to squeeze into the Legislative framework.
Bob Merchant. Buses can be an embarrassment.
Rod Atkins. A TMSV problem of parts for buses could be sought through COTMA.
Don Campbell. Conflicts possible in the future, trying to promote both polluting and non-polluting vehicles.
Martin Grant. Conferences would become unwieldy. There is too much business for a three-day Conference now.
John Radcliffe. Disparate groups can be a problem.
John Phillips. (also President at BCSV). Bus enthusiasts can suffer tunnel vision.
Trevor Burling. Buses would attract younger members and create some cross-polinisation.
Les Stewart. (also Tramway Convenor within NFRS). We would need a Bus Convenor to co-ordinate the bus people.
Frank Doherty. Asked if we should restrict to city buses only or coaches as well, to which Peter Kahn suggested mainly urban.

Consensus

The Chairman asked as follows:-

A. Should COTMA include groups who are mainly preserving buses but with some electric traction? 80% for.
B. Should COTMA include groups who are preserving buses alone, without electric traction vehicles? 30% for.

A SOCIETY IN TRANSITION

Written by Douglas Johns, Secretary of the Tramway Historical Society Inc.

Presenter: John Shanks
Session Chair: Peter Kahn

Session Secretary: Terry Verney

Background

A little over 40 years ago, on Saturday 11th of September, 1954, to be exact, the ceremonial "last" trams of Christchurch made their final journeys into Cathedral Square and thence into, seemingly, the oblivion of the Falsgrave Street carsheds.

Years of wartime constraints followed by postwar austerity measures have left the Christchurch Tramway System in a very rundown condition, and most people were glad to see the tramcars finally go.

Motorists were particularly pleased. They did not have to wait behind the tram every time it stopped to pick up or set down passengers.

The cyclists were pleased. They didn't get their wheels caught in the tracks, and come tumbling to the ground.

The passengers were pleased. No longer did they have to ride in the cold, draughty, rattly boneshakers.

Even the Christchurch Transport Board was happy. It no longer had to maintain the city streets (for the ultimate benefit of motorists) however many feet it was either side of the tram tracks.

No doubt Mrs Knight, of the New Brighton Line fame, would have rejoiced greatly, but she had long since passed on.

But not everybody was happy. There are always a few who don't go with the flow. And so these diehards did the only thing possible - they formed the Tramway Preservation Association, the forerunner of the Tramway Historical Society.

The Tramway Historical Society

The Tramway Historical Society had aims, it had commitment, and it had a single-minded purpose -- a tram would one day run again in a Christchurch street. And it did!!

In the August school holidays, 1964, Christchurch celebrated Papanui Tram Week. The ultimate had been achieved. A tramcar - horse drawn - ran in public service on a section of still exposed tram tracks in the Papanui Shopping Centre.

People rode the horse tram in their thousands. The Police had to provide traffic control. At the end of it all, the fledgling Society, little known until then, became a well known preservation group in Christchurch.

Initial tramcar restoration by the Society was carried out in an ever-expanding corner of the old Christchurch Transport Board workshops. Later this work was moved to our trambarns at Ferrymead, where most of you will be familiar with our operations.

The Tourist Tramway Project

It will surprise many of you to learn that the idea of a Tourist Tramway for Christchurch is not new.

In 1982, the Christchurch City Council decided to turn parts of High Street and Cashel Street into a pedestrian mall. The Society thought it would be a great idea if tram tracks were included in the redevelopment, on which a horse or steam tram could operate on special occasions. The suggestion was made, but nothing ever came of it. We were way ahead of time.

Way back in 1973/74 Cathedral Square had been redeveloped as part of a package of enhancements to the city at the time of the staging of the Commonwealth Games. This redevelopment resulted in a certain amount of criticism, provoked mainly by the congregation of nefarious characters with less than pure motives in some corners of the Square.

Now in New Zealand the best way to find a solution to a problem is to refer it to a committee. This time-honoured tradition was duly upheld and the so-called "Bishop's Committee on Cathedral Square" was formed, chaired by the Anglican Bishop of Christchurch. Being a good committee it called for submissions. Like all good tramway societies the Tramway Historical Society responded by suggesting that the Square could become the focal point of a tourist tramway, complete with the then newly restored Boon 152.

Again the suggestion was not taken up, but somewhere along the line the germ of the idea settled and lay dormant, but not forgotten. It took root and emerged in 1990, when the Christchurch City Council convened "The Tourist Transport Sub-Committee". And this time they did have trams on their minds.

This Committee called for proposals on inner-city tourist transport, to which the Society responded - it was getting quite good at doing submissions by now. All submissions had to be personally presented to the Committee. Only one submission was for real trams. The others all sought to operate look alikes, battery buses, or cardboard cutouts, all without the benefit of proven technology.

The Society was fortunate in presenting its submissions last. Our presenter was thus able to commence with the telling and dramatic words "Gentlemen I can offer you the real thing ....". And the real thing was chosen. After such a start, the question was never in doubt.

The progress on the building of the Tourist Tramway has been well documented in various publications, and is not part of this paper.

The Tramway Historical Society's Part In The Project

In retrospect convincing the Christchurch City Council that it should build a tourist tramway was, from the Society's point of view, probably the easiest part of the whole exercise.

One of the most fundamental aspects was the provision of the tramcars themselves. It goes without saying that if you are going to have a tourist tramway, then there must be tramcars. Whilst this Society had tramcars which it could make available, we by no means were the only possible source of tramcars for the Tourist Line.

Fortunately the Society was able to demonstrate that the tramcars it had were eminently suitable for the job and the ones which should be used.

Use of the Society's tramcars did present some problems for the Society, not only in respect of the tramcars themselves, but also in respect of how the Society should undertake any work needed on the tramcars, and how the Society should protect itself in regard to contractual obligations and the flow of income that the tramcars would produce.

The following areas of concern needed to be addressed:

a) Which tramcars?
b) Work needed on the tramcars
c) Safety requirements
d) Would we operate the Tourist Tramway?
e) How the work needed would be done
f) Protecting the Society from the Tax Man

So let us look at each of these items in a little more detail.

Which Tramcars

The Society had a number of possible contenders for the Tourist Tramway. We had three large electrics, two small electrics, one single decker trailer, two double decker trailers, and one steam tram that could be made available.

The steam tram, nice though that would have been, wasn't really in contention. Although coke may be reasonably readily available on this side of the Tasman, it cannot be obtained at anything like reasonable cost in New Zealand, and the amounts required to run "Kitty" in daily service would have made the operation too costly.

There is only one, and can ever only be one (!) "Kitty" so that in the event of breakdown or servicing requirements, the service would have to cease until she was back in service.

In New Zealand we have a phenomenon called "The Clean Air Society". They work themselves into a frenzy just thinking about smoke. let alone actually seeing smoke. Now although when "Kitty" burns coke no smoke results, she does exhaust steam through her funnel, and to a Clean Air enthusiast, that is much the same thing.

So taking all in all, "Kitty" will have to remain at home (special occasions excepted).

This left us with the electrics to run on the Tourist Tramway.

The original concept for the Tourist Tramway was for a single line running between Cathedral Square and the Museum. This was mainly on reserved track in a pedestrian mall. As such only one tram would be in use at any one time, and this type of operation would have admirably suited Boon 152, being a two ended car, with Dunedin No. 11 providing backup. The Council commissioned a consultant's report on the proposed tramway. and as a result of the recommendations contained in that report the Tourist Tramway grew into an inner city circle requiring three electric cars and two trailers.

This requirement involved the Society in a complete rethink of its running fleet. Not only had it to provide the city fleet, but it also had to maintain its Ferrymead operations. To make life even more interesting Brisbane 236 suffered a motor failure at this time, and the quotes to have this fixed were quite daunting.

After much deliberation it was decided to make electrics, Brill 178, Boon 152 and Dunedin 11 available together with Duckhouse Trailer 115. It was decided that the second trailer would be Dunedin Horse Tram No. 18. This had been under restoration for some time, and would now be completed as dual horse/electric trailer. It was withdrawn from use in Dundein in 1903 and hasn't carried a passenger in 90 years.

The Refurbishment Programme

With the exception of No. 18, all of the tramcars had been in use at Ferrymead for varying lengths of time, some since opening day in 1968. Obviously there would need to be quite a but of refurbishment work done to bring the cars back to pristine condition after years of seven days a week running.

All this sort of work costs money - big money when there is a deadline to work to, and the deadline makes necessary the use of paid full time labour.

I am sure I will strike a sympathetic chord with everyone present when I say that tramway societies don't have that sort of money sitting in the bank waiting for something for it to be spent on. We certainly didn't.

So when we got down to negotiating with Council representatives on our part in the overall scheme we said "yes we would supply trams in the necessary quantities, but someone else would have to pay for the cost of refurbishment". Council agreed. and included the cost of refurbishment in the set up costs which would eventually be recovered from the commercial operator.

The next step was to ascertain what the actual cost of refurbishment would be. Now all of you will know that this sounds easy until you actually sit down and put it on paper. Its a bit like trying to get a hard and fast quote on having the engine of your car overhauled - you can't get anybody to commit themselves. Its always a case of if this or but that ... Working out the cost of a tramcar refurbishment is just the same. The only difference is that the figures are a bit bigger, and the risk of getting it wrong is, accordingly, directly proportional !!!

A great deal of very hard work was done by Murray Sanders and his team, and eventually we came up with what we thought the cost would be. We gave ourselves a bit of a shock in the process, the figure being much higher than most of us ever expected.

In retrospect we were probably a bit light in our estimates, but not badly so. If we ever do this exercise again, we will add quite a bit bigger margin for contingencies just to make sure. Certainly when we "opened the trams up" we found some things we didn't expect, and therefore hadn't costed, but at the end of the day, even after their time in the city, we will have overall better trams as a result.

It was very evident at the outset that to undertake the refurbishment programme within the time frame required would mean that the Society would have to use full time paid staff, and all the costings were made on this basis. The use of such labour saw the Society embark on a new era, and the implications of this will be discussed later under "Doing the Work".

The Safety Requirements

Right at the outset the Society contracted to supply any trams to best restored museum standards. We were very aware that trams had not run in any street in New Zealand for 30 years, and that regulatory requirements then applying would not necessarily be the same now. Part of the agreement with the Council specified that any costs involved in complying with safety requirements were the responsibility of the Council, and would be costed at commercial charge out rates.

It was also made a condition of the agreement that any such modifications must be incorporated in such a way that they did not destroy the heritage nature of the tramcars, and must therefore be capable of being removed before the cars are returned to Ferrymead, in a manner that leaves the tramcars as historic exhibits.

In the event many safety related items needed to be incorporated. These included such items as continuous head lights and stop lights, indicators, electric windscreen wipers, ancillary and automatic braking systems, (not to mention such operator requirements as sound systems and skates rather than wheels on the trolley poles).

The Operator

As part of the original submission made to Council of tourist transport options we considered whether, if a tramway was chosen, we should be the operator.

There was considerable debate - some of it quite sharply divided - and much sharpening of pencils to produce a range of figures to cover a number of operating possibilities.

Three basic possibilities were open to the Society. We could undertake the whole operation ourselves, we could enter into some type of joint venture or company like structure with someone else to operate it, or we could simply lease the tramcars to a commercial operator.

There were two major stumbling blocks to operating the tramway ourselves or jointly with others. These were the lack of venture and/or setting up capital, and the inability to sustain any operating losses, especially in the early years of operation. Our estimates for the set up costs for the original plan (just the line from the Square to the Museum) were in the region of $100,000. The figure for the expanded operation would be considerably higher. And those figures do not include the refurbishment and safety related costs referred to above, which total over $400,000.

Like the Hare and Tortoise we settled for the lease option. It may be slower, but it is much more certain. We know what rental we will get on an annual basis, and so we can plan ahead for the future. The risks of operation have been left to the entrepreneur. At the end of the day we could, if we had operated the City Tramway ourselves, have placed our heritage tramcars at risk through the operation not living up to expectations. This could have resulted in the receivers selling our tramcars to pay the debts.

Doing The Work

As I mentioned earlier it was necessary to employ full time paid labour to achieve the refurbishment work within the time allotted.

This is not the first time that the Society has had the advantage of paid labour.

One of the more enlightened Governments in the 1970s had instituted employment promotion schemes to help try and overcome the then growing numbers of people who found themselves out of a job as our economy contracted. Through the kind offices of the Ferrymead Trust the Society was able to make use of a pool of workers under these schemes, and substantial amounts of restoration work were done on Boon 152 and Dunedin 11. All labour under these schemes was cost free to the user, who also received a small contribution to the administration costs and materials.

Unfortunately our use of this pool of labour did have some disadvantages. In particular the productivity was low and there was very little, if any, contact between the workers and the volunteers working on the same project. As a result the volunteers tended to shy away from any involvement in those parts of the project in which the paid workers were involved, so that there was not a "harmonious" working atmosphere.

We had to be very careful that we did not allow this situation to arise with the funded refurbishment programme for the City Tramway tramcars.

Two paid staff were required, one woodworker, and one engineer, and to ensure that the best people available were obtained advertisements were placed in the local papers seeking suitable applicants. Society members were encouraged to apply, but Society membership or experience was not a pre-requisite. We hoped, through the possible employment of outsiders, to bring new skills to the Society.

There were a number of attributes we wished our employees to have, principally:

- be first class tradesmen
- have proven employment record
- have a sympathy with heritage preservation
- be prepared to teach skills to members
- work a 40 hour week to include Saturdays.

One of the problems was we could only guarantee a years work, and understandably those with proven employment records could be a little reluctant to leave their jobs to work on trams for a year, with no assurances of employment beyond that time.

We received 26 applications and interviewed 12 of these. About a quarter of the applicants were Society members.

It quickly became apparent that while "outsiders" may well have contributed new skills to the Society, the already on hand skills of members clearly outweighed those possible benefits.

And so two of our members left their previous occupations and became New Zealand's first fully professional fully paid tram restorers. We had set up a new industry. Even our Accident Compensation Insurance Scheme does not have an occupational class for tram restorers. (We, like good conservators of money, chose the nearest, but cheapest, occupational class which was the repair of motor vehicles. After all a tram was a vehicle with a motor, and they were being repaired!!!)

What tipped the balance in favour of employing two of our members, quite apart from them being jolly nice fellows, was that little something that tram enthusiasts have. That something that shows they can do things that non-tram enthusiasts simply look at and shake their heads.

The employing of workers from within our ranks has meant that other volunteers have worked very harmoniously with them thus ensuring that the best possible job has been done within the time available.

I would like to personally acknowledge the tremendous assistance that I have received from Graeme and Larry, which has greatly lessened the administrative burden that such a large project could so easily have become.

The Tax Man Cometh....Or How To Organise Your Affairs To Make The Maximum Use Of The Benefits That Flow Your Way.

Our Society is essentially a volunteer driven Society. Most tramway museums are. As volunteers we were taking on a number of contractual obligations of some magnitude. It was necessary to protect the Society in the event of things not working out. Most of our Committee Members felt that there was a need to set up a "Commercial Wing" as it were. The problem was, what would be the best organisational structure - a separate Incorporated Society, a limited liability company or what?

As Oliver Wendell Holmes once said "Property has its duties as well as its rights". Or put more simply if you derive a benefit from something, the tax man is bound to become interested.

The Tramway Historical Society is an incorporated society under the provisions of the Incorporated Societies Act 1908. Section 61 (34) of our three and a half inches thick Income Tax Act 1976 says that income not exceeding $1000pa gained from trading with outsiders is exempt from income tax. If you earn over $1000pa the tax liability is 24% on the first $30,875, and 33% thereafter.

Now I am sure that most of you would not like the prospect of an average just over 28% or $24,000 of the rentals earned from leasing trams disappearing into the tax man's pockets. We certainly didn't - after all we could spend it much better than he could!!

So we had to protect ourselves from two angles. Firstly we had to protect ourselves from any liability that could arise that might see our tramcars being seized to meet contractual obligations, and secondly we had to protect ourselves from the ravages of the Inland Revenue Department.

Clearly the existing Society structure was inappropriate. The Society owns the trams, and the tax implications - which may well have rendered the income from our existing tram and bus operations liable to tax - did not give us the security we needed.

Setting up a limited liability company did not answer all our problems. It solved the problem of the possible forfeiting of our trams if it all went wrong, as the company would not own the trams, but would lease them from the Society for the purposes of refurbishment. A company certainly wouldn't solve the tax problem. It only made matters worse. There was no certainty of being able to set up a company with charitable status, and company taxation in New Zealand is a flat 33%. Even if the Society owned all the shares in the Company any dividends paid back to the Society would not carry tax imputation credits from which the Society could benefit, as the Society wouldn't be paying tax. I believe that similar considerations would apply in Australia with regard to franking credits on dividends.

But like all problems, there has to be an answer somewhere. And after a bit of research we came up with the answer - form a charitable trust to lease the tramcars from the Society, refurbish them, and on lease them to the commercial operator. The hallmarks of a charitable trust are that it must be for charitable purposes - and a museum qualifies, it must promote activities for charitable purposes - and again a museum qualifies, and it must distribute its income for charitable purposes - and the Society, as a museum is a willing recipient for such distributions.

A charitable trust cannot be wound up without a court order, even if it is bankrupt, so we had a double protection there. And above all a charitable trust is tax exempt.

So our "commercial wing" is known as the Heritage Tramway Trust, incorporated under the Charitable Trusts Act 1908.

To protect the Society, the Society has the right to appoint the Trustees of the Heritage Tramway Trust. The Society has decreed that the Trustees of the Heritage Tramway must include the Society President, Vice President, Secretary, Treasurer and two other Society members, thus ensuring forever that the aims and objectives of both entities remain with a common purpose.

Conclusion

The last two years have seen a very successful transition from a totally voluntary operated and "staffed" organisation to one that encompasses a "commercial" arm that is nevertheless firmly directed to advancing the

aims of the Tramway Historical Society. Great progress has been made, and with the impetus provided by being involved in the Tourist Tramway Project, this progress is assured for years to come, as the funds so generated are poured back into full time restoration work with a professional staff.

Resources remain the most important asset of our Society. Resources does not simply mean such things as equipment, trams, the ability to restore or operate. It has a much wider importance in being able to take opportunities as they arise, to see through the administrative problems that may arise, and to chart a way for the future.

The Tramway Historical Society has been able to undertake the vast majority of all aspects of this project from within the resources of its own membership. They have written the employment contracts, negotiated the refurbishment details, negotiated the lease details, and provided the administration and accounting functions necessary to operate what is quite a respectably sized small business. The only outside professional help has been in the area of the legal vetting of contracts and the preparation of the Trust Deed itself.

We look forward to the next few years with great anticipation and interest.

At the end of the Speaker's address, the time available for the session had expired. Therefore it was not possible for any discussion or questions/answers on the subject.

DEVELOPING SOCIAL ACTIVITIES - DISCUSSION SESSION

Session Chair: Carolyn Dean Session Secretary: Ron White

Several Museum members described social activities conducted at their respective places.

Ballarat: Has no regular activities because of travelling time constraints on working days. Regular Melbourne - based meetings have been abandoned, but there is a regular A.G.M. picnic day.

Wellington: Has film evenings and member barbeques as well as two dinners a year - Christmas and the Tramway Closing anniversary.

SPER: Used to have monthly information/social meetings but these lapsed because the people attending were also working regularly at the Museum site. Drink - driving laws have had a dampening effect and marital bliss had replaced midnight to dawn slide shows. An annual dinner is held and social events shared with kindred bodies.

PETS (Perth): Makes an effort to involve spouses and families (eg Hotham Valley dinner trips). Sleepover weekends are held monthly at the Museum site for work parties.

Haddon: The Museum Rep suggested combined social events.

Hobart: Museum conducts monthly meetings and visits as well as an annual dinner. A Christmas fun day is held with features such as trolley rides and jazz bands. Some camaraderie exists among the wives.

Adelaide: Reported that there has been no strong social program. Barbeques are held after the AGM and special events. Social events are occasional rather than regular.

Bendigo: Most members live in town and the most successful events are day trips in the Museum bus involving families. There is a Social Committee.

TMSV: Believes it may have had too many social events in the 70's. Perhaps 'fringe' members might be used to run the social program.

Other questions and comments:

Annual dinner seen as appropriate in involving wives in social activity.
Does the current small business atmosphere kill off social activity?

Does the membership make-up affect the social atmosphere?
eg. all male memberships, married membership
The bunkhouse at PETS and the Bungaree house (Ballarat) are focal points for social activity
Suggestion to offer our facilities to kindred bodies for social activities

TELL US YOUR HISTORY

Presenter: Colin Seymour
Session Chair: Ron White
Session Secretary: Bill Cox

Some history reported is better than no history at all!

Some Suggestions

* Newspaper clippings
* Other records/reports
* Official records
* Employee Magazines
* Museum records
* Local reminiscences

[Editor's note:- This presentation was illustrated by overhead projection and exhibits]

Introduction

My name is Colin Seymour. I am the President of the Australian Electric Transport Museum at St Kilda in South Australia.

I have been the "Museum News" correspondent for 'Trolley Wire' since April 1983. I have also supplied a number of feature articles to 'Trolley Wire' since December 1983.

The purpose of this Presentation is to encourage museum members to contribute short local historical articles to journals such as '*Trolley Wire*' and '*Tramway Topics*'.

My concern is that because of the high standards of historical articles and publications by writers such as the late Ken McCarthy and David Keenan in Australia and Graham Stewart in New Zealand in particular, there is a reluctance for other people to contribute historical articles to tramway journals.

I will suggest that:

Some history reported is better than none at all!

Short "less professional" contributions will at least give us a glimpse into the various local tramway histories.

I will suggest various ways to provide short articles with minimal effort while still achieving acceptable journal standards.

So let's look at some suggestions.

Newspaper Clippings

The first one is Newspaper Clippings. Most Museums have some sort of an archival collection of newspaper clippings gathered over the years. Just a reprint of an article can make interesting reading in itself.

In Adelaide the MTT actually kept huge scrapbooks of any newspaper correspondence about them.

There are many great stories which can be almost reproduced in entirety for minimum effort. For instance, there's the wonderful story from June 1918 of the runaway Prospect tram. Here's a piece from one newspaper:

"Read a small section from the relevant article - refer Appendix A Scrapbook 5/6/18, Pages 299,300,304.

As you can see, the reproduction of this article, not only captures a funny story, but captures the wonderful language on the day.

If you don't have copies of newspaper articles, try your local newspaper office or library. Use historical dates as a starting point.

It takes a long time to sift through 50 odd years of newspaper files, but you only have to start looking to come across an interesting article.

In Adelaide, we are also fortunate to have a scrapbook put together by a member of the Tramway Band from 1909 to 1925.

I was able to use this information to write a recent article for 'Trolley Wire'.

The New Zealanders have produced some wonderful reading for 'Tramway Topics' by reproducing various newspaper articles.

Official Records

Another source of articles are official tramway records. Some Museum's have large collections, while others only have bits and pieces. But even documents like old annual reports can provide interesting information.

Museum Records

When we talk about old records, don't forget your own Museum records - after all, some of us have been going longer than some Tramway systems.

Even old Museum newsletters can provide interesting information.

Other Records and Reports

This includes various reports about trams by other organisations or people or publications as distinct from official tramway records.

A few years ago, a visitor to St Kilda who had worked for the MTT during the Green Goddess trolley bus experiment in the early 1930s donated his speech notes from a presentation he gave at the time about the trolley bus experiment. The notes include many diagrams and technical information. An edited version of this is currently being turned into a Trolley Wire article.

Employee Magazines

Many tramway authorities produced employee newsletters or magazines. In Adelaide, the MTT began publishing 'Among Ourselves' in 1946.

This was a period in Adelaide when many of the first employees of the Trust when it was formed in 1907 were retiring after 40 years of services. The magazine captures their reminiscences of the early electric and the horse tram days. There are many stories in this journal which make fascinating reading. At least one article could be devoted to humorous tramway employee stories.

Local Reminiscences

And don't forget some of your local identities, or tramway employees, or even some of your Museum visitors. The memories may be fading, but you can often check on dates and locations. Another person may be able to confirm the tale. The main thing is that you qualify you article with words like:
"as recalled by ..." or "according to".

Now I'd like to mention a little something which can really add to certain articles - sketch maps. How many times have you read about a particular tram line, or a museum, but cannot picture where it is in relation to a central point.

Once again, I believe that some sort of map is better than none at all - just a simple sketch to give us a better understanding. Of course, for more detailed historical works, a professional map is essential, but for short magazine articles, a sketch map can really help.

Conclusion

So there are many fairly easy ways to provide us with a few pages of your history.

But I must make one very important point. Always get your article checked by one of your museum experts. A few obvious errors can really detract from a good story.

So how is it? Just give us a few pages of your local history. Just tell us your history, so it's not lost forever. Remember:

Some history reported is better than none at all!

Editor's Note:- Mr Seymour's paper also included a quantity of Attachments. It is felt that they cannot be included as part of this publication due to the constraints of space reasonably available in this volume. Anyone interested may care to contact the Presenter direct.

Questions

Lewis Nyman: Position re Copyright in reprinting old articles.
Answer: Acknowledge where information arose but print in any case. Use supplemental data if it comes to hand which may amplify/clarify an earlier article.

Richard Gilbert: Suggests trade union publications can provide input from former employees. Make use of maps to clarify location of story as published.

TRAMWAY OVERHEAD

Presenter: John Beckett
Session Chair: Peter Hyde Session Secretary: Tony Cody

I understand that the talk is limited to 30 minutes which gives the opportunity for an extremely superficial account of the subject and little possibility of exchange of information.

The subjects to be treated (at about three minutes per subject!) include:

1. Safety. Disconnecting supply and grounding overhead at substation. Grounding overhead at work point. Verifying safety and conditions of tower wagon. High visibility clothing of workers, safety gloves, safety helmets. Traffic diversion/warning signs and markers. Safe practices when working on tower wagon. Effects of fatigue and stress.

2. Display of vintage and modern fittings. Remanufacturing vintage fittings in the interests of cost saving and authenticity. Problems with using/reusing brown porcelain insulators. Display of "preferred" span wire construction.

3. Display of HO gauge demonstration unit showing general construction methods which are applicable to full size.

4. Video showing tensioning, crimping, height adjustment, use of fan grips, setting of frogs, setting offsets, centring wire etc., etc.

5. Sources of supply of materials, fittings, tools.

6. Problems with reconciling technical versus historical interests.

7. Bibliography and sources of useful information.

8. Brief open forum for contribution of information and ideas.

After the talk (or preferably "exchange") the presenter is willing to take interested parties out on the tower wagon, demonstrate the 7 1/4 gauge tramway (which has all the problems of full size plus a few of its own), and engage in discourse on overhead, all outside the formal Conference sessions of course.

Additional Notes By The Session Secretary, Tony Cody.

Tramway Museums should have access to a qualified electrical engineer overseeing work and also, a licensed electrician on site can be helpful for other electrical work.

No standards exist for wiring tramcars, but useful information can be gleaned from SAA wiring rules.

The Bendigo Trust inherited a very run-down system from the SEC. The system had been rehabilitated in the 1930s, but little further was then done until closure. The SEC retained responsibility for maintaining the overhead for some time after 1972 but, with the increasing burden of repair to a worn-out infrastructure, it was later glad to hand over this responsibility.

The Bendigo Trust commenced an upgrade of the overhead. A stock of about 1km of unused trolley wire was available and the Council also commenced installation of new concrete poles along part of the tram line. The new wire was strung from these new poles at an increased height. A height increase was desirable as problems with high and over-height vehicles had taken place. During this replacement work an SEC worker suffered bad burns from contact with a live span wire. No intermediate insulators were in this span wire and the insulation in the old-style ear was found to be defective. A replacement of similar span wires commenced but has still to be completed.

When new trolley wire was sought, it was found that the original 0.126 section wire was no longer available. A supply of 0.2 section trolley wire was located and 1km was acquired. This heavier wire was erected with fewer than expected problems in the area near the depot wye. Over a period of around three years the Trust hopes to replace all the trolley wire as there has been a continuing problem with collapse of the overhead on the southern portion of the line.

Various authorities have advised on the safety of the wiring replacement procedures (most especially the Department of Labour and Industry) and some aspects have since been tightened up.

Live-wire working is not now used in Bendigo. Overhead grounded at two locations including one at the point of work whilst the operation is in progress. Wire is still treated as if it were live despite these precautions. Section insulators have been found to be untrustworthy due to leakage in damp and humid weather. Additional precautions include bonding across primary insulators during work and grounding of the tower wagon.

Some other points of safety include the wearing of the appropriate clothing, fixing things properly rather than adopting a quick fix, not allowing the use of boxes or other items to achieve a higher level on the tower and always be mindful of the effects of fatigue on the workers.

A selection and brief discussion of overhead hardware followed. This included an example of the many defective insulators that have been replaced with the preferred types of new insulator. The traditional cap and cone type of hanger was found to be too expensive to acquire new. However the standard Melbourne hangers have been adapted as these are cheaper and quite effective. Standard Melbourne frogs have been adopted for similar reasons. It has been found possible to re-manufacture ears from the scrapped ears removed from the old overhead.

Equipment for handling the wire and fittings included specialised tools already in stock or purchased as required. For smaller wire jobs, cheaper commercially available wire tensioners and cutters have been found useful.

Editor's Note: At the end of the Speakers address, the time available for the session had expired. Therefore it was not possible for any discussion or questions/answers on the subject.

NOTES ON VIDEO PRODUCTIONS OF THE SYDNEY TRAMWAY MUSEUM

Presenter: Don Campbell
Session Chair: Barrie King

Paper prepared by: Dale Budd
Session Secretary: Dave Critchley

The overall history of the Museum's video productions is one of progressive development, using confidence gained from early productions to commit greater resources to achieving higher quality, and therefore increased sales on later tapes.

The story began when Roger Piper made his film available to the Museum. No editing of the film was permitted - and no editing was feasible on the video. Richard Youl did the transfer, shooting "off the wall" with a domestic video camera, and added some of his own film. There was no commentary, and the sound track consisted of the sound of Sydney suburban trains.

Titled "Trams", this pioneering production, done at minimal cost, demonstrated that there was a market for tram videos. About 160 copies were sold. It was then decided to use Jim Powe's film as the basis of further productions. Approximately 2 1/2 hours of film taken by Jim was transferred to tape professionally, but the transfer proved to be of poor quality, with flicker and other problems. Accordingly the material for Sydney Tramway Memories reel 1 was again transferred by Richard Youl, shooting "off the wall", with an off-the-cuff commentary by Don Campbell. The cover or slick was a colour photocopy, and sales amounted to a couple of hundred.

For reel two we paid for professional transfer using a competent and sympathetic production house, Systems Electronics. Very limited video editing was done, to save cost of the video editing suite. There was also a policy decision to "leave everything in", and not eliminate shots which were duplications.

The commentary was researched and written, and was pre-recorded by Don Campbell, for later dubbing onto the video. This was a technique which was not very satisfactory and was not repeated (although it is commonly used in professional productions). The commentary works better if the person speaking can see the scene on video which is being referred to - and also it enables any timing problems to be corrected on the spot through re-recording of the audio.

For reel two we paid for music for about half the production, leaving the old silent film without any accompanying music or commentary. This was done partly to save money, and partly because it seemed an appropriate technique - but it is not one which would be repeated. Again the slick was produced by colour photocopying.

Continuing strong sales led to a decision to further improve the production standard for reel three. We added a professional commentator and the cover or slick was produced by full colour printing. The production cost of reel three was around $2000. The aim of the increased production standard, including the cover, was to get the video into the ABC retailing network, and this was successful. The ABC has continued to be a major outlet, currently selling around 100 copies per month of *'Shooting Through!'*.

Reels one, two and three exhausted the film taken by Jim Powe, together with a contribution from Ben Parle and some historic footage from the State Transit Authority. It was concluded that there was not enough other film available, showing different lines, to justify a fourth tape in the Sydney Tramway Memories series. The easiest step forward was to re-issue reels one and two, bringing each of them up to the same standard as reel three and thus getting them into a wider retail market, principally through the ABC. This was done, with considerable success. The historic black-and-white sequences in reel two, which included extraneous material such as football matches and displays at Sydney Showground, were shortened slightly, and background music was added to all of reel two.

Sales of these three tapes generated substantial funds for the Museum, running into several thousand dollars. The quantity sold of reel three is around 600, with the others not far behind.

In considering what to do next, the key request was for a video which would cover the whole system on one tape. There appeared to be two main options. One would have been to produce a short tape of about half an hour, with highlights from all available film. Such a production would have needed a clear story line, perhaps on the history of the Tramway and it's contribution to Sydney. It would have probably needed extensive new material such as interviews with individuals. In brief it would have been a much more complex production

than the previous productions or the eventual alternative. It would have required considerable scripting and a fully professional film maker's approach.

The alternative - which eventually led to *'Shooting Through!'* was chosen not just because it was easier, but because it was believed that most people who buy tram videos get them because they want to see the trams in locations within which they are familiar - perhaps where they lived as a child, or where their parents lived. So it seemed sensible for the combined film to show every possible line.

By this time we had expanded our retail outlets slightly, to include some rail/tram enthusiast industry outlets, but notably also Grace Brothers. We learned from sales through the ABC shops and Grace Brothers that the tapes were of interest to people other than hard-core tram enthusiasts.

We received some helpful advice from Grace Brothers in planning *'Shooting Through!'*. They alleviated any concerns that the finished production would be unattractive because of being too long. In fact they said that length is a virtue: tapes shorter than an hour do not sell well, even if price is matched to length.

We were told that video prices were coming down. Whereas a price of $39.95 might have been acceptable a couple of years ago, many tapes are now available at much lower prices. Grace Brothers and the distributor emphasised the importance of putting all the material on one tape, rather than selling a pair of tapes, because some retailers will not take tapes packaged as pairs; and they also encouraged us not to worry about the reduced quality of images made from 8mm film: purchasers do not mind lower image quality on historic material. Our Grace Brothers adviser also indicated that, contrary to our initial thoughts, trams had equal or greater appeal than steam train videos - because trams run along streets, and past buildings, with which people are familiar.

The decision to use a distributor was difficult and complex. Instead of having copies run off the master tape and distributing them ourselves - with a very handsome profit margin - we would be handing over the master tape to the distributor, who pays for the production of the copies and then distributes them, paying us a royalty on each tape sold. This royalty is much less that the wholesale or retail mark-up - but the distributor places the tapes into a very much wider market. In effect we were trading off a larger profit on a small number of tapes against the advantages of much wider distribution. Of course we would make the normal retailer's profit on tapes sold at the Museum or through our mail order list, which currently runs to some 250 names. Sales of *'Shooting Through!'* are currently around the 2,000 mark, of which retail sales by the Museum account for about 450, so the benefits of the wider market achieved by use of a distributor are obvious.

It is interesting to record that when showed the partially completed tape to a number of distributors, we found that they were competing with their offers to handle the tape for us. It was not a case of persuading someone to do it, it was a case of picking the best offer.

We recognised that use of a distributor would have other benefits. The effort they put into promoting the tape would provide publicity for the Museum, increasing visitor numbers. So far our distributor, VDI, has spent in excess of $10,000 on promotion of *'Shooting Through!'*: it has been used as a prize in competitions run by newspapers, it has been prominently featured in catalogues and it was endorsed as a merchandise item for the City of Sydney sesquicentenary. None of this would have been achieved without the use of a distributor: the Museum simply does not have the resources to make these things happen. Further, the distributor is selling the program overseas - not just to tramway enthusiasts but to a wider market. Again, the Museum could not have undertaken this activity.

Turning to the production of *'Shooting Through!'*, a number of key decisions were made. First we would gather all available material from both amateur and professional sources - the latter including the newsreel collection and other film from the National Film and Sound Archive. We obtained Roger Piper's film again, and had it transferred to video professionally. Second, we would do a full editing job - a time-consuming and therefore costly task. The editing of *'Shooting Through!'* on video took seven full days, at a cost of about $1,000 per day. The result of a full day of editing is about 20 minutes of finished tape. The beginning and end of every shot has to be identified, and every shot has to be assessed for brightness, colour and sharpness, with appropriate adjustments being made.

Another important decision for *'Shooting Through!'* was to vary the style of music, especially having regard to the overall length of the tape. We chose piano music by Scott Joplin, which is out of copyright, and paid for professional recording by a professional pianist. The decision was made to issue a map sheet with the tape. It was decided that the closing sequence should provide a strong promotional message for the Museum, and the

shots at the Museum were professionally filmed. The total production cost for *'Shooting Through!'* is in excess of $12,000. The return on this will come partly from sales and royalties and partly, as already mentioned, through stimulating visits to the Museum.

There is also a potential for the tape to earn royalties from its inclusion in the library of Film World Research: organisations seeking to show street scenes of Sydney in bygone days will be able to use extracts from *'Shooting Through!'* for which the Museum will receive fees.

What would we do differently if we were starting again?

The answer is: not much. I am sure that our approach, of learning to walk before we ran, i.e. by starting off on a shoestring and building up, was the sensible course.

Advice for other museums? Don't be perturbed if all you have is 8mm film. If it is of good quality, i.e. correctly exposed and steady, then it can be satisfactorily used as the basis of a video promotion. Conversely there is no need to waste money on editing such material on one inch video tape. This is expensive overkill for the image you can get off the film. 3/4 inch equipment is entirely satisfactory, and comes at a much cheaper price in terms of editing time.

It is essential in preparing the commentary to have a detailed knowledge of the scenes being shown. Especially when you are working from film which is unedited, or with a variety of film from different sources, it is essential for editing to be able to recognise locations and put them into a logical sequence.

How to get started? An essential requirement is adequate source material: you should be thinking of a finished length of not less than one hour. Production of videos requires someone interested in and knowledgeable about films and film making (or video and video making). Such knowledge is essential to turn enthusiast material into something acceptable for a wider public - which is necessary if satisfactory sales are to be achieved. This person must develop the concept for the production. As mentioned earlier, there also needs to be someone with a detailed knowledge of the locations to be shown. Incidentally and importantly, scenes should not be chosen or edited so that they show only trams. In editing *'Shooting Through!'* we deliberately included scenes showing people, cars and other motor vehicles - because they add to the interest of the tape for many viewers. It is important to identify a competent and friendly production facility with 3/4 inch editing equipment. Finally, you need lots of spare time to commit to the job.

What you do not need is a lot of money. Production of tapes to the standard of the *Sydney Tramway Memories* series, which is very acceptable for widespread retail distribution, is not necessarily an expensive proposition.

In conclusion, it is appropriate to acknowledge all those who have contributed to the development of the Sydney Tramway Museum's video tapes. Richard Youl's experimental production of Roger Piper's material was a pioneering effort without which the later and more ambitions productions would never have been attempted. Jim Powe, apart from contributing the film which provided the basis for the *Sydney Tramway Memories* series, also provided helpful advice on the standard requirement for retail sales, both in the technical aspects of video production and in the presentational aspects, such as the use of a full colour printed cover. Alan Phillips of Grace Brothers and Geoff Wylie of VDI, our distributor, also provided guidance which as already mentioned was extremely helpful. And finally it is important to thank all those who contributed to the film from which the videos have been made. Without their generosity in making their film available, none of our videos would have seen the light of day.

Questions

Barry King: Enquired as to how SPER coped with copyright.
Don explained that SPER sought initial material that was original or out of copyright (eg Scott Joplin 'rags' in 'Shooting Through!') though copyright of about $700 was paid through the National Film and Sound Archive for material reproduced from Cinescope Newsreels.

Les Stewart: Asked was there a critical cost analysis done on the videos.
Don answered that the early videos, Trams and Sydney Tramway Memories 1-2-3, had been produced and distributed by ourselves. Early dubbing had been done cheaply through a Religious communication outfit and relatively large profits were made per individual tape. However, as we had a limited distribution network the overall result was not as spectacular.

To use a distributor meant lower profit margins with royalties and sales mark-up from SPER's own sales being the main income. However, this is compensated for by the much wider distribution network including major retailers, hobby shops, tourist outlets and interstate, and more recently international, distribution.

AXLE BOX BRASSES AND CAST STEEL WEDGES - WEAR, CAUSES AND REMEDIES

(As Experienced By The Perth Electric Tramway Society Inc)

Presenter: Bob Pearce
Session Chair: John Pennack
Session Secretary: Martin Grant

Editor's Note:- This presentation was illustrated by overhead projected slides and samples.

The tram is a vehicle generally powered by electricity and supported by a single truck or two bogies. The truck consists of two axles and four wheels while a bogie tram consists of two bogies each of two axles and four wheels. Both trucks and bogies have one or two motors and assorted brake gear. Each axle has two axle boxes, one at each end of it, where the axle passes through the frame of the truck or bogie and the frame of the truck or the bogie actually sits on the axle box. The whole weight of the tram is carried on the bearings inside the axle box. Therefore, they form a most integral part of the running characteristics of the tram.

The tram may be perfectly restored to operating condition in a museum, but forget the axle boxes, and, though the tram may go, it won't for very long. A strange burning smell will emanate from below the floor, a loud torturous scream will rend the air and passengers will cry out in alarm and jump off in droves. In short, if the axle boxes are not well cared for then give up trying to run trams.

Now, all tramway systems experience the problem of axle movement, either laterally or rotationally (in addition to the normal turning of the axle), when the tram car is in motion, whether along street or enclosed track (such as in Melbourne or Bendigo) or on open track (such as in most museum environments including Perth).

This movement is caused by the axle to which the wheel sets are attached, being forced to move as the wheels move within the confines of the two rails, and by the movement of the motor which is connected to the axle by gears.

Because rail is not perfectly straight, nor is it perfectly aligned in smooth radius curves, and it does not matter how much effort is applied to attaining those ideals, the wheels will be forced to move from side to side as the tram moves along. This will cause the axle to move laterally, while rotational movement occurs every time power is applied to the motor and the wheels turn.

The rotational movement to which I refer, is not the normal turning of the axle that occurs when the tram is moving, although that in itself will be the cause of some of the problem in any case, but the additional stress that occurs when the tram motor is put into, or out of, power.

The axle will move or jerk and it is that which causes the axle box brass to try and move in sympathy with the axle. Naturally, the axle box brass will always try and turn in sympathy with the axle when it is moving in any case but it is the sudden start or jerk of the axle that causes most rotational problems.

I hasten to add that the problem will not occur when the tram is standing still, and as I do not know of any one who will pay to sit in a tram at a museum instead of being taken somewhere, I don't think that that is the answer to the problem.

Ideally, the portion of the axle contained within the axle box has been manufactured and carefully machined to tolerances in accordance with the design specifications.

Gun metal axle box brasses, an excellent load and backing material for a journal lined with white metal, a low coefficient of friction material 1.6mm thick is provided to give long journal life. Cast steel wedges, to keep the brasses in their proper location, are inserted into the axle box to prevent this lateral movement and restrict the effect of the jerking or uneven rotational movement that occurs every time a tram is put into power or the bogie runs over uneven track.

In order to minimise that wear process as well as the build up of heat which is occasioned by the friction of the metal surfaces rubbing against each other, lubricants are used in one form or another.

To ensure the even transference of the lubricant to all surfaces within the axle box, the use of some material, such as wool packing, or, as we are now doing in Perth, poly pads wrapped in 'chenille' soak up the lubricant from the sump of the axle box and carry it to the bearing surface where it is squeezed out by the weight of the axle upon it. This permits the lubricant to flow freely over all of the wearing surfaces.

The poly pad is a sponge like material that soaks up the lubricant while the chenille, which wraps around the poly pad, is packed against the metal surfaces of the axle. This transference of lubricant from the sump to the axle journal through the poly pad, (or wool packing or other material that may be used) is called (by Westrail) 'siphoning'.

One advantage we have found with the polypad is the decrease in the amount of lubricant required for each axle box. We initially kept the level at 12mm below the bottom lip of the axle box, but found that the polypad was so efficient that the whole of the journal, the top of the brass and the wedge plate were covered in oil and was also leaking from the axle box lid.

By reducing the oil level by 7 to 8mm to 20mm below the lip we have found that the same amount of coverage of the journal and the underside of the brass is still maintained, but the loss due to leakage has been eliminated.

Another advantage is the wear factor (amount of use) of the polypad. We, and other operators no doubt, but especially Westrail, had found that simply topping up with oil and not carrying out any cleaning or other maintenance of the wool (or other material used in the axle boxes) invariably led to the destruction of it, and in fact, during these days of austerity, the necessary attention to wool packing by Westrail staff was not done as often as it should.

This led Westrail to developing the idea of using some other material to replace the wool skeins used at that time. This was based partly on the fact that regular attention to cleaning the wool and repacking it into the axle box was fairly labour intensive and time consuming, and with the changeover to polypads, such process would not be required. Also, as can be seen from the sample and the slide, to remove and replace the polypad is extremely simple. Most importantly, however, the amount of contamination is almost non-existent compared to wool or other material (such as cotton waste) used in packing axle boxes.

Our introduction to the polypads came about because our museum was looking for a cheap and reliable source of wool. While enquiring at Westrail, I was told that they had changed over to polypads some time before, but there was some wool still available in the store which we could purchase at a price (the going price that Westrail had paid). With the rapid changeover to roller bearings from conventional axle bearings, polypads and chenille were available in large quantities from the salvage office at Midland Workshops (Westrail). As a result, with a sample for the council meeting to look at and for Noel Blackmore to evaluate, and taking into consideration the price differential between wool and polypads, we obtained most of the available stock from the salvage office and have now started a programme of progressive change from wool to the polypads.

At present, all axles of W2 393 have been done and one axle of 426 (the original trial car) as well as W2 368. When the bogie exchange takes place as part of the refurbishment of bogies for W2 329, polypads have been used instead of wool. W2 329 has run for 40,000 kms with polypads and no need to replace - ie four years compared to about three years to clean/replace wool.

The cost comparison between wool and polypads is as follows:-

Wool purchase price $100/kg (100 skeins/kg - 1989 prices).
Four skeins/axle box (.4kg/axle box $4) = $16.00
Polypads approx $2.00 each (1/axle box) = $8.00

However with all metal to metal surfaces where one or both surfaces move against each other, and no matter in what way it is used or what preventative action is undertaken, there will always be wearing of the surfaces in contact with each other, and it is no different to the surfaces inside the axle box.

The usual effect of this wear is to cause the erosion or wearing down of the white metal, which then exposes the gun metal to the axle. Under normal conditions, the axle brass is removed for machining and realigning with white metal before the gun metal brass is exposed.

However, during the period of time that the brass is in use in the axle box, not only is there wear to the white metal, there is also wear to the end of the brass, which is caused by the lateral movement of the axle. This may continue to a stage where the white metal or brass is not effectively restricting the lateral movement of the axle within the axle box, usually indicated by excessive hunting or flogging of the wheel sets as the tram moves along.

As the clearance between the journal end flange and the brass increases, so does the wear rate, because the mass of the tram forces the axle to move sideways and the brass is worn more. As the unrestricted clearance gets larger, so the movement increases and the wear will proportionally increase in a logarithmic scale. This will then place ever increasing stresses on wheel flanges, and through them, the track.

Inspection of the axle box brass usually shows that the white metal surface has been worn almost, or completely, away. Also it is possible that the size of the brass has been reduced by such a degree that it is so far out of design tolerance that an excessive amount of rebuild is needed to bring it back to design specification.

Using large amounts of white metal to build up the end of the brass is not successful because the white metal, being very soft, will eventually be squeezed out by the movement of the axle. Remember that the white metal is a very soft material, consisting of some 75% lead.

The usual remedy is to remove the old brass and replace it with a new unit, and if necessary, also replace the cast steel wedge securing the brass in position.

By looking at the slide, it can be seen that the greatest amount of wear is both on the bearing surface and more importantly at each end of the brass, although more so at the leading (outside end) edge of the axle. This circular wear is directly caused by the fact that the axle is not snug within the box and is rubbing up against the end of the brass. Hence the lateral movement of the axle is causing the wear.

To replace the whole brass unit is a costly exercise and for a long time, our resident electrical and mechanical supervisor Noel Blackmore, had been searching for a solution that would not only solve the problem of the wear, but also would be relatively cost effective, bearing in mind the limited financial resources of the Museum.

Noel knew that the old Perth Electric Tramway used Brill bogie and wheel set equipment and Brill had fitted a "replaceable" brass alloy (we are not sure what the brass alloy was) check plate onto the ends of the axle within the axle box and the question was, therefore, would such a device have practical implications on MMTB axle box brasses. Some four years ago, Noel came up with a proposal that would need some trialing but appeared, on paper anyway, to be the answer to the problem.

The Brill check plate sits in a groove machined into the end of the particular type of axle having a check plate journal, while the axles used by the MMTB are "MCB" type axles. Because many ex-Melbourne trams went to various museums, with six coming to Perth plus one ex-Ballarat, all of the trucks under the bogie trams were equipped with "MCB" journals. The trucks obtained from Japan are Mitsubishi built Brill 77E trucks, also with "MCB" axles. Consequently Brill type check plates would not work and to have the axles machined to take them would be a horrendous task, as well as a huge financial burden on any museum contemplating the task. (Note: MCB - Master Car Builders).

Noel came up with a different idea which is based on the Brill idea but has to be necessarily different to comprehend the MCB journal. However, it does the job just as well.

The worn brass requires 8mm to be machined off the worn end to ensure a full and resultant square face. Room was therefore available to fit a replacement phosphor bronze wear plate onto the end of the brass and this became the new wearing surface. The profile of the wear plate is identical with that of the axle box brass. Two screw holes were drilled and tapped into the end of the brass and the check plate was secured into position by 8mm diameter stainless steel countersunk screws and "Loctite" compound.

At first there was thought that a problem may exist with the rotational movement of the axle causing the brass to move and possibly fracture the two screws due to the force of the movement exerting great pressure onto the

wear plate and the screws holding it in place. It was found, however, that the cast steel wedge was long enough to sit directly over the top of the wear plate and restrict any turning movement.

The exercise worked so well and improved the running characteristics of the trams so much, coupled with the dramatic lessening of costs of replacement (re white metalling or new axle brasses), that we have undertaken a program of fitting wear plates to all axle box brasses as they come up for replacement.

The situation now is when the wear on the replaceable wear plate is such that replacement is required, it will become a matter of simply removing the screws holding the worn wear plate in position, and fitting a new unit.

The benefit is that with a new wear plate in position, a greatly reduced clearance exists between the end of the axle and the axle brass, and this prevents almost all of the lateral movement of the axle and the effect is very noticeable on the running characteristics of the tram.

Where it is found that the axle box brass is beyond repair because it is so far out of tolerance or design specification, then a new unit is provided, but it is fitted with a wear plate at the outset of its life within the axle box.

The old unit is not thrown away, however, it is kept until sufficient are on hand, when it is melted down and made into new axle box brasses, which of course also assists in keeping down production costs.

At present, the costs to make a new axle box brass and wear plates are as follows:-
Axle box brass:- Between $225 to $260 (own material supplied).
Wear plate:- Between $50 and $60 (*own material supplied).
*This includes the cost of machining the axle box brass, and drill and tap for two screws.

If a batch of 25 or more replacement wear plates are made, this cost reduces quite dramatically to about $30-$35 each, including the correct sizing (journal diameter etc) and final fitting.

We are now investigating the design of a wear plate to fit the inboard end of the axle box brass. This has been brought about because, although the original length of the axle journal was designed to be 177.8mm, we have encountered MMTB axles with an average journal length of 180.9mm with the worst case of 188.9mm.

One reason why the journal lengths are so different to the original design length is because serious scoring of the journal may have occurred due to a hot axle (hot box) or other cause. As a result, the journal is built up with chrome steel or similar and then machined to the designed profile, so that the axle box brass will sit within the standard 3.175mm clearance.

To build up an axle at the inboard end for machining is not recommended because the heat to the area caused by the application of the hot metal, had been known to severely weaken the axle and has been listed in derailment reports as the cause of axle fracture and/or collapsed wheels.

During the course of the machining, the length will be increased, even if only 1 or 2mm each time. But when considering the age of some of the axles in use on our trams in museums today, it is likely that some axles are anywhere between 40 and 60 years old and have probably been machined many times, so it should be no surprise to find the journal length very different to the original size. To measure the journal length (inside the axle box), Noel designed and made this device, which is shaped to fit the outboard and inboard radii.

We found that, although we were restricting movement at the end of the axle by fitting the wear plate, there was still sufficient clearance at the inboard end to allow the axle to move and create additional thrust on "one" wear plate. This has made it necessary to provide an additional wear plate at the inboard end of the axle box brass.

This will increase the bearing length (axle box brass and wear plates) to cover the whole of the journal within the axle box thus a greater load sharing of the thrust forces will be achieved. When this treatment is done to an axle, it is necessary to do both ends at the same time.

W2 393 had new axle box brasses fitted in November 1990 and currently has run approximately 40,000kms. On the November 1994 inspection, it was found that the brasses now require the installation of wear plates. This is expected to cost around $400 compared with $2100 for complete replacement of the brasses.

If white metalling only is required, that cost would be approximately $1200. The re-use of whitemetal can only be done two or three times without re-constitution. If the brasses had already been whitemetalled more than two or three times, then a metallurgical analysis would be required to establish whether the white metal was suitable for re-use. However, as a cost basis, to undergo a full white metal treatment is still some 3.5 to 4 times more expensive than to fit wear plates, assuming that the journal face is still is satisfactory condition. Where it is not, then a replacement brass (fitted with a wear plate) would be provided in its place, bearing in mind that what is done to one end of an axle must be done to the other.

We will advise museums of the outcome of our work if interest to it is shown by those which may be having a problem in this regard.

Cast Steel Wedge Plates

We have found that these have had excessive wear on each end of the plate and the 6.35mm bullnose radius was so badly worn to be almost non existent and also distorted. The axle box end locating lugs were also worn.

The original design length of the wedge plate was 165.1mm, but we found some of ours had worn down to a worst case of 161.0mm. We also found that some had gone out of square with one side being 161.0mm and the other 165.0mm making the wedge plate also a major problem.

To rectify the problem on the wedges that were still repairable, we built up the bullnose by electric welding and then re-machined to the standard 6.35mm radius. At the opposite end, we built up the locating lugs and then machined them back to the design overall length, plus 1.016mm oversize to allow for wear on the upper edge of the axle box.

We then squared the underside face of the wedge plate and machined in flat to maintain full face contact of the axle box brass.

Where these plates are uneconomical to repair or are so out of square as to render them impossible to build up and machine to the required profile, we will replace them with new plates at an approximate cost of $50 each. The material used to make them will be CMA 1 manganese bronze (a very hard wearing bronze, so hard that it is almost impossible to machine).

Already we have made patterns for these units to be made, along with patterns for brasses to fit MMTB No.1 and 9 axle boxes. We are investigating their use on No.15 axle boxes. We have now also produced a pattern for the manufacture of axle box brasses for the brill 77E trucks we obtained from Japan.

If other museums are interested in acquiring brasses, or in modifying their existing brasses to take the wear plates, contact us and we will advise prices to have the work done using our manufacturers, thus saving expense in setting up the process with a local supplier in your home area, and we will soon be able to provide brasses for Brill 77E trucks if required.

Editor's notes:-

1. At the end of the Speaker's address, the time available for the session had expired. Therefore it was not possible for any discussion or questions/answers on the subject.

2. Photocopies of the overhead projection slides were supplied by the Presenter. Printing advice is that they would reproduce poorly in this publication. Therefore it is suggested that anyone interested in copies should contact the Presenter direct.

FIRE PREVENTION - DISCUSSION SESSION

Session Chair: Bruce Worthington — Session Secretary: Henry Brittain

Fire can be very devastating. Both SPER and Perth Museums have been affected by bush fires although not seriously. In those situations where museum sites are set amongst trees and bush the following safeguards should be put into practice:-

- ensure tracks are kept clean of weeds.
- trees are trimmed back from overhead.
- rails are properly bonded to prevent any sparks.
- keep guttering clean of leaves.

In all Museums the proven in-house source of protection is by automatic sprinklers supplemented by smoke detectors connected to a automatic alarm system at a fire station or else some other place that can respond.

Other safeguards can include:-

- banning smoking in museum buildings and on tramcars.
- inflammable liquids should be safely stored.
- buildings should be spaced apart so that fire cannot spread from one to another.
- fire extinguishers kept in each tram and at conspicuous sites around Museums.
- fire drills held annually for Museum members and run by qualified firefighters.
- avoid use of blow torches, naked flame.
- do welding in open spaces.
- when undertaking restoration ensure that installed electrical fittings are of modern design and construction.

Recommendation From Discussion Group

That COTMA develop a code of practice for fire protection, including smoke alarms and that a designated supplier be identified who can advise and supply protection equipment suitable for tramway museums.

ARE WE TALKING TO THE RIGHT MINISTRY

Presenter: Richard Gilbert
Session Chair: Jack Nyman Session Secretary: Lindsay Richardson

As a tramway museum we should look at ourselves and consider where we stand as a group of tramway enthusiasts.

We should consider: Who do we serve? We, I suggest, serve tourists, people seeking a day out and we are an education resource. We entertain and we educate. We relive memories for older people. We entertain all age groups. We educate the younger generation. We educate other members of the community. Therefore we should regard ourselves as being in the area of tourism and museums. We are not public transport. We should talk to the Tourism Ministry and the Arts and Culture Ministry. There are other areas we should make contact with. Grants and other forms of assistance are available, not only from the areas of tourism and the arts, but Youth, Sport and Recreation, Rural Area Grants, Specialist Grants such as the Tasmanian Government "Tasmanian Research Publications Fund" which is available to publishers of works dealing with the historical context of Tasmania.

There are Grants for Courses, which can be of benefit to museum members to develop skills for the museum. There are labour supply schemes such as the LEAP scheme and the Saturday Community Workers.

We have to broaden our visions and aspects of what our museum is doing in the community. The Transport Ministry does not usually have grant money. It is not set up for that task. The Ministry can be an important resource. After all, it may have, or does still supply, the heart of the collection, that is, the trams, related equipment, or even land. Like Puffing Billy, we acknowledge the history of the equipment, the area it came from and its part in developing the city, but now, it has moved on. It has a new owner, an owner operating in the area of tourism and museums.

As such it is more directly under the umbrella of Tourism and Arts and Cultures Ministries.

Some grants that the Ballarat Tramway Preservation Society has had are:

State Government - The Ministry for the Arts : A Cataloguing Kit.

This kit allows us to preserve, sort and file our archives. These archives can be objects, film or paper. The grant gave us a filing cabinet, acid free envelopes for film and negative storage, storage boxes and folders, labels, pencils, rubbers, rulers and books on cataloguing and listing the collection.

Federal Government - Community Employment Scheme: Labour and materials.
This grant enabled us to achieve considerable progress on reconstruction of the Horse Tram and conduct heavy engineering maintenance of the electric trams. The grant gave us paid labour for a period of months.

Local Government - Ballarat City Council: Cash amount to house Tram No. 14.
The Ballarat Council considered that their grant of a Tram from the SEC would be better utilised if the tram were housed at the Tramway Society Depot. The Council granted a monetary amount equal to what it would cost the Council to house the tram at a Council site.

In fact, the BPTS has had no direct grant from the Ministry of Transport. The Ministry can, of course, be the greatest benefactor by making an initial grant of vehicles, equipment or land, but once received we need to look at other areas to restore, develop or preserve our granted equipment from the Transport Ministry.

You will inevitably ask what steps do we take in our new field of regarding ourselves as a museum. You can join another organisation, Museums Australia, either at the State branch or the Federal branch, or both. The State and Federal branches produce a magazine newsletter which not only lists coming events and articles on particular museums, but also lists some grants that are available.

Getting sponsors for a particular event at your museum. The local business community can often be obliging for some reciprocal advertising. Our 21st year celebrations saw the bread and sausages provided for our public barbecue breakfast. We ran advertisements for these two firms in all our brochures and advertising for the weekend. The Road Construction Authority supplied the truck that delivered Electric Supply Company Tram No. 12 as part of their donation of the tram that was on the site of the Ballarat ByPass Freeway.

Sponsors can be sought for open days, displays, a particular event or a restoration project, exhibition, conference or a course.

Multiple Heritages

Make contact with other museums in your district. The trams were part of the community. They were not just there on their own. A local museum may be able to provide your museum with further details or information about tramway history in another aspect. Your museum may also help that particular museum. The trams were once part of the community, now the museums have to be a community.

Involve the community in you museum. There can be permanent displays of a fellow community group, or well publicised particular days of a special event such as:
Car Rally/Tram Calvacade, Fashions and Transport, Food and Transport.

Speak at local fellow interest groups. I spoke at the Ballarat Vintage Car Club and fascinated the audience with our archival tram tape; they loved the cars in it!

Sourcing Grants

Join Museums Australia. Join your local tourism region. Join your local historical society. Go to seminars, be seen, be known, Lobby - Rub shoulders. Don't just be on your museum site. Be part of your community.

Ballarat History Fair

This popular yearly event concentrates on a particular aspect of history each year. Recently the theme was transport - we took our Horse Tram. It was a great drawcard at the entrance, and we had a sponsor to truck it there and the entire exercise cost us nothing. We also took part in the fair by having a display stand of photographs, models and sales supply.

Advertise yourself as part of the community.

In Victoria no one knows who 'Steamrail' is, but in Western Australia everyone knows who 'Hotham Valley' is.

Recently, I went to the Nyora Hotel after a day of working on the tourist railway there. The publican said that I was the first one from the railway that had come over and spoken to her. She wanted to advertise the railway and the locals often talked about the railway that ran past the front but they hadn't heard from anyone to be able to tell them anything about it.

We are all in the competitive market place. Our hobby was set up by us to enjoy our interest but we must have a wider vision.

Force yourself into it - to survive!

Maybe COTMA should join Museums Australia. Our Conference programme would have been placed in the 'Whats On' columns of their national magazine. People of importance may have read about it. Its a case of rubbing shoulders, and being outward with information and news about the Australian tramway museums. Our museums are rich in social and technical history and yet they are not exactly the topic of conservation of people directing and selling tourism and culture.

We have to lobby for our cause. We have to seek out the right Ministry and the many other areas of available resources and funding.

Questions

John Radcliffe: Need to know as many Ministers of Parliament as possible

Trevor Burling: Need to know whats going on in Regional and Local authority bodies.

Vote of thanks by Jack Nyman

SOCIETAL IMAGING - LEAFLETS, POSTCARDS AND GUIDEBOOKS

Presenter: Bill Scott
Session Chair: Chris Andrews Session Secretary: Richard Gray

The first contact many future visitors have with us is by the published word, as leaflets, postcards or guidebooks. These then, are noteworthy means by which we can generate increased interest in our societies.

Accordingly, how we show ourselves in these areas can make a difference to our viability. The successful formula seems to be, ancient equipment in superb condition combined with modern advertising. Any form of the printed word, whether it be a free leaflet, a paid for postcard or guidebook, is a form of advertising.

The public is constantly bombarded with advertising material, such as magazines and books, for which the publishers have often gone to great lengths to give them maximum appeal. None of us has a budget to match many of these offerings, yet our efforts have to be noticed amongst the plethora of paper.

This is the challenge we at Ballarat are aiming to meet as opportunity and funding permits. The more of the imaging we can carry out ourselves, the less the financial cost to our societies, or the more attractive we can make our presentation. This is especially so of guidebooks where there are many pages to design and layout, combined with relatively low or short print runs. The usually high costs of pre-press work is thus spread over fewer copies.

There may be an avenue for sponsorship to aid with financing. However, it appears that securing finance in this manner is more likely if a presentable and previously published work is shown at the time of the request to assist with an updated version. A Catch 22 situation!

Leaflets

The first of the three images to consider is the advertising leaflet, given out in large numbers and without charge to the recipients. We made ours clearly readable with a positive message. One two sided sheet of 4" x 8 1/4" (10cm x 21cm) was fine. Anything larger would only increase costs unnecessarily.

The weight and stiffness of the paper was made sufficient so that the leaflets would remain upright in display stands and not droop like weeping willow trees, which would be a most distressing sight and not a good image for the Society. Do not use brown ink for printing on leaflets as it is a dead colour.

An illustration on the front gives a welcoming impression, particularly if it is a tramway scene with human interest rather than a close-up view of a tramcar, as if on static display. We remembered that the leaflet is for the general visitor and not tramcar buffs.

Postcards

Postcards are also a form of advertising, either to purchasers at any location where they are on display, or when visitors send or show them to others around Australia and overseas. The main difference as compared to leaflets is that, ultimately, the visitors pay for them plus any postage involved rather than our societies.

Therefore, and especially as postcards are more likely to be held onto than leaflets, taking good care in their preparation is highly desirable. The composite postcard with several illustrations is preferred by some purchasers who regard it as better value for money. One illustration with several focal points, such as three different type of tramcars, is a variation on this theme. This latter variation will cost less to produce as only one scanning charge is payable as against one for each individual view on multiple scene cards. We found that a border around a postcard gives a finishing touch.

The name of the society's line, or its location, should be displayed somewhere on the front of the card and not confined to the back only. Some outlets will not handle a postcard on which the subject or its location is not named on the front.

As postcards are small items, very clear photographs are preferred and ought to be made from colour slides. Companies producing postcards will print a number of different designs at once on a large sheet. This spreads the printing charges considerably, thus reducing individual costs.

The last card we published was a standard range one at 142mm x 97mm. Postcard sizes vary slightly between manufacturers, probably according to the dimensions of their printing equipment. Cards being small items, slight differences in sizes can be noticeable, so that a supplier who prints nearer to the actual standard size of 143mm x 100mm would be preferred.

Another popular postcard is the Continental with an actual size of 177mm x 118mm, though again, there can be slight variations between manufacturers. The public has accepted their higher retail price of 60 cents, as opposed to 40 cents for a standard card. However, in our specialist arena, market research may be advisable before introducing the larger and higher priced postcard.

Guidebooks

Guidebooks complete the trio of basic promotional material for organisations such as ours. The comments about postcards being, ultimately, self financing advertising, apply equally to guidebooks.

For our, "Ballarat's Heritage Tramway", the first consideration was how much we could charge our visitors for it. From this aspect all other decisions flowed. We then looked closely at page size and considered that B5 trimmed would give a pleasant shape and about the largest size which visitors could handle on our tramcars without inconvenience, which would otherwise cause them to become more or less creased or crumpled. Visitors do not usually board the cars with large bags or document cases!

To gain maximum impact for illustrations we bled off the photographs on all the outer edges of the pages. This procedure increases the area of the views to a surprising extent, as this increase occurs around their borders. The improved impact is considerable.

At the point of sale, first impressions are vital, so a glossy rather than dull finished cover and paper stock was chosen to enhance the illustrations. A half rather than full gloss finish was selected to give life to the illustrations, yet without being too reflective for reading the text. Additionally, the cover was laminated to give it increased durability.

A paper weight of about 130gsm would ensure images on the other side of a page do not show through. For the relatively short run we made, of 3000 copies, the difference in cost between cheap and good quality was a small sum measured as a percentage of total printing expenses. The same comment applies to the card cover, which on our book weighs 250gsm.

The most fruitful areas we found for reducing costs were in pasting up the booklet from the galley proofs supplied by our typesetters, proof reading and how we prepared our colour illustrations for the colour separations.

The cutting, pasting and page design were handled by ourselves, though it was sufficient for the positioning to be made by sight only. The typesetters then easily produced the typesetting accurately by computer for final proof reading by us, before transfer to the film makers.

If the page laying out is to be left to the typesetters, one has to more or less accept their interpretation of your instructions or meet, perhaps, substantially increased costs.

Colour, at least on the front cover, is essential these days for booklets to be noticed at a point of sale amid the many other publications on offer, including on a society's own sales counter. We preferred to have a significant number of colour views in the text as well.

Colour views as slides are scanned individually, though colour views as prints can be colour separated collectively, if all are the final size and colour density for publication. The colour prints can be prepared at a competent one hour Kodak Express service, or similar. The savings we made were substantial for our 15 colour views, equivalent to about 30% of total outlay for the film making process.

Typestyle can be a matter of choice though we avoided the rather plain sans serifs. We found that a mere one point increase in the line spacing of the text made the pages look much more readable, rather than a sheer mass of type, which is disconcerting in a guidebook.

Finally, a quick note on the guidebook contents. We seem to have found a suitable formula, at least in the opinion of the National Trust in Victoria. Of our book they said, "not a big tome, lots of illustrations and does not overwhelm with technicalities".

We hope that our associates in the tramcar preservation field will find some benefits for themselves among our discoveries.

Editors Note:- At the end of the Speaker's address, the time available for the session had expired. Therefore it was not possible for any discussions or question/answer on the subject.

RAIL SAFETY LEGISLATION IN NEW ZEALAND

IMPACT ON VOLUNTEER HERITAGE RAIL OPERATORS

Presenter: Les Stewart, President, National Federation of Rail Societies, New Zealand
Session Chair: Dennis O'Hoy Session Secretary: Bill Kingsley

At the 1990 Conference in Wellington, N.Z., Roger Toleman of the Ministry of Transport outlined the proposals for the overhaul of the tramway and railway safety regime in New Zealand. This covered the:

- the need for licensing
- Safety Audit Model
- Steam Boilers and Overhead Electricity Supply
- Transitional Arrangements
- Accident Investigation
- Transport Corridor Management

A further two years elapsed before legislation was passed and on 1st April 1993 the following acts came into force:

- Transport Services Licensing Amendment Act (No. 3) 1992
- Transport Accident Investigation Commission Amendment Act 1992
- Railway Safety and Corridor Management Act 1992

Overview

* **Legal Framework**
  - Licensing
  - Safety Plans
  - Accident & Incident Reporting & Investigation
* **Content of Safety Plans**
  - Quality Systems
* **Issues for Volunteer Groups**
  - Paperwork
  - Auditors Vs. Inspectors
  - Organisation Structure
  - Potential Cost
* **Summary**

We are now 20 months into the new environment. While existing operators have had to comply with licensing requirements and accident and incident reporting from the beginning, a period of three years has been allowed for the development and approval of the most significant element of the legislation - safety plans.

Today I intend to provide a brief overview of the legislation, look at what is involved with safety plans and safety audits and review the impact of this on volunteer groups such as yourselves.

Licensing Requirements

* Transport Services Licensing Act requires all operators to be licensed.
* Neither a revenues earning ploy nor a means to limit the number of operators.
* Identifies all operators to be covered under the Safety Audit regime.
* Licence issued only when the operators safety plan is approved.
* All operators as at 1st April 1993 have three years to have their safety plan approved.

All rail operators are required to have a rail service licence. Rail Service Licences are neither a revenue earning exercise nor a means to control the number of operators. They cost nothing and provided the management is of good character and you have an approved safety plan anyone can get a licence.

The Rail Service Licence is a registration mechanism by which the Land Transport Safety Authority can identify who is covered by the legislation. The LTSA administers the legislation within which the safety systems are established and have a responsibility to ensure all operators have a safety plan which is regularly audited.

Any rail service operating at the time the legislation came in force has until 31 March 1996 to develop and gain approval to a safety plan.

Safety Plans And Audits

* Transport Services Licensing Act requires all operators to have an approved safety plan.
* No safety plan - no licence.
* Safety plan defines how the operator plans to build, maintain and operate their tramway or railway in a safe manner.
* Once approved, the operator's compliance with the safety plan is audited by an independent safety auditor.
* Land Transport Safety Authority may request supplementary and special safety audits.

As defined in the Transport Services Licensing Amendment (No 3) Act, a safety system sets out the "... standards, practices, and procedures" the operator proposes to follow in order to ensure the safety of persons

likely to be significantly at risk of death or serious injury through the operation of a rail service vehicle. We will look at the content of a safety system in more detail later.

Once approved, as a condition of being granted a Rail Services Licence, the operator must operate their railway or tramway in accordance with the system. Compliance with the system is audited annually by an independent auditor approved by the LTSA.

The LTSA also has the authority to order supplementary audits if it has reason to doubt the safety management of a particular operator.

Accident And Incident Reporting And Investigation

* Hierarchy of accident and incident reporting.
* Operators maintain an incident log:
  - audited by Safety Auditor.
  - Reviewed by LTSA staff.
* Notification to LTSA:
  - accidents immediately by phone.
  - incidents by fax as soon as practicable.
* Transport Accident Investigation Commission (TAIC):
  - investigates all accidents involving death.
  - other accidents and incidents as it deems necessary.

Railways and Tramways are historically very safe compared with other forms of transport. However, for every death or serious injury there are numerous minor injuries and for every minor injury there are many incidents which could have resulted in injury.

To enable adverse trends to be identified a system of accident and incident reporting has been established. For this purpose the following definitions are used:-

- Accident is an occurrence associated with the operation of a rail service vehicle and results in death or serious injury to a person.
- "Incident" is any occurrence, other than an accident, associated with the operation of a rail service vehicle that places or could have placed a person at significant risk of death or serious injury.

Accidents must be reported to the LTSA and the Transport Accident Investigation Commission by phone within two hours and followed by a written report on or before the next working day. Incidents have to be reported by fax on or before the next working day.

TAIC investigate all accidents identifying the cause(s) and recommending any changes required to the safety system of the operator. Often recommendation will be made to all operators in the interest of preventing of another accident.

Quality Systems Underpin Safety Systems

Land Transport Safety Authority

Plan: Establish legal framework within which rail operators manage the safety of their systems.
Do: Provide guidance and support in the implementation of the legal framework. Approve safety plans.
Check: Monitor accident and incident reporting for adverse trends and review audit reports of rail operators.
Act: Take action to remedy adverse trends and poor audits, eg. seek changes in safety plans, initiate special audits, withdraw licences.

Rail Operator

Plan: Develop safety plan to meet operator's strategic objectives working within the legal framework.
Do: Operate the tramway or railway in accordance with the approved safety plan.
Check: Monitor operations in accordance with the approved safety eg. exception reporting, management reports, internal audits and inspections.
Act: Take action to remedy faults eg. train staff, adjust maintenance schedules, amend safety plan.

Having looked at the three components of the safety legislation - licensing, safety systems and accident and incident reporting, we will now have a more detailed look at safety systems. It is the safety system that has the greatest impact on volunteer groups.

The basic philosophy underlying the safety system regime has its origins in quality management systems. The responsibilities of two of the three parties, the LTSA and the operator can be illustrated using the Plan, Do, Check, Act (PDCA) Cycle.

The operator who creates the risk takes responsibility for managing that risk, while the LTSA, on the other hand, is responsible for legal framework and ensuring that it is effective i.e. New Zealand has safe railways and tramways.

The other party involved in a safety system regime and mentioned but not specifically covered here is the auditor. The auditor is required to judge whether there is a sound and appropriate safety system in place for the nature of the operation, and to monitor the standards within that system.

Contents Of Safety Plans

* Organisational Objectives.
* Administration Details.
* Standards proposed for each aspect of operation eg. track, rolling stock, training etc.
* Procedures for ensuring compliance with each standard.
* Reporting systems for accidents and incidents.
* Management structure responsible for safety, including job descriptions.
* Standards of training and experience required by drivers.
* Scope of each regular audit.
* Name and qualifications of auditor.
* Other matters as may be prescribed.

Each tramway or railway is different in terms of scale, reason for existence, nature of equipment, customers etc. Safety plans must recognise these differences and be adapted to suit the need of the operator. For this reason a safety plan begins with the objectives and the key background details of the organisation - location, ownership, length of track etc.

The main body of the plan details the who, what, how and when of safety management on the tramway or railway. The focus is on:-

- management structure including job descriptions (who and when).
- standards and procedures (what and how).

The final part of a safety plan details who the auditor(s) will be and their responsibilities. The auditor's role is to see that the safety system is structured and implemented in a way which ensures so far as is humanly possible, the operation of a safe tramway or railway.

Issues For Volunteer Operators

* Four areas are of particular relevance:

  - Paperwork.
  - Understanding the difference between Auditors and Inspectors.
  - Organisation structure.
  - Potential costs.

So just what are the implications of a safety system for a volunteer based rail operator?
Our experience to date indicated four areas of particular relevance:

- paperwork
-understanding the difference between auditors and inspectors
- organisation structure
- potential costs.

Paperwork

* Safety plans have the potential to bring out the bureaucrats in all of us.
* The need to maintain proper records has the potential to turn volunteers away.
* Groups therefore need to apply three basic principles:-
  - Adopt the Pareto Principle
    >>the 80/20 Rule.
  - Use the "KISS" Principle
    >>"Keep It Simple Stupid".
  - Remember the customers
    >>they pay the bills!

The big risk with safety plans is that the need to maintain adequate records of safety related activities will bring out the bureaucratic instincts in us all and drive members away.

Volunteers and paperwork do not mix well together. Volunteers come along to restore trams and trains, lay track, drive trams and locomotives, not to fill out bits of paper. Paperwork is left back at the office.

To combat this the Federation is emphasising three basic principles:

Adopt the Pareto Rule (also known as the 80/20 rule)
In respect to a safety plan this means that an 80% safe railway or tramway can be achieved by concentrating on the top 20% of the risk factors. This is not to say that the aim is not for 100% safety but to emphasise the need to be pragmatic - trying to cover the hundreds, if not thousands, of risk factors will create a monster that will eventually put the group out of business.

Use the KISS Principle - "Keep It Simple Stupid"
The processes outlined in safety plans have to be implemented by members. It is good management to ensure that the skills and efforts of the members are focused on restoring, maintaining and operating trams, locomotives, rolling stock etc. and not spending hours each day doing the paperwork.

Remember the Customer - they pay the bills
Safety procedures must be customer friendly. Just as a railway or tramway with a poor safety record will not attract customers, tramways and railways that are operated in such a way that customers are inconvenienced, even in the guise of safety, will also have poor patronage.

Inspectors Vs Auditors

* Inspectors check that the physical items comply with appropriate standards.
* Audits cover more than the physical items
  - quality of management
  - staff training.
* Auditors check the records to ensure the operator
  - carried out agreed actions
  - according to the timetables
  - to the defined standards
  - by the appropriate people.
* Auditors will also
  - kick the 'ballast'
  - interview key management.

One of the most difficult concepts that rail groups in New Zealand have had to come to grips with is that of auditing and understanding the difference from inspecting.

Until now we have all been used to an inspectorial regime whereby various inspectors from Government Agencies would visit the site and inspect track, vehicles, boilers, etc. to ensure they complied with the relevant statute. This would ensure that things were safe for at least one day of the year.

While the operator has always been legally responsible for complying with appropriate standards, a safety audit regime forces the operator to be more proactive in safety management. In practice, the operator will undertake

their own inspections according to a timetable agreed in the safety plan. An auditor, who is independent, is required to audit a compliance with the safety plan once a year.

The audit will primarily consist of checking the records to ensure the actions detailed in the safety plan were carried out according to the timetable by the required people and in accordance with the standards set out. This is not to say that auditors will totally ignore the physical condition of the tramway or railway, they will want to "get out and kick the ballast" to satisfy themselves that the paperwork matches with reality. In addition key management will be involved with interviews and discussions.

Organisation Structures

* Volunteer groups are traditionally managed by committees.
* Committees are seen to be democratic - everyone can be involved in the decision making.
* Safety plans require a clear definition of management responsibility in respect to safety.
* Office bearers must:
  - be accountable
  - have clear levels of decision making authority
  - have requisite skills and experience.
* Preference for appointments rather than elections.

The changes necessary to an organisation's management structure to ensure there is a clear line of accountability for safety is likely to have the greatest impact on volunteer groups. However, this impact is not on how the group runs its tramway or railway but on the underlying culture of the organisation.

Traditionally, volunteer groups are managed by committees and elected office bearers. The very democratic nature of these organisation gives members the feeling of being in control of their organisation.. Decisions are usually made by committees or at the very least by consensus.

In order to achieve a clear line of accountability for safety there must be a well defined management structure with clear accountabilities and appropriate delegated authorities. The committee is still important but its decisions will be limited to ones of strategy and policy and it needs to stay away from operational matters.

The skills and experience of members holding management positions also become important in a structure accountable for safety. Elections cannot guarantee that office bearers will have the necessary skills or experience nor can they guarantee stability in the management structure from year to year. Accordingly, the trend will be towards a structure based on an elected committee which appoints all office bearers who have responsibility for safety for fixed terms.

The management structures of our volunteer tramway and railway groups will thus change to resemble those of a small company. This will challenge the leadership of these groups to ensure that members always feel they have a say in the running of their organisation.

Potential Cost

* Until now honorary inspectors have been used.
* Auditors could potentially cost money.
* Remuneration is an issue between the operator and the auditor.
* Operator needs to find an auditor, acceptable to the LTSA, who will act in the honorary capacity.
* The financial implications place an incentive on the operator to have and maintain a good safety system.

Under the inspectorial regime, most volunteer operators had honorary inspectors - often retired railway or tramway staff who agreed to be an inspector as their contribution to the preservation effort. Under the new regime a number of groups fear that auditors will end up costing a fortune.

However, the LTSA is only concerned with the suitability of the auditor not the financial arrangements between the operator and the auditor. So if the operator can arrange for an auditor to act on an honorary basis there will be no additional costs over the existing system.

Even if the operator has to pay for an auditor, the legislation has been designed to bring a discipline to operating a railway or tramway which means that the tramway or railway management will continually look at

the safety issues. A clear and well set out safety system, with clear evidence that standards are being met means that the audit should be over quickly at low cost.

What Does It Mean In Practice

* Volunteer rail operators in NZ have a very good safety record.
* So what is wrong with current practices.
* Safety plans will formalise existing practices.
* Opportunity will be taken to improve practices
  - record keeping
  - management.
* Will become more business like.
* Represents a significant cultural change for many groups.
* Challenge is to ensure members understand and accept the changes that are inevitable.

So what will all this mean in practice?
We have had a very good safety record over the years so why change?
In reality the new legislation will probably mean little change to daily operating procedures and workshop practices. The safety plans will largely formalise existing practices. However, many groups have already found the process a useful opportunity to review their practices to ensure they meet the needs of their current operations. So there will also be some improvements.

These improvements will mainly be in the areas of:-
- record keeping
- management structures and practices.

The changes required in these areas that will mean a significant cultural change for a number of groups. The challenge for all groups is to ensure that their members understand and accept the changes that are inevitable.

Overall the new regime will result in groups taking a more business like approach to their operations - which can only be good for them and the industry.

Discussion

John Radcliffe referred to the International Standard of Quality Management - ISO 9000 guide aimed at all business and Craig Tooke to AS 3902.
Les Stewart emphasised that management groups within the museums must talk to all levels within the workforce.
Dave Hinman and Les Stewart discussed the problems for Auditors who need to be covered for liability and who are auditors - not inspectors. The NFRS is trying to establish a list of volunteer auditors.

SKILLS DEVELOPMENT IN THE MUSEUM ENVIRONMENT

AN OVERVIEW OF THE EFFECT OF RECENT LEGISLATION CHANGES IN NEW ZEALAND

Presenter: Trevor Burling, Qualifications Convenor, National Federation of Rail Societies, NZ.
Session Chair: Dennis O'Hoy Session Secretary: Frank Doherty

Introduction

As the museums in Australia and New Zealand, and I suppose other parts of the world, began operating, they tended to adopt the engineering standards and operational practices that were established by the Municipal operators from whom they inherited their trams and other tramway equipment, and, where necessary, introduce some variations to fit local needs. Over time, appropriate technological improvements have also been adopted. In this way the museums have managed to progress for three decades building up an impressive record of service and efficiency.

Inevitably other changes or improvements have been introduced over the years and these changes have usually occurred after arrival at a consensus by museum members, or the changes may be the climax of a project led by

the Council Of Tramway Museums of Australasia (COTMA) and/or the New Zealand National Federation of Rail Societies (NFRS).

Members generally feel quite comfortable about such events when they are borne out of a perceived need. This process usually establishes ownership of an initiative well before an engineering standard or new operating practice is introduced.

Conversely changes or new rules that are unilaterally imposed upon museum operators from time to time by the local or state authorities are often less palatable. Regrettably they are frequently an official reaction arising out of an inquiry into a catastrophe that has occurred on a public rail service somewhere. The result is we are often expected to comply with what may appear to be rather draconian and unbalanced directives.

Development

In the early days of museum development some of the official agencies regarded us as a group of amateurs who were only playing with machinery that we knew little about, and they usually were reluctant to admit that they knew even less. Their view was that we were creating a hazard to ourselves and the public and therefore should be controlled by a strictly regulated inspectorial style of management. Often if compliance with these outwardly imposed standards involved the unplanned expenditure or diversion of limited resources, then the museum members' reaction was occasionally manifest by the display of hostility or passive resistance.

Some of our authorities have not been very good at managing such affairs and consequently the perception of statutory authorities by museum members has frequently been negative to the point where relationships became strained. Whereas in other cases the agencies have been very conciliatory and have used a sagacious approach in these matters. This kind of experience has inspired museum administrators to work with the authorities and helped to facilitate consultation and consensus and the establishment of common standards.

This management style was a little haphazard at first, but changed strategies have been introduced which have fostered a determination on the part of all concerned to work together on these matters and establish a comprehensive risk management programme, recognising that the key element in all of these initiatives is the human resource factor.

Those authorities or Government agencies who have an enlightened view of our position have quickly established a good rapport with the local museums which is to the benefit of all concerned. Whereas others will often tend to be over cautious and limit museums to operating within the boundaries of their own ignorance.

I acknowledge that some of us are not entirely blameless either given that in the embryonic stages of our museums there were occasions when some very enthusiastic members who were keen to get the system going, did things that were at the least rather irresponsible, and some times attracted the attention of the authorities.

The New Zealand and Australian museums have amassed many thousands of hours of incident free operating experience proving that those earlier mistakes were usually made in ignorance and, to our credit, lessons were learned so that the mistakes were not repeated, and furthermore, other groups learned from these unfortunate experiences and acted accordingly. All of this has proven that we are capable of providing a very professionally managed environment for our members to work in, and for the public to visit in safety.

Skills

Those past experiences have helped us to recognise the need for our staff to be competent in what ever they are doing. I use the term staff deliberately because it is the view of most of our New Zealand museums that a professional business approach is important and from what I have seen in Australia the same approach is evident. This professionalism can only be achieved if we claim ownership of the notion that appropriate training has taken place providing people with the opportunity to learn the skills necessary to carry out the engineering and operational activities of our museums efficiently and safely.

Over the past few years the New Zealand Government has acknowledged this professionalism to the point where we are consulted on a regular basis to express our views on many matters that concern operating standards and training in the museum industry. Particularly if there is a perceived need to introduce changes. It is noteworthy that the NFRS is regarded as an important member of the transport and tourism industries and needs to be consulted on training issues as well.

However I must add that that would not have come about if it were not for the efforts of such organisations as the NFRS and COTMA who have worked very hard to establish the credibility that we now enjoy with Government and other authorities.

Members Qualifications

No one is likely to or should be expected to become competent at performing any task without some form of training in the skills needed to carry it out. Even the most menial of duties need a planned approach if consistency and standard procedures are to be maintained.

These principles are well established in the rail transport industry and others and it is this sort of culture that has led to the establishment of common standards for the operation of tramways and railways.

New Zealand Qualifications Authority

In New Zealand we have a Government body called the New Zealand Qualifications Authority (NZQA) whose mission is to ensure that there are sufficient people available to industry with appropriate skills and qualifications to provide the necessary labour and professional service needed by industry. This authority has developed a national qualifications framework which contains the core unit standards for training any person in any skill for any part of the commercial or industrial sectors.

This guarantees that the industry groups concerned decide what the standards will be, and ensure that training opportunities are available leading to qualifications for occupations involving even the most menial skills to those requiring tertiary qualifications and that they get meaningful recognition.

This system also ensures that the skills learned in one occupation are transferable to another if appropriate, without having to start from scratch because of a change in occupation. The framework is continually being developed and expanded. At the moment there are about a thousand units registered, and about four thousand waiting for approval and eventual registration.

One of the latest initiatives in this programme is the setting of unit standards for the acquiring of energy and hazardous gases qualifications, including steam boiler operation which is certainly a topic of interest to some of our museum members.

One of the down stream effects of all of this on the museum fraternity is the obtaining of a statutory qualification such as steam boiler certificate or an electrical qualification by those who wish to be involved. This means that museum members who wish to operate locomotives or vehicles, or work on museum installations where such qualifications are necessary, must meet similar standards to those considered appropriate by industry and Government agencies.

In New Zealand qualifications in these areas have always been necessary, but the new system allows more flexibility in acquiring such qualifications, and is competency based rather than emphasis put on time spent as the tea boy working through to the elevated status of driver etc. and mostly based on seniority.

Our old system was something that was conceived in the Victorian steam age which became a rigid culture based on ignorance and mysticism, perpetuated by armies of bureaucrats who tinkered with the regulations or inspection systems following a disaster of some sort or the old superintendent retired and the new one has some different ideas.

We have now entered an enlightened era, and museum managers acknowledge that the changes are necessary and appropriate given that a certain amount of risk is involved in what we do.

It is acknowledged however that not every detail that is required in the commercial sector with modern plant machinery is appropriate in a museum environment. Given that some of their standards would require modification to our vehicles and equipment destroying the authenticity of our exhibits, or require our operators to learn skills that they would never use inside the museum gate.

This difference has been taken on board by members and the authorities concerned such as NZQA and indirectly the Land Transport Safety Authority (LTSA) and the Labour Department. These Government agencies are working closely with NFRS and individual museums to facilitate the formulation of sensible and

workable rules for qualification and operating standards that reflect the needs of the groups concerned, yet establish and maintain similar standards to those required in industry.

Government Agency And NFRS Liaison

One of the most significant examples of this consultation and co-operation is the attendance of officers of these Government agencies at NFRS conferences where frank and helpful discussion takes place, to ascertain the most efficient and sensible means of reaching these safe operating objectives.

The museum movement is also committed to these goals, and we are fortunate in that among our ranks we have some members with analytical, debating, lobbying, legal and engineering skills. These people have willingly consulted with various officials and parliamentary committees to ensure that the best arrangement for the whole federation is won.

From time to time they are called upon to interpret what can some times appear to be rather mysterious and complicated language for some of those individuals and groups who are good practical people who just want to get on with their favourite activities without wading through a quagmire of legalese cloaked in shrouds of mystery.

Efforts like this ensure that the training and qualifications required by members do not appear to be an insurmountable hurdle.

One example of the progress made is that we have now registered our needs for steam generation and boiler care qualifications with NZQA.

And the Occupational Safety and Health division (OHS) of the Labour Department (who administer the relevant part of the Boilers Lifts and Cranes Act) are working with us to find workable solutions for groups interested in the acquisition of steam qualifications as they pertain to the museum environment.

Both NZQA and OHS acknowledge that we are a special group doing a high quality job of preserving an important part of our heritage and in order to carry out this function we require appropriate training opportunities in order to obtain the necessary statutory qualifications.

Summary

In summary I would like to say that we feel that we have entered a new era in New Zealand, where there is a will among all parties concerned to work together to achieve a result that is for the good of all. Whilst allowing the museums to attain their own objectives without the fear of some agency walking through the gate and closing them down because of an event that occurred somewhere else and has no connection with our operations or how we manage them.

But on the other hand we recognise that if we cause such an agency to pay us a visit because of some act or omission that attracts their attention then we are the masters of our own destiny and it's up to us to maintain the confidence that has been built over the past thirty years, and now enshrined in our legislation.

I feel sure that we will all benefit from this experience and I just wanted to take this opportunity to briefly describe what is currently happening at our end of the track in regard to staff competency helping to build that professional image that the people who pay the bills (the customers) will benefit from, and enjoy sharing our treasures, perhaps returning with others or maybe even join our group.

Long may we be able to tolerate the pain of that incurable disease for which there is no cure but for which there is a brief respite by indulging in just a little more.

Questions

Les Stewart commented further on the Safety Standards as far as the Federation in concerned.

Bill Scott: How are our tram airbrakes affected by legislation?
Murray Sanders: High pressure vessels over .5 cubic metres are covered by stringent restrictions over their use.

John Radcliffe commented and asked how it affected people involved in the Education Sector?
Dennis O'Hoy: We do have to have a full time Health & Safety officer. They are involved in the induction of all staff in all aspects of safety. It is not a bureaucratic bundle - it does work.
Dennis O'Hoy then gave an example to demonstrate this.

RAIL SAFETY LEGISLATION IN NEW SOUTH WALES

BRIEF OVERVIEW OF THE NEW SOUTH WALES RAIL SAFETY ACT

Presenter: Don Campbell
Session Chair: Dennis Bell

Paper prepared by: David Rawlings
Session Secretary: Bob Merchant

The State Government introduced the Rail Safety Act in the latter part of 1993 of regulate rail safety in New South Wales. Unlike earlier rail safety systems, the Act places the administration rail safety outside the control of the State Rail Authority. The Act covers not only the SRA but all other railway owners and operators in the State.

The Act has been introduced because of substantial changes in the NSW rail industry, including the establishment of the National Rail Corporation, the growing trend to establish commercial short lines on previously disused SRA lines, the introduction of light rail rapid transit systems and the likely introduction of private sector high-speed rail services.

The Act applies to all railways in New South Wales with a track gauge of 600mm or more, including heavy railways, light railways, Tramway and inclined railways, and to monorails. It also applies to any other "railways" which will permit transport systems using the new technologies to be added to the coverage of the Act in the future.

The Act does not apply to aerial cableways and underground mining rail systems, or Amusement Park railways as they are regulated under other legislation.

The *owner* of any railway infrastructure and the *operator* of rolling stock using any railway infrastructure need to be "accredited" under the Act. Owners include leaseholders and managers if they are responsible for the construction and/or maintenance of the railway's infrastructure.

The primary emphasis of the Act is on the development and enforcement of rail safety standards and procedures *proposed* by the owners and operators and *examined and agreed to* by the Director-General of the Department of Transport. This approach is designed to ensure that safety standards and practices will match those needed for each individual railway and will be able to be put into practice.

Any railway owner or operator wishing to gain accreditation has to submit an application to the Director-General. The application needs to identify the principle safety risks, propose safety standards, systems and management plans and provide information on insurance, management and financial capabilities, the infrastructure, rolling stock and other equipment to be used, organisational and staffing structures and any running rights agreements.

The application is considered by the Director-General who decides whether to accept the proposed safety standards and systems and whether the applicant is able to ensure that they will be properly implemented. If accreditation is approved the owner and/or operator is obliged to comply with its conditions and restrictions, subject to penalties of fines and/or, in serious cases, imprisonment. Once accreditation has been issued, it normally continues indefinitely - unless it is cancelled or suspended - until the owner changes or the operator loses their right to operate the railway.

Most terms and conditions imposed will depend on the circumstances of each railway, but some standards set out apply for all railways. These include training for staff in rail safety work, ensuring health and fitness of employees and prohibition of work by those under the influence of alcohol or other drugs.

Enforcement of the obligations imposed on railway owners and operators who gain accreditation involves a combination of self-regulation - including internal safety audits - and routine and random inspections of infrastructure and rolling stock and observations of operations by the Directorate of Rail Safety.

Safeworking staff, including drivers, guards, those responsible for track and rolling stock repairs and maintenance, need to hold a "certificate of competency" issued by an authorised agent.

All serious rail safety incidents or accidents defined as "notifiable occurrences" need to be reported. Owners and operators need to conduct internal inquiries into all rail safety incidents or accidents, and inform the Director-General in detail.

Owners and operators need to submit annual safety reports and annual updates of their management plans to the Director-General.

Application fees and annual fees payable are used solely to help cover the costs of the Directorate of Rail safety. *Sliding fee scales take account of the difficulties faced by some volunteer-based historical railway operators and owners. There is a strong public interest in maintaining these operations. In extreme cases annual fees may be waived or reduced.*

Thus the stage was set for the implementation of legislation which would have a profound influence on all railways in the state. Initially, those railways who had SRA accreditation were granted 'temporary' accreditation until their application had been lodged and approved. The 'big' players, State Rail Authority, Australian National and BHP, had resources to prepare their applications for accreditation, but for the volunteer historical railway owners and operators the preparation of their application was to take some time.

To ensure all aspects of the Act were covered in the application documents, the Directorate of Rail Safety published a set of Guidelines of Accreditation Applications. It set our in some detail the areas of rail safety which had to be considered.

To enable effective determination of the railway owner or operator's capacity to safely maintain and operate a railway system, the applicant seeking accreditation had to demonstrate that the organisation had the capacity and competency to safely maintain and operate the railway.

DETAILS OF THE GUIDELINES

Organisational and Managerial Aspects

Organisation
Safety Management Systems
Running Rights
Workcover Authority of NSW
Railway Safety Workers
Inquiries into Rail Safety Incidents
Management
Financial
Private Sidings
Dangerous Goods
Reporting Safety Incidents

Operational Aspects

Safeworking
Special Working of Trains
Loading Arrangements
Competency Assessment of Operational Employees
Emergencies
Safeworking Procedures for Engineering Work
Instructions to Employees

Infrastructure Aspects

Track
Structures
Signalling Systems
Overhead Electric Train Power Supply
Workshops
Infrastructure Maintenance
Competency Assessment of Infrastructure Employees
Bridges
Associated Track Structures
Communication Systems
Buildings
Tunnels
Instructions to Infrastructure Employees

Rolling Stock Aspects

- Rolling stock submitted for Accreditation
- Rolling stock Outline
- Rolling stock Coupling Arrangements
- Brake Equipment
- Passenger Cars
- Locomotives
- Intermodal Equipment
- Train Examination Procedure
- Instructions to Rolling stock Employees
- Road worthiness of rolling stock
- Rolling stock Structure
- Bogies
- Rolling stock Accessories
- Freight vehicles
- LP Gas installation
- Rail tank Cars
- Rolling stock Maintenance
- Competency Assessment of rolling stock Employees

Much of the detail required was similar to that required by the SRA, but the areas of routine maintenance (proposed scheduled maintenance procedures, minimum operating standards), issuing of instructions and acknowledgment of receipt of the those instructions (source, distribution, acknowledgment process, records, details of follow up process to ensure understanding) and competency assessment of workers (criteria-curriculum, training, records; assessment - procedure, programme, records) were high on the priority list.

As stated in the paper in the Perth COTMA Conference Proceedings, our only shortcoming was the area of the keeping of maintenance records to provide documented proof that the maintenance is carried out in accordance with predetermined standards.

In order to provide the mechanism for providing records, we first had to prepare the 'predetermined standards'. Although the Rail Safety Directorate would examine and approve the standards, the standards themselves had to emanate from the organisation itself.

Mainline historical operators (3801 Limited, Rail Transport Museum) were able to refer to various SRA documents covering bogies, brakes and safeworking, but our Society had to compile our own standards for trackwork, overhead and safeworking. The safeworking procedures had been in place since the 1970s and had been accepted during the SRA accreditation application so did not pose a problem.

Although not completed, three handbooks have been prepared to support the application. These handbooks are not required to accompany the Application, but must be available for inspection by officers of the Directorate.

Handbook of Tramcar Maintenance

- Bodywork
- Lubrication
- Controllers
- Resistance Grids
- Trucks and Rigging
- Inspection
- Traction Motor Maintenance
- Circuit Breakers
- Brake rigging
- Maintenance Schedules and Checksheets

Handbook of Tramway Overhead

- Basic history (for Dept of Transport Engineers)
- Construction
- Checksheets
- Design
- Maintenance

Handbook of Tramway Track

- Introduction (to detail the differences between tramway and railway)
- Maintenance
- Design
- Construction
- Checksheets

Summary

The basic thrust of the Rail Safety Act and Accreditation is self regulation. This demands responsibility, good management and accountability. Accreditation means an increase in paperwork, the introduction of a regime of regular maintenance and an increase of safety awareness. It will increase costs through annual operating fees, although there are indications that historical preservation groups will not be unduly disadvantaged. Insurance costs will also increase in the short term.

On the positive side, official government recognition brings with it a reward for the work put in over seemingly countless years by many volunteers and the historical value of public transport history and preservation.

Since receiving SRA accreditation we have seen the beginning of a culture change within the museum. Tramcar checksheets, which are required to be filled in before and after traffic operations each operating day, have a completion rate of 97%!. Most traffic staff are more aware of safety, not only for patrons but for themselves also.

Although some of the other preservation groups have found it difficult to appreciate the need for volunteer museum accreditation, we were fortunate that over twenty years ago Society administrators realised that traffic rules and training were important for the ongoing success of the Museum.

It is believed that other State governments are watching with interest the effect that the NSW Rail Safety Act is having on rail operators, with a view to introduce similar legislation in their state.

The preparation of two applications for accreditation had been demanding, but at the end of the day, very satisfying. It has forced the introduction of procedures and record keeping which will ultimately make safety a way of life. Even if the other states do not follow NSW, it would be worthwhile for all Societies to examine the changes in New Zealand and New South Wales and consider implementing similar procedures.

Questions

Les Stewart: asked what annual fees would SPER be charged if you don't get an exemption?
Don Campbell: replied he did not know but would try to find out.

Rod Atkins: asked how long it took to prepare for accreditation from first to last?
Don Campbell: replied it took 12 months for the accreditation by the State Rail Authority of NSW but accreditation by the Department of Transport took a lot less time as much of the work has already been carried out for the SRA.

John Radcliffe: asked whether SPER had been consulted on the drafting of the Act?
Don Campbell: replied 'no we were not'. Don outlined the 3801 accident and the legislation was aimed to cover heavy rail. The legislation required each trip to be signed out by a qualified engineer. It was pointed out by SPER that we now ran 17 trips per day and did this require each trip to have a signed trip inspection sheet. It turned out that this was not intended in our case and the Act was modified to cover tramway trips.

Bill Scott: asked if a fee was the required for individual tramcar inspections?
Don Campbell: replied that the SPER inspecting engineer is a member of the museum and does not charge a fee.

John Radcliffe: asked if O-bahns were included in the "rail" modes included under the Act?
Don did not know but would try to find out.

GETTING VICTORIA'S PUBLIC TRANSPORT HERITAGE ON THE MOVE
AN ADDRESS BY: HON ALAN BROWN MP, MINISTER FOR PUBLIC TRANSPORT
COUNCIL OF TRAMWAY MUSEUMS OF AUSTRALASIA
12TH BIENNIAL CONFERENCE - BENDIGO

Monday 5 December, 1994

Ladies and Gentlemen, fellow tram enthusiasts,

I am very honoured to be here tonight to address this very important conference on Tram Heritage. I am particularly pleased that Bendigo has been chosen to host the 12th Conference of COTMA as this Government has established a very close working relationship with the Bendigo Tramway Trust. In fact, we currently have a very successful exchange program underway between The Trust and the Met Tram business unit of the Public Transport Corporation. We were happy to lend The Trust our precious Birney Tramcar for Saturday's magnificent "Calvacade of Trams". In return, an historic Bendigo Tram is currently running on the very

successful free City Circle Trams for the benefit of visitors like yourselves. I am pleased to announce tonight that the expression of interest process has been so encouraging that we now intend to invite the five highest rate respondents to tender for the supply and maintenance of on-board announcement technology on our ten City Circle W-Class Trams.

I would like to revisit the area of Heritage Trams later in my address. However, I have been specifically asked by your Conference organisers to provide a brief outline of the Victorian Government's Public Transport reform strategy since the coalition was elected to office a little over two years ago. Without in any way wishing to politicise my comments tonight, you cannot fully understand what this Government has achieved and why it had to be done unless you recognise the absolute mess we inherited in transport. Under the former Labor Administration, Victoria had the worst performing public transport system in Australia. The services were generally unclean, unsafe and unreliable. It was also unaffordable to taxpayers who had to meet the cost of an escalating deficit. Let me give you two examples from the tram area which graphically illustrate my point. Between St Georges Road, Thornbury and High Street, Northcote, in Melbourne's northern suburbs, there was a tram route of a mere 500 metres known as the 'Hump'. In the past, this service was used on average by one passenger per tram run. In fact, the staff generally outnumbered the customers as these trams had both a driver and a conductor on board. This service cost the Public Transport Corporation around half a million dollars a year to operate. It would have been far cheaper for the PTC to have paid for a taxi for each passenger trip. Under this Government, route No. 9 no longer operates and Victoria's taxpayers are $480,000 per annum better off. Similarly, you would all be familiar with Melbourne's very successful Colonial Tramcar Restaurant. In the past, this privately managed service was forced to carry a conductor on each trip, even though for ten years a fare was never collected nor a passenger helped. The conductor just sat in the back driver's compartment and read the paper or did her knitting. Under Labor, this unnecessary conductor was costing the restaurant proprietors in excess of $50,000 per annum. One of my first decisions on taking office was to remove conductors from Melbourne's restaurant trams. As a direct result, Melbourne can now expect to see a third restaurant tram on the tracks by February bringing additional jobs and tourist dollars to the State Capital. I am of the view that this is a concept which vintage Tramways like those operating here in Bendigo and also in Ballarat should seriously consider. As an incentive, the Victorian Government would be prepared to provide, free of charge, surplus W-Class trams to Victoria's heritage tramway to establish their own restaurant tram ventures. Problems such as conductors on restaurant trams and tram services that only carry one passenger were just the tip of the iceberg.

By 1992, unless public transport was turned around quickly, its very survival was in jeopardy. All up, the system was costing Victorian taxpayers $2 billion a year in losses, subsidies and interest payments. In short, the new Government had to transform Victoria's public transport system into a service which customers would use and taxpayers could afford. Consequently, in January 1993, I announced a reform program to create a world-class public transport service and cut its budget subsidy by half in less than three years. The total cumulative savings of the reform strategy by 30 June 1996, will be a massive $633 million. This is equivalent to an average saving of $429 per Victorian household. Despite these unprecedented savings, everyone who had access to public transport prior to our reforms will continue to have access no matter where they live in the State. After the January announcement last year I negotiated two landmark agreements with the Rail and Tram Unions which have ensured public transport reform without industrial disruption. For the first time in over a decade, Victoria's public transport system is now starting to become a service once again. The service is much cleaner with private sector contractors removing graffiti within 24 hours of it being reported. The service is safer with Victoria Police now solely responsible for law enforcement on public transport. The service is more reliable with cancellations down to a minimum and punctuality improving all the time. Most impressive of all, the service is significantly more affordable with vast savings for taxpayers as I mentioned before. On this basis, the long-term future of public transport in this State looks secure. There is still much more work to be done before Victoria's public transport 'service' is as good as any in the world but we are well on track to achieving this ambitious goal.

However, public transport is not just a means of getting people from point A to point B. It can also be a valuable heritage and tourist asset to ourselves and visitors to our State. This is very much the case with Victoria's Public Transport Corporation which has the largest and most precious collection of historic public transport rolling stock in Australia. Victorians could be forgiven for being ignorant of this fact as previous Governments have hidden away these public transport treasures in the vaults of the PTC, only rarely brought out into the light of day. It would come as a surprise to many to discover that the Corporation had a fleet of vintage buses hibernating in the 'Batcave' under the Westgate Freeway as well as numerous heritage trams and trains gathering dust in workshops and depots. This vintage rolling stock is in addition to Melbourne's much-loved W-Class trams which only a few years ago were in danger of being scrapped and sold off to American

Amusement Parks. Under this Government, fifty three W-Class trams have been saved to operate as an integral part of the daily Met service with ten of these W-Class trams running on the very popular and free City Circle service. Equally important, all these W-Class trams will be fully overhauled for the first time in decades and sensitively refurbished with long-awaited enhancements such as public address systems and heating. No longer will commuters have to put up with leaky roofs and draughty Melbourne winters as they enjoy a ride on one of the Met's historic W-Class trams. It should be noted that San Francisco's world-famous cable car fleet numbers only 37 vehicles and runs on only 8.5 kilometres of track. On this comparison, Melbourne's 53 restored W-Class trams in their distinctive heritage liveries running on four high-profile tourist routes should soon rival the best heritage tram services in the world. No visit to Melbourne will be complete without a trip on a W-Class tram. But that's not all, the PTC also has a vintage tram fleet of over twenty vehicles, many of which pre-date the W-Class trams. The Government has recently announced its intention to restore these trams to their former glory. Instead of locking them away, we will be contracting-out the management of this fleet to the private sector so they can be readily available for charter for the first time. What better way to celebrate a birthday or carry a wedding party than on board a faithfully restored vintage tram?

Country Victoria will also benefit because V/Line is now offering its fleet of "Classic Carriages" for hire, including the Royal Train which has not been on the tracks since the Prince and Princess of Wales last rode on Victoria's railways. If you wish, a steam locomotive can be used to haul your historic railway carriage on its leisurely journey. The PTC also owns a fleet of vintage buses, some of which hail from as far back as World War II and the 1956 Olympics. As recently as last Friday I personally handed over eight of these vehicles to organisations on a complimentary long-term basis for suitable tourist purposes. My good friend, Andy Hall from the Tramway Museum Society of Victoria, is now the proud custodian of two of these buses for use at the TMSV's Bylands Museum. Andy knows all about driving buses as he is also an employee of mine driving for Met Bus in Melbourne's southern and western suburbs. Victoria's public transport heritage doesn't stop at our rolling stock. The PTC also has a responsibility for heritage infrastructure that can range from railway stations to tram poles. In recent months sixteen historic Melbourne tram shelters, including the Batman Avenue Tram Terminus, have been refurbished for the benefit of our customers.

If you visit Melbourne after the Conference you can see for yourself that Flinders Street Station, the jewel in the crown of our great city's rail system, is being refurbished and repainted in its heritage colours. When completed by Christmas, we plan to floodlight it for all to see. I also take personal pride in the fact that the Victorian Railways "Honour Board" from the Great War is now cleaned up and back where it belongs in the foyer of Transport House. It had inexplicably been left behind when the former railway's headquarters building in Spencer Street was sold for redevelopment in the late 1980s. On Remembrance Day, for the first time in many years, we even conducted a service at the Honour Board in conjunction with public transport war veterans. I have also recently named the new Elizabeth Street Tram Terminus after the late Sir Robert Risson. As many of you would be well aware, Sir Robert was chairman of the Melbourne Tramways Board for 21 years and the man who deserves full credit for saving our city's trams. Once again, this demonstrates this Government's respect for those who have made Victoria's Public Transport System one of the greatest in the world. In my public transport portfolio, we recognise that the past should and must be preserved.

However, it should not be forgotten that the needs of our customers and taxpayers are paramount. There will be occasions where operational and/or financial considerations outweigh heritage concerns. In most cases, workable compromises can be negotiated. A good example of where the Government has helped strike the right balance is the PTC's recent offer to the South Gippsland Tourist Railway to run services on the railway line from Nyora to Leongatha. This is the first time a tourist railway has been allowed to lease an operating railway line with full responsibility for the management and maintenance of 41 kilometres of track. Once this is achieved, the local tourist railway will be able to give travellers an unparalleled view of the scenic delights of South Gippsland. There is no reason why more tourist and vintage rolling stock cannot operate on the road and public transport infrastructure. We can retain our public transport heritage without turning them into museum pieces. What we need are "Living Museums" where people can experience first hand the thrill of a steam train ride and the joy of a vintage tram trip. Along these lines, it is proposed that the historic Hawthorn Tram Depot will be leased to the new private sector manager of the PTC's vintage tram fleet to provide an authentic home for this precious collection. Non-profit transport preservation groups such as "Puffing Billy" and heritage tram bodies have shown what can be done to restore and operate our transport heritage. It only takes imagination and cooperation with the private sector and heritage groups to do for the PTC's historic trains, trams and buses what the Government is doing for the State as a whole:

- Getting it "ON THE MOVE".

AFTER DINNER SPEECH TO THE COTMA CONFERENCE, BENDIGO, 1994

Presenter: Geoffrey Claydon

I had spent all my life in Europe. Then, a quarter of a century ago, tired of the tranquil pleasures of such places as Berlin and Sarajevo, I determined to break out and see the rest of the world. Naturally I chose, as my first country to visit, Australia.

Now it is true to say that in selecting Australia, I did so with just a touch of apprehension. I had observed that on the cricket and rugby fields Australians appeared at times not always to show the deference due to the former colonial power. Then again, I had been given to understand that the British were called "Poms" or "Pommies". Although I didn't know the origin of these expressions, they didn't altogether convey quite the impression of respect and dignity which was clearly called for. Furthermore, my apprehension turned to alarm when even before setting foot in the place, news of my pending visit had got out among the tram fans here and I got the message back that "they don't want a stuffed-shirt Pom coming to tell them what to do!"

But the day came for me to embark on my journey. I attracted curious glances from commuters on the London Underground as I set off on a frosty February morning in 1969, dressed in a natty light-weight suit and straw hat. My point of arrival in Australia was Brisbane, since I was aware that the Tramway there was due to close the following April. The temperature was a humid 38 degrees. The contrast between this and chilly London, plus jet lag, meant that I had not felt inclined to eat anything before attending my first meeting. This was with George Baker, the Workshop Superintendent at the Brisbane Workshops at Milton.

My travelling companion was Dr Jim Jordan, who at that time worked at the Chiswick bus works of London Transport. George Baker had also worked for London Transport, so the meeting was convivial. When over, George said, "How about a drink?" Given the temperature, I readily fell in with this idea. We picked up the Deputy Manager en route - a chap called Warwick, whose surname I've forgotten. Then to a bar - my first visit to an antipodean pub! I was asked what I would like to drink. Cautiously I replied, "What do you drink?" "Rum and coke" came the response. Now I had tasted Coca - Cola one desperate day in Paris and had made a mental note never to renew my acquaintance with it. However, I thought it courteous to go along with the suggestion. On tasting the drink, it hardly touched the sides: it was delicious. "Have another" urged our hosts. Then another, and another. Gradually, Jim and I were permitted to stand our rounds. And so it went on till closing time - all on an empty stomach!

On leaving the bar, we piled into Warwick's car, which made its unsteady way back to the centre of the city for us to be deposited at our hotel. This chanced to be a temperance hotel in Queen Street. Not merely was it not licensed to sell intoxicants; it was run by a temperance league! I staggered up the steps and demanded my room key in slurred tones while clinging precariously to the reception desk. Then, to the horror of the management, I insisted on being taken up in the service lift. So ended my first day in Australia.

We went on to visit Ballarat and Bendigo, then still run by the SEC. We saw the legendary Basil Miller. He was the only Australian I have met who used the expression "fair dinkum", an expression which according to British mythology all Australians use all the time. In Melbourne, we had the great privilege of meeting General Sir Robert Risson, who took us to lunch at the Australia Club in William Street. With its stuffed leather chairs and port, it was just like being back in England.

We were conducted around Melbourne by Dudley Snell, who was many years later to die in sad circumstances while installing the Tuen Mun tramway in Hong Kong. I remember him saying, when Jim Jordan wanted to go to the bus works, "You don't want to go to that nasty smelly bus works, Mr Claydon, do you? Let's go to the nice clean Preston workshops". Then, on another occasion, as we were bowling along in a chauffeur-driven car, he tapped the chauffeur on the shoulder and told him to keep off the part of the road surface maintained by the Tramway, so as to avoid wearing it out!

And so I fell in love with Australia. I could say the same about New Zealand; another wonderful country. But tonight I thought it right to concentrate on Australia.

It has therefore been a very great pleasure to be in Oz again and at a COTMA conference. The accommodation here at the LaTrobe University campus has been excellent. Speaking of accommodation, I don't know whether you have been sharing yours. Certainly I have. I share mine with the photocopying machine. It has a fair number of visitors. I see dear old Dennis O'Hoy there, affable as ever. Yesterday, I was having a great shower.

I had just reached that moment when you're groping for a towel, when the door whammed open and a cheery guy said; "Just come to check your meter, sir!". I looked around, wondering what depraved Australian practice this was. Then I found that he had come to record the reading on the photocopier!

Seriously, though, it has been both an instructive and an enjoyable experience to be here. Apart from the excellence of the arrangements provided by the Bendigo Trust - even laying on a derailment for our diversion - on a personal note I have deeply appreciated the warmth of the reception shown to me. I have also admired the efficiency of the COTMA organisation and the sense of dedication on the part of the participants. This has been no binge. With an organisation and attendance such as we have seen here, you can look forward to the future with every confidence.

So I think it appropriate to give you a toast. I ask you to join with me in a toast to COTMA - long may it prosper.

ELEVENTH REPORT

12TH AUSTRALASIAN TRAMWAY MUSEUMS CONFERENCE BENDIGO VICTORIA

6th December, 1994

COUNCIL OF TRAMWAY MUSEUMS OF AUSTRALASIA

Chairman - Dr John Radcliffe
Executive Officer - Mr Bill Kingsley

Member Organisations as at December 1, 1994

Australian Electric Transport Museum (SA) Inc
Box 2012 GPO, Adelaide, South Australia, 5001
(Museum: St Kilda Road, St Kilda, SA)

The Bendigo Trust
76 Violet Street, Bendigo, Victoria 3550
(Museum: Hargreaves Street, Bendigo, Vic)

Maitland Tramway Park and Museum Ltd
Box 82, Jesmond, New South Wales, 2299

Museum of Transport and Technology (Inc)
Great North Road, Western Springs, Auckland 2,
New Zealand

South Pacific Electric Railway Co-operative Society Ltd
Box 103, GPO, Sydney, New South Wales 2001
(Museum: Princes Highway, Loftus, NSW)

Tramway Historical Society Incorporated
Box 1126, Christchurch, New Zealand
(Museum: Ferrymead Historical Park, Heathcote, NZ)

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)

Ballarat Tramway Preservation Society,
Box 632 Ballarat, Victoria 3353
(Museum: Wendouree Parade, Ballarat, Vic)

Brisbane Tramway Museum Society
Box 94, Ferny Hills, Queensland, 4055
(Museum, Ferny Grove, Qld)

Melbourne Tramcar Preservation Association Inc
Box 324, Prahran, Victoria 3181
(Museum: Haddon, Vic)

Perth Electric Tramway Society (Inc)
Box 257, Mt Lawley, Western Australia, 6050
(Museum: Whiteman Park, Perth, WA)

Steam Tramway and Railway Preservation
(Co-op) Society Ltd
Box 3179, Parramatta, New South Wales 2124
(Museum site: Parramatta Park, Parramatta,
NSW)

Tramway Museum Society of Victoria Inc
Box 27, Malvern, Victoria 3144
(Museum: Union Lane, Bylands, Victoria)

Council Address:
51 Lenna Street, East Burwood, Victoria, 3150.

COUNCIL OF TRAMWAY MUSEUMS OF AUSTRALASIA CHAIRMAN'S REPORT 1994

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

Previous Meeting

The previous meeting of the Council of Tramway Museums of Australasia was held in Perth, Western Australia on 2 June 1992.

Membership

Membership remains at 14 organisations there having been no change in formal membership since the last meeting of the Council. However, it is my sad duty to record that the museum buildings and the majority of the collection of our smallest member, the Steam Tram and Railway Preservation (Co-operative) Society Ltd in Parramatta Park, New South Wales was destroyed in what appears to have been an arson attack on 7 June 1993.

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 re-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.

The 1992 meeting supported the continuation of the Operations Group under the Chairmanship of the Executive Officer and the management of the Executive. Members were Bill Kingsley, Carolyn Dean, Keith Kings, Craig Tooke and Andrew Hall. This group, which helps to facilitate the day-to-day activities of COTMA, has provided valuable support to our Executive Officer and I express appreciation for the contribution that members of the Operations Group have made to our continued endeavours.

Communications

Ten memoranda were issued during 1992 - 1994, three more then in the previous period. The Executive Officer has continued to make these memoranda quite comprehensive including technical information and policy updates as well as advertising opportunities for exchange of parts and cars between constituent museums. Topics covered included the 1992 Local Capital Works Program (which subsequently benefited several museums), the Protection of Movable Cultural Heritage legislation, the activities of the International Association of Transport Museums, lubrication technology, engineering heritage and conservation guidelines, meetings with the Victorian Minister of Transport and other Victorian agency representatives regarding availability of Melbourne tramcars and parts, electrical operations guidelines, the Royal National Park Tramway opening, the development of the Christchurch City Tramway, and preparations for the 1994 Bendigo Conference. Topical news clippings have also been circulated attached to our memoranda.

Policy Issues

Following discussions at the 1992 COTMA Conference your Executive Officer and I have continued negotiations with the Victorian Government regarding access to cars and parts from the Melbourne Tramway System. We met with the Victorian Minister for Public Transport, Mr Alan Brown on 27 July 1993. In the frank exchange of views, Mr Brown made it clear that his Government was committed to its pre-election policy of the retention of all 'W' trams in Melbourne, an undertaking it had made to the National Trust of Victoria. Following an outlining of the aspirations of individual COTMA museums and describing the progresses which they had made over the past 20 or 30 years, Mr Brown responded that if we were able to negotiate a commitment from the National Trust of Victoria which might have them support the release of some cars and equipment from the Melbourne system, he would be willing to consider the matter.

Subsequently we wrote to the Director of the National Trust of Victoria, Mr Peter Sweeney setting out our position. No formal response was received to that correspondence. We also met with the General Manager Bus and Tram Operations in "the Met", Mr Russell Nathan. Following press announcements of the formation of

the 'W' class Tram Implementations Monitoring Committee (WIMC) in February 1994, we wrote to the Minister inviting further details and also seeking copies of recent reports which the Government had secured into 'W' class trams. We duly received a report of the Public Transport Corporation's Tram Profile Assessment and a report prepared for the PTC by the consultants INDEC, albeit with the confidential financing aspects excluded, together with details of the Committee.

Subsequently, I approached Mr Ian Wight, the National Trust of Victoria Member on the WIMC, and he indicated that he would be willing to place before the Committee a copy of our earlier letter to Mr Peter Sweeney setting out the background and aspirations of COTMA constituent museums, and enclosing material previously provided to the Minister describing affiliate museums. At the same time, I also provided a copy of the paper which was presented to the International Association of Transport Museums in Ottawa in 1992, outlining the development of tramway heritage preservation in Australia and New Zealand, COTMA's role in it, and the issues to be faced in the future in the hope that it might also be of interest to the Committee's members.

Although I am not sure that this material was subsequently tabled, and we did not receive any direct communication from the Committee, I later met with Mr Wight in October 1994 to ascertain the current position. At that meeting, he provided to me a copy of the "Policy for the use of 'W' class type trams surplus to the operating fleet" of 'the Met'. I have attached a copy of that policy statement to this report. I understand that the policy has since been submitted to the Minister of Transport for consideration, though at the time of writing we have no knowledge of the outcome from that advice.

What did concern me however, was that this matter had been dealt with by the policy arm of the National Trust of Victoria, and apparently had not been referred to the Museums arm of the National Trust. It was clear that the thrust of debate was strongly orientated towards tourism promotion in Victoria and that it is reflected in the membership of the WIMC. It is unfortunate in my view that the conservation aspects which COTMA-affiliate museums seek to undertake could not have been given greater consideration by that Committee. In the event, we await further advice from the Minister and this may well be provided to us during the Conference.

Both the COTMA Executive Officer and I have continued to visit constituent museums as frequently as possible during the past two years. Bill Kingsley has travelled widely throughout Australia and New Zealand and has visited most museums during that period. I have had the opportunity of visiting museums in Brisbane, Newcastle, Sydney, Bylands, Hobart and Perth as well as continuing my personal involvement with our Adelaide affiliate.

COTMA has continued to contribute to the endeavours of the International Association of Transport Museums. I had the opportunity of participating in the 1992 IATM Conference in Ottawa, Canada, during the course of which I presented a paper entitled "Tramway Museums in Australia and New Zealand - Crossing the Inter Generation Boundaries of Collecting, Interpretation and Management". This paper sought to outline the background to the development of the various museums within Australia and New Zealand and their coming together within COTMA itself. During 1994, I also had the opportunity of participating in the IATM meeting in Lisbon in Portugal, at which I presented a paper on behalf of the Port Dock Station Railway Museum, upon whose Board I sit as a Government nominee. At the same time, I was able to update participants in developments on the Australian Tramway Museums, and in particular was able to stress the important contribution which volunteers made to museum development within Australia - a contribution with which European museums are less familiar. It is probable that the IATM may wish to hold its annual Conference in Australia in 1998 in connection with the ICOM Conference which is to be held in Melbourne in that year. Current suggestions are that the IATM Conference would be held in Adelaide under the aegis of the History Trust of South Australia, and could involve the National Motor Museum, the Port Dock Station Railway Museum, the South Australian Maritime Museum and the Australian Electric Transport Museum.

Museum Developments

Over the past two years, the Tramway Museum Society of Victoria had progressively taken delivery of two Bristol buildings which is has acquired from the Castlemaine Technical School to develop interpretative facilities. It has continued the restoration of 'W' class car 220, and has extended its track towards McKerchers Road. As well as other developments, two additional buses, namely AEC Regal 759 and Volvo 850 have been added to its collection from "the Met" fleet.

The Melbourne Tramway Preservation Society, at Haddon, Victoria, had continued restoration on 'W2' class car 407 while completing work on 'W4' class car 670. It has completed its trackwork to the lower terminus, through the use of steel sleepers and appropriate track bonding. Signalling has also been completed.
In Perth, Fremantle Municipal Tramway number 29, launched at our previous Conference, has been in regular service, albeit after a truck change. Extensive work has been continued on the engineering shed, while the body of Kalgoorlie car 25 had been secured, and restoration continued on Perth 'E' class 67. A significant reconfiguration of trackwork at Stockman's Crossing was undertaken. Major traffic operations continued, largely underpinned by the use of Melbourne 'W2', 'SW2' and 'W4' class cars.

The Sydney Tramway Museum completed the restoration of 'R1' class car 1971, and in December 1992, took delivery of Nagasaki car 1054. Brisbane car 295 was returned to traffic, while major extensions to the depot were completed externally. 'R1' class car 1951 and 'D' class car 117 were transferred to the museum on loan. The major new initiative was the taking over responsibility for the former National Park Electric Railway, which was re-opened as the "Parklink" tramway on May 1, 1993. Devastating bushfires occurred in Royal National Park in January 1994 during which all but 2% of the park was destroyed by bushfires. Fortunately, the "Parklink" tramway operated through that section of the park which was not destroyed, although the museum lost one span pole and forty sleepers during the fire. However, services were restored within a couple of weeks. Recently, the museum has been advised of major grants from the NSW Railway Heritage Fund to allow restoration of 'C' class car 29, and to build new exhibit accommodation.

In Adelaide, the Australian Electric Transport Museum had 290 metres of its own track relayed in mass concrete with the support of the Salisbury Council. A diesel-electric tow motor was completed by one of its members as a TAFE project, the ensuing vehicle proving useful for relocating vehicles about the depot yard. 'B' type "toastrack" car 42 was officially placed in traffic on 10 April 1994 by the South Australian Minister of Transport, the Hon Diana Laidlaw. This car had last operated (in its 'A-2' type configuration) in 1935, and last operated in its 'B' type configuration in 1917. A major project is the re-installation of the wheel lathe which was secured from Preston workshops in 1992. 'G' type (Birney) car 303 is under refurbishment currently following damage inflicted by vandals several years ago, while 'E-1' car 111 is also in the workshop for restoration. The museum has achieved full accreditation from the History Trust of South Australia, only the third volunteer-based museum in South Australia to achieve this distinction. The museum recently completed a five-year plan for its future development.

The major development at Ballarat in the past two years was the completion of a very historically significant restoration of Ballarat horsecar number 1. Work has continued on the restoration of Electric Supply Company car body number 12, while major emphasis has also been given to cataloguing of Ballarat Tramway archives. Operations were enhanced by the adoption during the Begonia Festival of new "park and ride" traffic arrangements.

In Brisbane, the Brisbane Tramway Museum Society has been completing the restoration of drop centre car number 341. It took delivery of an hydraulic press from Milton workshops. It contributed the use of cars 65 and 99 to display in King George Square adjacent to the Brisbane Town Hall for Heritage Week 1993. A new display room has been established on the museum grounds at Ferny Grove. Unfortunately, damage by vandals amounting to $16,000 was inflicted on buses in 1993 stored adjacent to the tramway depot.

At Newcastle, a short line service was established on Lee Wharf Road adjacent to Central Newcastle, with complimentary exhibitions being located in the former office to the wharf foreman.

In Bendigo, 'SW5' class car 808 entered service with the Bendigo Trust on August on 27 August 1992, while Footscray Car 21 was added to the tourist service from October 1992. Much of the more recent effort in Bendigo has been directed to the current COTMA Conference.

The Tasmanian Transport Museum Society on the occasion of the 100th anniversary of the establishment of the Hobart Tramway, restored the body of double deck car 46 which was placed on display in the city centre as part of the celebrations. This was a major achievement from one of our smaller affiliates.

Restoration activities in Auckland by the Museum of Transport and Technology have been primarily oriented to the Wellington double deck car 47, a complex project which has involved reconstruction of the steel framing upon which the body rests. At the same time, Auckland streamliner car 248 has been undergoing refurbishment following the completion of Wellington car 257. The boiler of steam tram motor 100 has meanwhile been returned from the naval dockyard for the refitting of its body work. A major activity during

the year was the relocation of many of the museum's stored items including a number of tramcars from its long-standing store at Sylvia Park to Avondale.
In Christchurch, the Christchurch City Council has been continuing to develop the Christchurch City Tramway, upon which trams from the Tramway Historical Society are due to operate. This had entailed the TMS in considerable work in preparing cars for use on this line. New trucks are to be constructed for Boon car 152, while Brill car 178 is being restored onto authentic Brill 77 E trucks.

Restoration activities by the Wellington Tramway Museum have continued at Paekakeriki during the past two years. Proposals have also surfaced for a museum tramway in down-town Wellington in association with the National Museum - a proposal which has some parallels with the development which is being undertaken in Christchurch.

Urban Transport Developments

The Melbourne Tramway System has continued to expand with the completion of the order for 'B' type articulated cars, and extensions to the Airport West and East Burwood lines, the latter opening in July 1993. A new City Circle tram loop also opened on 28 April, 1994, involving the laying of new tracks in Spring Street to allow a complete loop to be constructed via Flinders, Spencer and La Trobe Streets. A considerable number of 'W' class cars were stored during the year, primarily at Newport Railway workshops, those being so stored being additional to cars previously stored at the "Henderson's Spring Works" in earlier years. One man operation is also beginning to be widely implemented on the Melbourne system. A second restaurant car (937) has been added to the fleet.

In Adelaide, the 65 year old 'H' type cars have continued to operate as in previous years, with proposals to purchase Melbourne 'B' class cars having been foregone. Some consideration is being given to the acquisition of new low-floor vehicles and proposals have also being advanced, not for the first time, to extend the Glenelg tramway via King William Street to Port Adelaide via the existing suburban railway reservation.

In Sydney, proposals to construct a new light rail system at Pyrmont appear to be well advanced, however little has been heard in recent months of proposals for a light rail system in Brisbane to Teneriffe.

Tramway heritage developments, albeit on a relatively limited scale, have continued to be undertaken by "the Met" in Melbourne. Victorian Railways car 20 was donated and transported to Preston workshops in December 1992, only a few days prior to the death of its former owner, Mr Bob Prentice who had been a long-standing participant in the tramway movement. Preston workshops have also been instrumental in pursuing the restoration of Hawthorn Tramway Trust number 8 (previously Bendigo 3).

Valedictory

I must record the passing of one of Australia's tramway historians *par excellence*, Mr Ken McCarthy in February 1993 at the age of 58. As well as being a founder of the Sydney Tramway Museum, he in later years was very active in the development of the Illawarra Light Railway Museum Society at Albion Park near Wollongong, as well as being a font of inspiration for the restoration of the Purrey steamtram which was completed as a Bicentennial project in Rockhampton in 1988.

Bob Serle, Secretary of the Tramway Museum Society of Victoria died suddenly in October 1994, when preparing to go to Bylands to work on car 220. His efforts as a recent contributor to the TMSV, offering his lifetime of business experience to help the Society, was an inspiration to us all.

Constitution

Delegates will recall that at previous meetings, the incorporation of COTMA has been discussed, with a formal commitment being taken to that course of action at the 1992 Perth Conference. I am pleased to advise that COTMA's solicitor, Mr Anthony Sell, has completed the required formalities with the result that we are now a formally incorporated association under the appropriate legislation in the State of Victoria.

Formal electrical operating guidelines were prepared and circulated to COTMA museums over the past two years, and I should like to express appreciation to Mr Craig Tooke for his endeavours in ensuring their

completion. Recent experiences in the railway preservation field, including traffic accidents in New South Wales and the unfortunate death by scalding of a fireman in South Australia following blowing out of a fusible plug from a steam locomotive highlight the hazards which are faced in operating voluntary rail museums, and it is absolutely crucial that we make every endeavour to ensure effective occupational health and safety requirements within our museums. Whilst these requirements are strongly enforced with new legislative arrangements in New Zealand, the primary responsibility for such matters rests on a more informal but yet necessarily responsible base within Australia. It is noted, however, that greater formality is beginning to occur in Australia, notably in New South Wales.

The Future

COTMA has been operating for almost twenty years. Although the New Zealand Rail Federation has been in place for a similar period, co-ordination has yet to develop between the participants in the railway museum and tourist railway field in Australia. It is notable that within recent months, efforts to generate wider co-ordination have arisen in the railway field both in Victoria and South Australia. It is also salutary to observe that only within the last few months after two and a half years of discussions, there has been established the European Federation of Museum and Tourist Railways ("FEDECRAIL"). In creating COTMA in 1975, the Tramway Museums in Australia and New Zealand were generally "ahead of the pack". We have developed some excellent and responsible museums in our respective countries and the increased interest which is being taken in them and the development of proposals to re-introduce trams into some of our central cities highlights the success of our efforts.

The three primary issues which we now face into the future are the resolution of the halt which has been called over the past two years to access to cars and equipment from the Melbourne tramway system; the additional work being thrust upon a number of our museums due to the recent enthusiasm which has been generated for the building of museum Tramways in inner city areas based upon access to cars from our collections; and the need to attract younger members to our organisations. These issues represent major challenges which we must face in coming years. However, looking back on our achievements, we must conclude that we have been successful in meeting our primary objectives of conserving and operating representative transport collections from our respective cities, largely upon our own resources.

Acknowledgments

Ms Carolyn Dean has served as Honorary Treasurer again for a further two years and Mr RG Paroissien has continued as Honorary Auditor. Keith Kings maintained his long standing commitment to museums throughout Australia and New Zealand in his capacity as Spare Parts Officer until 1994, his role having more recently been undertaking on an interim basis by Mr Graham Jordan. Bill Kingsley as Executive Officer has undertaken an increasingly heavy workload to ensure effective relationships between constituent museums and between those museums and the various transport authorities.

Both Bill Kingsley and I will not be offering ourselves for re-election in the coming year so we have reached a turning point in the future of COTMA. Nevertheless, there are able successors in the wings and after appropriate office bearers are chosen, I would anticipate that COTMA will continue its successful progress in facilitating the development of the Tramway museums in Australia and New Zealand.

John C Radcliffe OAM
CHAIRMAN
6 December 1994

POLICY FOR USE OF "W" CLASS TRAMS SURPLUS TO THE OPERATING FLEET

Introduction

The 53 operating "W" Class trams and their special routes are a major spectacle and attraction in Melbourne.

The image of the trams operating in everyday service in the streets of Melbourne is unique and will remain as our world-wide symbol. The streets of Melbourne are the place to view, enjoy and ride on "W" Class trams.

Policy

1. Sale of "W" Class Trams.

   No "W" Class trams are to be sold.

2. Overseas Use of "W" Class Trams.

   No "W" Class trams are to leave Australia.

3. Trams Loaned Interstate.

   "W" Class trams are not to leave Victoria. (With the exception of those agreed under No. 4). However, exchanges which result in the return of Victorian trams should be considered.

4. Suitable Uses for "W" Class Trams.

   If a proposal was made which would enhance the viability and success of the operating fleet and to promote Melbourne then it may be considered favourably. Suitable proposals might be:

   a. Short term tourism promotion for Melbourne.
   b. Short term display at interstate trade EXPO promoting Melbourne.

5. Unsuitable Uses of "W" Class Trams.

   Proposals for the use of "W" Class trams which are present not able to be used in the operating fleet must not detract from the cultural and economic value of the operating fleet as outlined in the introduction. It would not be considered appropriate for "W' Class trams to appear around Melbourne or elsewhere in venues such as:

   Department stores
   Schools or parks
   Other similar commercial venues
   Golf courses
   Fast food outlets

6. Time Limits of Loans

   Maximum time of a loan of a "W" Class tram should be no more than twenty years with renegotiation then if appropriate.

7. Fee Charged for a Loan of a "W" Class Tram

   a. Non profit proposal. Non profit proposals such as museums and tourism promotions should not require a fee to be charged.
   b. Commercial proposals. Such proposals should have a fee charged at commercial rate to be determined at the time.
   c. Offer of significant amounts of money. If significant amounts of money are offered for the loan of a tram, all other conditions of this policy should still be adhered to before accepting the proposal.

8. Loan of "W" Class Trams to Victorian Tram Museums and Tourist Tramways.

   Museums should be transport or transport orientated museums affiliated with COTMA and be registered or accredited as a museum. "W" Class trams could be made available to Victorian tourist tramways such as Bylands, Bendigo or Ballarat.

9. Special Conditions for "W" Class Trams Loaned to Museums.

   The "W" Class tram must be kept undercover and well maintained and when returned should be in no worse condition than when loaned.

10. Requests for Components and Parts from Museums.

If an historic tram in an Australian museum needs a part and if there is no other reasonable way of obtaining the part then it may be supplied if:

a. The individual historic tram which requires the part is identified.
b. The supply of the part will not affect the integrity and ability to operate of the "W" Class trams both in the operating fleet and in storage in the future.

11. Use of "W" Class Trams Not in the Operating Fleet on the Melbourne Tram System.

It would generally be considered that "W" Class trams could be used on the Melbourne tram system as long as the use does not detract from the operating fleet of "W" Class trams or the PTC. Suitable uses would include:

a. Restaurant trams.
b. Private charter tram operations.
c. Tourist tram operations.

12. Consideration of Proposals.

Proposals should be referred to the Minister and decided within this framework.

EXECUTIVE OFFICER'S REPORT 1994

From: Bill Kingsley

Yes. It's true. After eight and a half years this time around (ten and a half years total) I will be stepping down as your Executive Officer at this Conference General Meeting. But why?

I have to admit that I'm worn out. Not old, just tired! And when that happens it really is time for a rest, and a need to pass on the responsibilities and opportunities to someone younger and more dynamic.

In early 1991 I retired from Footscray TAFE, but none of the things that I retired to do have been done. The backlog of technical magazines to be read has in fact grown. The house needs attention. The garden is out of control. Not only that, but my mother needs more of my help and time these days, and I owe her that.

I have run a good race. It has not been a perfect race as there is much that could have been done that has not. I have not finished the race because there is no finishing line. This race is a relay, and I am happy to pass on the baton to the next runner. Then I will sit down beside the track and cheer him on. But I won't leave this field of endeavour. I can't.

It was back in 1975 that I had the bright idea to convene our very first Conference in Ballarat, the Conference at which COTMA was born. It all happened because of a perceived need, a need which has turned out to be very real, a need for all our tramway museums and their workers to come together to share, to socialise, to learn, to become more aware of each other, to support each other. We owe a lot to the small committee that helped me to put that first Conference together, and the names of Geoff Cargeeg, Allan Harnwell and Clyde Croft should not be lost in the course of history. We were the real pioneers of COTMA. Then, for the first two years, I served as Executive Officer before handing over to Keith Kings.

So I have a vital interest in, and concern for, the future of COTMA. I simply cannot walk away.

Therefore, having determined a year ago that I would be stepping aside, I took it on myself to ensure that the best possible replacement was found before this Conference. I shared my concerns frequently with members of the Executive, and appreciated that other museum members also saw a need to share their concerns with me. The short list of possible contenders became shorter and shorter. But three problems troubled me.

1. The work and expectations of COTMA have expanded incredibly over the last few years. If I, as a retiree, could not cope fully, how could a non-retiree ever cope?

2. The number of museums in COTMA is about to expand. The Christchurch Tramway is soon to commence operation. They will need us and we will need them. There are tourist tramways possible for Sydney, Wellington and Hobart. There will be a tramway museum in Melbourne. These will all be professional operations. We must take them on board or we will become obsolete ourselves. There are bus and coach museums who want to be part of us.

3. COTMA must become more active, participating in submissions to governments, being consultative, pushing the common needs of its museums and their members.

It slowly dawned on me that the reason that it was so difficult to find the perfect replacement for me was that the system also needed to change, and my stepping aside from the power source was the opportunity to effect those changes. Then everything and everyone started to fall into place.

We do need an Assistant Executive Officer, not so much to share the EO's workload, but to accept delegated responsibilities in order to relieve the EO of part of that workload.

I am elated that, when our prospective EO shortlist came down to two completely unsuspecting COTMA stalwarts, Richard Gilbert and John Lambert, both accepted our invitations (pleadings) to stand as EO and AEO respectively.

We need a Deputy Chairman, preferably in Melbourne, who can support the Chairman, be available when the Chairman is not, help in liaison with the Victorian Ministry of Transport and with the PTC, and relieve the EO of the need to Chair the Operations Group. That is an ideal task for me to retire into.

As part of this immense opportunity to restructure, John Radcliffe, after 19 magnificent years as our Chairman, has also decided to step aside. John's CSIRO workload seems to be ever increasing, while over in the far west, another great COTMA supporter, with a proven administrative record, has retired and has offered to take on the leadership. Thanks Lindsay Richardson. This is a huge calling, a huge opportunity and responsibility towards co-ordinating an increasing number of tramway museums in Australia and New Zealand, and their hundreds of members.

These nominations must yet be proposed and seconded at the CGM. There is no bar to other nominations from the floor. But I put to you sincerely that, with Dave Hinman and Carolyn Dean renominating, this is THE team to take us towards and into a challenging and rewarding future. Please support them with all your energy.

The more mathematically gifted among readers of this treatise will have realised that in stepping up to Chairman, Lindsay will vacate the position of Australian Executive Member. This is a great opportunity for another new face to appear on Executive. It needs to be someone dynamic, someone very familiar with COTMA, someone in whom we can all have faith, and someone who can attend our new AGM's, and, for geographical balance, preferably, but not necessarily, a non-Victorian.

May I revert here to the work of the Executive Officer. There are those who believe that this work is all about trams and depots, tracks and overhead, spare parts. I'm sorry, for those folk have it generally quite wrong. It is a work with people, for people, and about people. It is the people who need help. It is the people who need support. It is the people who make COTMA what it is. It is the people who make the museums successful. Look after the people and they will look after the trams.

When I have visited museums (incidentally, all of my travels have been at my own expense), sure it has been great to inspect restoration work, sure it has been great to photograph the trams, sure it has been even greater to drive those trams, but most important, it has been paramount to meet YOU and your people, those who make your museum function, and to meet you in your own surroundings.

Well I do remember a visit to Perth in early 1992. The purpose of that visit was to help and guide preparations for the COTMA Conference some months later. But PETS had that task well under control, and a more important calling for me emerged during my stay. So, when at last I departed eastwards on the Indian Pacific, I relaxed back into my roomette seat to watch the lights of the suburbs fly by with that superb contentment of a task completed. Why? Because I had been able to help, support and inspire people. Particularly I had been able to encourage some of the younger members. The farewells had been earnest, and the hands that waved from the Perth Terminal waved in thanks.

I know when I visit Loftus that my first joy is always to be just part of that great environment at STM, but my first need is to meet the members, to meet my friends. On the other hand, I well remember one visit to a far away museum when I left for home knowing of members that I had not been able to contact during my stay, and that hurt.

But it has been very difficult for me to spend time amongst people. The work of the EO is such that 80% of it takes place at a desk. Unfortunately, the pen, the word processor, the telephone, are the tools of trade and the nearest I get to my people is often a voice on a telephone. I have spent more time being the EO's secretary than being the EO. I remember, on one occasion with Dick Jones, sharing that frustration, and realising the awful truth that my work FOR COTMA was preventing my work WITH COTMA. How do you overcome that problem?

But really, the task has been a great blessing. The greatest joy has been the friends that I have made. There are far too many names to mention, but you all know who you are. To those who have supported me through the highs and lows, to those who have welcomed a travelling me into their homes and families, to those who have guided me, inspired me, shared with me, shaken my hand, sought my help, sweated with me out on the trackwork, shared a joke, a meal, a drink with me, thanks, for you have all been great. Thanks especially to the Kiwis who have always made this itinerant Kangaroo so welcome.

The name of the game is SHARING. COTMA is sharing. We must all keep sharing.

Let us not criticise each other. Let us work together, help each other, support each other, for we are all in this task together.

To the new EO may I say, "Here is the baton for the race. Go with it. The road is hard and demanding, but it is full of joy and reward. There are many people to help you. There are many people for you to help".

SUMMARY OF COMMUNICATIONS THROUGH COTMA OFFICE
from Bill Kingsley, Executive Officer.

A April 1992 - March 1993 (12 months)
B April 1993 - March 1994 (12 months)
C April 1994 - November 1994 (8 months)*
* Does not include Conference & Post Conference enquiries/bookings.

	A	B	C
Visits & Meetings	42	100	79
Sets of Memoranda or Minutes Out	28	23	19
Letters Out	73	103	114
Phones and Fax Out	112	138	232
Letters in	86	99	101
Phones in	134	143	206

Year A included the Perth Conference.
Year B, a non-Conference year, shows an escalating trend in activity.
Column C, although only for 8 months, includes the lead up to the Bendigo Conference and indicates a terrifying increase in activity.

COUNCIL OF TRAMWAY MUSEUMS OF AUSTRALIASIA INC.
CONFERENCE - BENDIGO - DECEMBER 1994

TREASURER'S REPORT

COTMA's financial situation has remained good with 'cash at the bank' remaining healthy. One disappointing aspect is that the amount owing by member museums has remained about the same. Since the date of the report, some of these outstanding balances have been paid.

I would ask member museums to pay their accounts on time as it makes my work load easier.

Uniform and spare part sales have virtually stopped with little income expected in the next year. The income from video sales has filled the gap that the lack of spare parts and uniform sales has created.

Now that COTMA is incorporated, some additional expenses for filing fees etc. will be incurred.

With respect to the budget, this has been prepared on the basis of the current situation with regard to expenses etc. One unknown situation at the time of the preparation of this report was the results of the Bendigo Post-Conference Tours. It has been budgeted for a break even situation.

One aspect that the Executive of COTMA will need to consider is what should the organisation do with the healthy cash surplus it currently has? It should also consider whether to become a member of Museums Australia.

Carolyn Dean
Treasurer
20 November 1994

Proposed Budget - C.O.T.M.A. - 1994/95

		$
INCOME		
	Membership Fees	1200
	Sale of Equipment	150
	Sale of Videos	450
	Interest	100
	TOTAL	1900
EXPENDITURE		
	Postage & Telephone	800
	Printing & Stationery	500
	Membership (IATM)	90
	Purchase of Videos	300
	Bank Charges	10
	Other Expenses	200
	TOTAL	1900
	Excess Income over Expenditure	0

COUNCIL OF TRAMWAY MUSEUMS OF AUSTRALASIA

Financial Statements
Year Ended 31st March, 1993

BALANCE SHEET as at 31st March, 1993

1992 $			
	Council Funds		
8075	Accumulated Fund		8444
1200	Acquisition Fund		1200
9275			9644
	These Funds are Represented by:		
	Current Assets		
4547	Australia & New Zealand Banking Group Ltd	5618	
1495	Debtors	1311	
510	Members Subscriptions in Arrears	270	
1569	Stock on Hand (at cost)	1558	
8121			8757

	Less Current Liabilities			
-	Creditors			98
8121	Working Capital			8659
	Plus Non Current Assets			
1800	Electrical Former (at cost)	1800		
(1800)	Less Government Grant	(1800)	-	
1688	Storage Van (at cost)	1688		
(534)	Less Provision for Depreciation	703	985	
1154				985
9275				9644

Council Funds for Year Ended 31st March, 1993

1992 $			
	Accumulated Fund		
4780	Balance brought forward 1st April, 1992		8075
3295	Plus Surplus for Year		369
8075	Balance carried forward 31st March, 1993		8444
	Acquisition Fund		
1200	Balance brought forward 1st April, 1992		1200
-	Plus Members Deposits		-
1200	Balance carried forward 31st March, 1993		1200

Income and Expenditure Account for Year Ended 31st March, 1993

1992 $				
	Income			
1280	Members subscriptions			1210
86	Interest Received			159
4085	Sale of Equipment			91
-	Sale of Videos			414
5451				1874
	Less Expenses			
50	Affiliated Memberships		138	
4	Bank Charges Duties		6	
169	Depreciation		169	
316	Postage & Telephone		494	
516	Printing & Stationery		288	
1101	Purchase of Equipment		11	
-	Purchase of Videos		314	
-	Repairs & Maintenance		85	
2156				1505
3295	Surplus for Year			369

Auditor's Report To The Members Of Council Of Tramway Museums Of Australiasia

Scope

We have audited the financial statements of the Council of Tramway Museums of Australasia for the financial year ended 31st March, 1993 as set out on pages 1 to 3. The Council's Board of Management are responsible for the preparation of the financial statements and the information they contain. We have conducted an independent audit of these financial statements in order to express an opinion on them to the members of the Council.

Our audit has been conducted in accordance with Australian Auditing Standards to provide reasonable assurance as to whether the financial statements are free of material misstatements. Our procedures included examination, on a test basis, of evidence supporting the amounts and other disclosures in the financial statements, and the evaluation of accounting policies and significant accounting estimates. These procedures have been undertaken to form an opinion as to whether, in all material respects, the financial statements are presented fairly in accordance with Australian accounting concepts and standards and statutory requirements so as to present a view which is consistent with our understanding of the Council's financial position and the results of its operations.

The audit opinion expressed in this report has been formed on the above basis.

Audit Opinion

In our opinion, the financial statements present fairly the financial position of the Council at the 31st March, 1993 and the results of its operations for the year then ended in accordance with the Statements of Accounting Concepts and Australian Accounting Standards and comply with the Constitution of the Council.

K.L. Paroissien & Associates
Certified Practicing Accountants
R.G. Paroissien - Partner.
Melbourne, 20th July, 1993.

COUNCIL OF TRAMWAY MUSEUMS OF AUSTRALASIA

Financial Statements
Year Ended 31st March, 1994

BALANCE SHEET as at 31st March, 1994

1993 $			
	Council Funds		
8444	Accumulated Fund		8899
1200	Acquisition Fund		1200
9644			10099
	These Funds are Represented by:		
	Current Assets		
5618	Australia & New Zealand Banking Group Ltd	6224	
1311	Debtors	961	
270	Members Subscriptions in Arrears	540	
1558	Stock on Hand (at cost)	1558	
8757			9283
	Less Current Liabilities		
98	Creditors		-
8659	Working Capital		9283

	Plus Non Current Assets			
1800	Electrical Former (at cost)	1800		
(1800)	Less Government Grant	(1800)	-	
1688	Storage Van (at cost)	1688		
(703)	Less Provision for Depreciation	872	816	
985			816	
9644				10099

Council Funds for Year Ended 31st March, 1994

1993 $			
	Accumulated Fund		
8075	Balance brought forward 1st April, 1993		8444
369	Plus Surplus for Year		455
8444	Balance carried forward 31st March, 1994		8899
	Acquisition Fund		
1200	Balance brought forward 1st April, 1993		1200
-	Plus Members Deposits		-
1200	Balance carried forward 31st March, 1994		1200

Income and Expenditure Account for Year Ended 31st March, 1994

1993 $			
	Income		
1210	Members subscriptions		1210
159	Interest Received		141
91	Sale of Equipment		-
414	Sale of Videos		433
1874			1784
	Less Expenses		
138	Affiliated Memberships	87	
6	Bank Charges Duties	5	
169	Depreciation	169	
494	Postage & Telephone	626	
288	Printing & Stationery	353	
11	Purchase of Equipment	-	
314	Purchase of Videos	89	
85	Repairs & Maintenance	-	
1505			1329
369	Surplus for Year		455

Auditor's Report To The Members Of Council Of Tramway Museums Of Australiasia

Scope

We have audited the financial statements of the Council of Tramway Museums of Australasia for the financial year ended 31st March, 1994 as set out on pages 1 to 3. The Council's Board of Management are responsible for the preparation of the financial statements and the information they contain. We have conducted an independent audit of these financial statements in order to express an opinion on them to the members of the Council.

Our audit has been conducted in accordance with Australian Auditing Standards to provide reasonable assurance as to whether the financial statements are free of material misstatements. Our procedures included examination, on a test basis, of evidence supporting the amounts and other disclosures in the financial statements, and the evaluation of accounting policies and significant accounting estimates. These procedures have been undertaken to form an opinion as to whether, in all material respects, the financial statements are presented fairly in accordance with Australian accounting concepts and standards and statutory requirements so as to present a view which is consistent with our understanding of the Council's financial position and the results of its operations.

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K.L. Paroissien & Associates
Certified Practicing Accountants
R.G. Paroissien - Partner.

Melbourne, 15th July, 1994.

SPARE PARTS AND UNIFORMS OFFICER'S REPORT

From: Keith Kings.

The two years since my last written report, for the Perth Conference, have seen little activity in the first year and no transactions in the second.

In handing over the Spare Parts responsibility to Graham Jordan, I will list the remaining items still in stock on one consolidated list, and thus eliminate the several separate lists on the original purchases.

We have covered our purchase, transport and cranage costs already. Much of what is left may never be sold. This is due to having been offered "all-or-nothing" lots. In Spare Parts, for example, we have plenty of certain W3 and W4 items, but few of these trams are in active museum service. The M&MTB held medium term stocks, but then found it necessary to withdraw these trams from service at short notice. With the brown uniforms we will have little chance of selling very small or very large fittings. I feel that sales of our remaining uniforms stock will be very limited.

At my retirement from these two joint positions, I would like to thank those who have helped in the loading, transport, and unloading of stock, and in the sorting and stock taking of the uniforms. My thanks also to the Societies and individuals who have made purchases from us and thus caused these projects to be worth the effort.

TROLLEY WIRE
REPORT TO THE 1994 COTMA CONFERENCE

From: Bob Merchant, Editor.

'Trolley Wire' has been produced now for over forty years and has covered tramway news and museum events which have passed into history. It continues as its founder intended; to publish historical research, tramway news of the day and most importantly, news of tramcar preservation around Australia.

Since our report to the Perth Conference in June 1992, eleven issues of 'Trolley Wire' have rolled off the press. Our print run remains at 1100 copies per issue.

The period under review has been one of pleasure, and also, unfortunately, of some disappointment for the editor. But the disappointment only applies to the actual printing of the magazine, not to the published content.

In June or July 1992 our printer changed to desktop computer publishing and the August 1992 issue of *Trolley Wire* is believed to be first to use some electronic laying out and the first issue to use computer-scanned photos. The text was not well laid out, there was a prominent scratch mark across the centre of one photo and reproduction of others was very milky.

The November 1992 issue was the first to be fully laid out in the electronic medium (using, we found out later, Quark Express on a Mac). The results were still not satisfactory and the issue was late. Our disappointment was conveyed to our printer.

Computer-scanned colour was used for the first time in the February 1993 issue. The colour photos reproduced too darkly, some of the black and white photos still milky, and the sizing of some photos was not as specified and laid out. The incorrect sizing resulted in a paragraph of text being omitted. The general layout of the text was much better, however.

At 74 pages, the February 1993 issue is the largest *Trolley Wire* yet produced. Since that time, the *Trolley Wire* crew have been asked not to personally finance additional pages as the additional weight takes the magazine into the next postage rate bracket, and the crews' contribution does not include the additional postage. After all, who is interested in financing postage?

The February 1994 issue arrived showing much improvement to the photographs. We were advised that a problem with the scanner had been the cause of the indifferent photo reproduction and a new scanner has been obtained. The photo chosen for the cover of this particular issue was replaced after printing had commenced following advice received from a Canberra-based enthusiast.

The enthusiast had taken photos of the first City Circle car in the paintshop at Preston and was requested by the Met not to publish the photos as the livery had not been approved by the Minister for Public Transport. He was aware, however, that another photographer, whose photo we had received and were using, had also been requested not to publish and decided to check with the editor. A replacement front cover photo was quickly found. Two weeks later it would not have mattered as the Melbourne press printed colour photos of the car in its new livery.

The covers of the next three issues were only fair as the colours were too dark, the May 1994 cover being the worst to date. It is hoped that better colour rendition can be achieved. Discussions with our printer continue.

There were so much general news for the August 1994 *Trolley Wire* that at least two pages of material had to be omitted due to lack of space. Photo reproduction was generally better than previous issues although three were printed too dark and one photo was left out altogether. For some unknown reason, its place was taken by a photo repeated from another page.

Unfortunately, some of the published comment regarding the reliability of City Circle cars upset the Spotswood Electrical Workshops and a letter of complaint was received from the Manager Electrical Production. The editor has apologised to Spotswood for the comments made and, as requested, will print the letter of complaint in its entirely in the February 1995 issue of *Trolley Wire*.

Most production problems probably don't rate much notice by the general reader, but they do annoy the editor! Things, however, should improve. In September our printer, David Meulen moved from western Sydney to Canberra. We have heard that his father, John Meulen, who retired from the business some years ago, is interested in assisting his son. We hope John will take a hand again in preparing *Trolley Wire*. His production of *Trolley Wire* from 1983 to 1989 was of a high standard.

The editorial office also expects to go to full inhouse desktop publishing sometime in late 1995. This should bring the text layout problems to an end - at least you'll be able to blame the editor! - and contain costs.

The joy of the editor's job is being able to cover the museum milestones and day-to-day events contributed by our museum correspondents. The milestones include the launching of Fremantle 29, Ballarat horse car No. 1 and Adelaide B type 42, the arrival of Nagasaki 1054 at Loftus, and the opening of the Parklink tram service

into the Royal National Park. The body restoration of Hobart double-deck car 46 and its display in the Elizabeth Street Mall was a great task well done and drew much favourable comment from *Trolley Wire* readers. The disastrous fire at Parramatta Park is one event which we would have preferred not to have had to cover.

And what of future issues? Articles dealing with tramways in Adelaide, Ballarat, Geelong, Melbourne and Sydney are on hand. It is realised that not all museums have available a researcher like the late Ken McCarthy to ferret out the details and present them in a readable form. It would be pleasing to be able to vary the NSW-VIC-SA diet with a little something from, say, Tasmania or Queensland. No doubt something will turn up in due course and, surprisingly, it usually does.

The Sydney article mentioned above takes a different tack to the usual published tramway research, but we are not giving away any details here. The article was offered to the editor through a SPER Board Member, who knew the author and the research he had carried out, and thought it might be worth publishing.

In closing, I would like to sincerely thank the various museum correspondents and photographers for their regular contributions. They are recording history as it happens. Without them, *Trolley Wire*, and the tramway museum movement in Australia, would be the poorer.

TRAMWAY TOPICS
Report to the COTMA Conference, Bendigo, December, 1994

From: Alan Smith, Editor.

This report summarises the main issues and developments over the past year for New Zealand's journal *Tramway Topics*, published by the Wellington Tramway Museum (WTM) on behalf of its peer organisations the Tramway Historical Society (THS) of Christchurch and the Western Springs Tramway (WST) of the Museum of Transport and Technology (MoTaT), Auckland as well as for WTM itself.

Two major changes were made at the start of 1994. The first was the move to A4 size in place of the A5 which (with its pre-metric equivalent) had been the format since 1966. The second was the move to quarterly productions (4 issues per year) in place of 6 per year which had, with few exceptions, been maintained since 1963. These changes were made for several inter-linked reasons:

1. To reduce costs; the goal is the same amount of content in a year, at less cost through fewer post-outs.
2. To allow bigger, more interesting illustrations.
3. To give better shelf-appeal and so make it more marketable for casual sales.

Reaction from museums' members has been very positive. It would be good to have some robust critical appraisals from our fellow COTMA colleague organisations.

As we enter 1995 I see a number of policy issues which I feel may be common to most if not all other journals within the COTMA grouping. They are listed in no particular order, for discussion to help the continuous improvement of *Tramway Topics* as New Zealand's main tramway interest journal.

1. Production technology - how can costs be driven down by making full use of desktop publishing systems.
2. Commercial "Vintage Trolley" (VT) will start in New Zealand next year (in Christchurch). It may well spawn others. Our magazine reflects its 'enthusiasts' origins: should we seek to be recognised as a key journal for the VT industry, or should we keep an 'amateur' purity - without wallowing in amateurish standards?
3. There are probably about 20 or so journals and newsletters being published within the COTMA fraternity. It would be interesting to have a complete list.
4. Are journals like *Tramway Topics* core business to a museum or should they be strictly self-sustaining financially? Their "newsletter" function is certainly a core museum activity. A strong case can be made for the journal's historical recording role to be as central to the museum function as car preservation itself.
5. We are probably the most appropriate journal to be the documentary record of the Wellington trolleybus system - the last one in Australasia. It's been hard to pin down a reader who can keep that role alive. Do other COTMA museums see this as a *Tramway Topics* role, or do they see it as not a valid tramway museum journal subject?

In 1995 *Tramway Topics* enters its 34th year, with goals of keeping costs within revenues, better timeliness, more marketing of casual sales and improved performance as a journal of record of both tramway historical research and of current museum/electric street transport/VT progress.

COUNCIL OF TRAMWAY MUSEUMS OF AUSTRALIASIA INC. MINUTES - ELEVENTH CONFERENCE GENERAL MEETING

First as an Incorporated Association.
Phoenix Centre, Bendigo, Tuesday 6 December 1994 at 0830 hours.

Introductory Procedures

1. Present

Executive: Dr. John Radcliffe (Chairman), Bill Kingsley (Executive Officer), Lindsay Richardson (Australian Executive Member and PETS Rep), David Hinman (New Zealand Executive Member), Carolyn Dean (Treasurer).

Representatives: Dennis Bell (TBT), Colin Seymour (AETM), David Verrier (TTMS), Robert Merchant (SPER), Andrew Hall (TMSV), Jack Nyman (NTM), Craig Tooke (MTPA), John Shanks (THS), Richard Gilbert (BTPS), Peter Hyde (BTMS), Les Stewart (WTM).

Observers: Delegates and Guests, including David Neish (Rockhampton).

Apologies: STRPS, MOTAT.

Moved Merchant/Seymour "That Delegates and Guests be welcomed as Observers to the Meeting". Carried.

2. Minutes Of Tenth Conference General Meeting - Perth 1992

Moved Tooke/Shanks "That the minutes be accepted". Carried.

Matters Arising From The 1992 Minutes

3. Incorporation

The Executive Officer briefly described the history of our activities towards Incorporation, commencing at the Wellington CGM 1990, through the Perth CGM 1992, to Incorporation on 3 November 1994 under the Associations Incorporation Act 1981 of the State of Victoria, and thanked Hon. Legal Officer Anthony Sell for his excellent assistance.

The Common Seal of the new Association was exhibited. The Executive Officer clarified that, if the COTMA Representative for any Member Museum cannot attend an Annual General Meeting, then the Rules enable any official appointee of that Museum to act as Alternative Representative.

4. Proceedings Of Conferences

Delayed Proceedings from Sydney (1988), Wellington (1990) and Proceedings from Perth (1992) have been distributed. The Chairman asked that Bendigo (1994) be prompt with its Proceedings.

A check of available spare back copies from earlier Conferences was made. A list of required copies to 1986 was provided to the Chairman. Further copies can be provided for 1988 by Robert Merchant, 1990 by Trevor Burling, and 1992 by Lindsay Richardson.

5. Patterns

Lindsay Richardson advised that the task of compiling a list of patterns available at Museums has been undertaken by PETS Life Member Ric Francis, who will carry on the work previously initiated by Allen Bradley (BTPS).

6. Reciprocal Visits

Sets of "Cards of Introduction" as approved at Perth 1992 were distributed to Representatives. The Executive Officer accented that the Cards are for use by ACTIVE members of Museums, should be accompanied by a Letter of Introduction, are time limited, and that additional copies are available from the COTMA Office.

7. Instruction Manuals

The Executive Officer advised that the task of compiling lists of Manuals held by Museums is to be re-activated, and the co-operation of Museums to a forthcoming pro-forma is sought. The Chairman classified three types of Manuals, being from original manufacturers, from operating authorities, and those created by Museums.

Les Stewart advised that he was commencing accreditation booklets, to which Howard Clark (SPER) offered to assist.

Craig Tooke reminded Museums that the Electrical Operations Guidelines were available for use by Museums provided no commercial gain was sought to be made from the text. Les Stewart warned of the experience in New Zealand where industrial operators would like to use the results of Museum research for free - a situation which is not acceptable.

Following discussion it was moved Merchant/Seymour and carried unanimously that,

"1. Where COTMA or an individual Museum has developed a manual for the operation of a tramway, that it be available through COTMA or the Board of the Museum at a charge to be determined and with restrictions on availability".

"2. For convenience, the manual could be provided for copy in computer disc format."

8. Affiliations

National Federation Of Rail Societies

Our Chairman spoke of the reciprocal affiliations now in place with the NFRS. Les Stewart (as Chairman of the NFRS) underlined the usefulness of the affiliations, where COMTA information has been circulated within NFRS, and offered that the Federation will work closely with COTMA on issues of accreditation, safety, regulations etc.

Motor Coach Museum Trust (Foxton)

A letter from Ian Little (Chairman, MCMT) was tabled, accepting Affiliate Membership which was offered following an invitation from the Perth Conference.

9. National Tramway Museum (Crich) (TMS/UK)

Consideration was given to formalising relationships with the NTM. The Executive Officer spoke of the happy informal co-operation now existing through Craig Tooke (as NTM Area Representative). The NTM does not have a suitable category of membership or affiliation to encompass COTMA.

Conference Guest Geoffrey Claydon (Vice Chairman TMS) spoke of the warm feelings of friendship between the TMS and COTMA Museums. On the recommendation of Richard Gilbert it was agreed by Council that informal relationships be maintained and that we continue to send Memoranda to the National Tramway Museum. Howard Clark recommended, and Council agreed, that the incoming Executive consider another category of Membership for overseas Museums.

10. Conference General Meeting Agenda

In compliance with a request by the Perth CGM, an invitation for CGM Agenda items via the Memoranda to Museums had disappointingly resulted in no suggestions. The Chairman stated that the request would be continued for future Meetings.

11. Timing Of Conferences

CGMs had frequently expressed a preference for non-Winter Conferences. This Bendigo Conference was our first ever Summer Conference and co-incided with a heat wave. Discussion suggested that the Host Museum should determine the dates with respect to its own climate and business but in consultation with other Museums, and that the pre-Christmas period be avoided if possible due to financial and social obligations.

12. Communication With The PTC

The Executive Officer explained that in following up to a Motion at the Perth CGM, a document "COTMA and the PTC" had been drawn up between COTMA and Mr Russell Nathan (Managing Director - Met Tram) and circulated to all Museums, setting out the means by which Museums must communicate with the Met Tram Business Unit of the PTC.

The great plus of this exercise is that the General Manager himself has offered to be the point of liaison between COTMA, its Member Museums, and Met Tram, an offer which we greatly appreciate. The negative is that RVM (Rail Vehicle Maintenance) is a separate Business Unit to Met Tram, but Mr Nathan is able to refer us to the appropriate person in that Unit.

Andrew Hall alerted Council to W class parts and patterns being 'thrown out' by the RVM. We supported a suggestion that we write to the Minister on his recommendation as TMSV Rep seeking a meeting with Ms Tania Coltman to discuss this apparent situation. Agreed by the Meeting. Craig Tooke recommended that, as Mr Nathan does not have control over RVM, the incoming Executive establish lines of communication with RVM and Infrastructure Units. Agreed.

Matters Arising From Conference Sessions 1994

13. Bus And Coach Museums Within COTMA

Refer to the report on the relevant Workshop. Because there is overlap of membership between tramway and bus/coach museums, and because many tramway Member Museums have buses, there is already provision for Membership by bus/coach museums who also have one or more trams or trolley buses, and this is allowed by our Rules. It was agreed that no further action was required. Howard Clark warned Council to beware of bus collections owned by individuals.

14. Driver Training

Deferred to item 20.

Reports (Refer Proceedings for written reports).

15. Chairman

Dr John Radcliffe spoke to his written and previously distributed report. He spoke particularly of the stability of COTMA since inauguration in 1975, of the current 14 Member Museums, of the steady membership of the Executive and of special input from Bill Kingsley, Keith Kings, Allan Harnwell, Carolyn Dean and Craig Tooke. He indicated that he was stepping down as inaugural Chairman after 19 years.

Moved Merchant/Hyde that the Chairman's Report be accepted. Carried.

16. Executive Officer

Bill Kingsley spoke to his written and previously distributed report. He spoke particularly of both the joys and hard work of his role, thanking the many people who had been of encouragement and support to him. He described the expanding role, need and membership of COTMA and the need for an expanding Executive to achieve the necessary goals. As Convenor of the first Conference in Ballarat in 1975, he thanked all those present at this Conference, as their participation and enthusiasm were proof of the need for COTMA. He indicated that he was stepping aside as Executive Officer after eight years in his second period in that task.

Moved Hall/Tooke that the Executive Officer's Report be accepted. Carried.

17. Treasurer

Carolyn Dean spoke to the Financial Reports which had previously been distributed. She was happy to announce that COTMA's finances were healthy and that all Museum Members were financial members of COTMA.

Moved Hall/Merchant that the Treasurer's Report and Financial Reports be accepted. Carried.
Moved Tooke/Hyde that the Budget be accepted. Carried.

18. Trolley Wire And Tramway Topics

Robert Merchant (Editor TW) and Henry Brittain (for TT) had both previously distributed reports.

It was moved Shanks/Seymour "That these two reports be accepted with appreciation" and was carried with acclamation for the work of the Editors, Robert Merchant and Alan Smith.

19. Electrical Guidelines Committee Of Review

Craig Tooke explained that the Committee has not met. There had been feedback on the Guidelines from several Museums. There is a new MetTram document and a consequent need and opportunity to update ours. Craig asked Museums to continue to review the documentation.

19A. Rolling Stock Maintenance Standards

COTMA needs to take a lead, making use of SPER and THS material.

Moved Tooke/Hall "That we establish a sub-committee of at least four people plus a PTC representative, the four including at least one from each of Australia and New Zealand". Carried.

It was moved Hall/Bell "That Craig Tooke convene the new sub-committee". Carried. Nominations for membership included Murray Sanders (THS), Andrew Hall (TMSV), a corresponding representative from SPER, Warren Doubleday (BTPS) (subject to his agreement), and a representative from TBT. Carried.

20. Driver Training, Testing & Medicals Committee

This Committee consisted of Richard Gilbert (BTPS) (Convenor), Tony Smith (MTPA), Dennis Bell (TBT) and Andrew Hall (TMSV) with corresponding assistance from Max Fenner (AETM). The Proposed Guidelines were presented at a Workshop Session and will be found with amendments in the Proceedings.

It was moved Burling/Seymour "That the amended Guidelines be accepted". Carried.

21. Operational Safety Committee

This Committee to be convened by David Rawlings (SPER) has not yet commenced. The Executive Officer quoted from a letter from the Convenor. Following input by Howard Clark and Don Campbell (both SPER) it was determined that SPER should indeed lead and convene the Committee, using its own experiences upon which to base the Guidelines, with correspondence input from Les Stewart (WTM), Dennis Bell (TBT) and Troy Thomas (BTMS).

Elections

22. Preliminaries

In order to expand the Executive to cope with the increasing responsibilities, it was moved Gilbert/Nyman "That Council establish new Executive positions of Deputy Chairman and Immediate Past Chairman, and re-establish the Executive position of Assistant Executive Officer". Carried unanimously.

Dean Filgate (MTPA) asked when the position of Immediate Past Chairman might cease to exist. The Executive Officer explained that, by the Rules, this decision would be made by future Conference General Meetings.

23. Elections

Chairman: Lindsay Richardson (PETS) was nominated Tooke/Gilbert and elected unopposed with acclamation. It was determined that Dr. Radcliffe continue to chair COTMA until the end of the Meeting and the end of the Conference, at which point he would assume the position of Immediate Past Chairman.

Deputy Chairman: Bill Kingsley (TBT) was nominated Hall/Bell and elected unopposed with acclamation.

Executive Officer: Richard Gilbert (BTPS) was nominated Tooke/Richardson and elected unopposed with acclamation.

Assistant Executive Officer: John Lambert (BTMS) was nominated Hyde/Gilbert and elected unopposed.

Australian Executive Member: Howard Clark (SPER) was nominated Hall/Merchant. Don Campbell (SPER) was nominated by Mr. Richardson but declined. Mr Clark was elected unopposed.

New Zealand Executive Member: David Hinman (THS) was nominated Shanks/Burling and elected unopposed.

Treasurer: Carolyn Dean was nominated Gilbert/Tooke and elected unopposed.

24. Non-Executive Elections & Appointments

Auditor: K.L. Paroissien & Associates nominated Seymour/Hall and carried unopposed.

Public Officer: Richard Gilbert, as Executive Officer, nominated Seymour/Nyman. Bill Kingsley was nominated but declined. Mr Gilbert was elected with one against.

IATM Representative: Lindsay Richardson proposed that Dr John Radcliffe undertake this role as Immediate Past Chairman. Agreed.

Bank Signatories: Council determined any two of Ms. Dean, Messrs Richardson, Kingsley and Gilbert shall operate the Bank Account and sign cheques.

Applications For New Memberships

25. Application For Affiliate Membership

The Executive Officer introduced an application by the CityTram Association.

Moved Nyman/Hall that the CityTram Association be admitted to COTMA as an Affiliate Member Museum. Carried.

26. Potential New Members

David Hinman foreshadowed an application by Christchurch Tramway Limited. Moved Shanks/Burling "That the incoming Executive determine on this application out of session when received, subject to legal requirements of acceptability being established". Carried.

Council also wished Rockhampton well in their endeavours to re-establish with the Steam Tram.

New Business

27. Carris, Lisbon

Lisbon, 900mm gauge, 4 wheel fleet being reduced. Opporto, standard gauge, soon to close. John Shanks spoke on availability of particular types of parts, John Radcliffe on availability of whole trams. Geoffrey Claydon suggests that we need a single line of approach and liaison who can speak Portuguese and can containerise out.

Any Museums interested were asked to contact the new Executive Officer.

28. Pro Bono

This is a federal list of charities and similar bodies suitable for bequests, from which there is a "History of Heritage" classification available for $60 per annum. Entries do not need to be "Registered Charities". For the next Memorandum.

29. Museums Australia

Richard Gilbert introduced this new Australian museum 'umbrella' organisation as useful, with a national publication, and enables rubbing shoulders with other organisations.

Moved Gilbert/Nyman that the incoming Executive examine a proposal to join and possibly form a special interest group within Museums Australia.

30. Perth Conference Video

Carolyn Dean and Bill Kingsley expressed their disappointment with the relatively low sales of this video, especially after the excellent work put into it by John Phillips (BTPS)

Far greater support for the Bendigo Conference video, also being produced by Mr Phillips for COTMA, was urged.

31. List Of Museum "Experts"

The need for this new listing was introduced by Bill Kingsley. Pro formas were distributed to Representatives and will be followed up.

32. Museum And Tram Information Updates

Although mailed out before the Conference, not all Museums had returned the pro formas. Mr Kingsley will also follow up these important updates.

33. Prizes And Awards

Les Stewart described how the NFRS award a plaque for the best restored steam locomotive. Following discussion it was moved Tooke/Shanks "That the incoming Executive investigate and if possible establish a prize for the best museum project". Carried.

It was also moved Richardson/Seymour "That a portion of funds accumulated be redirected towards trustee investments". Carried.

33A. Association Of Railway Museums

The Chairman urged that we pursue closer relationships with ARM. Details of the 1995 ARM Convention will be published in a forthcoming Memorandum.

33B. IATM Museum Catalogue

The Chairman also recommended that Museums wishing to be listed contact him.

Concluding Items

34. Future Conferences

1996:

Bill Kingsley referred to correspondence:-

a. From THS asking that their Conference be deferred from 1996 to 1998 so that the new challenges of working with the new city tramway can be tackled without distraction, and

b. From BTMS indicating that they would be unable to substitute for THS due to heavy commitments at Ferny Grove.

Dennis O'Hoy (TBT) reported on his recent visit to Hong Kong and the escalating costs he found that would prohibit the possibility of an off-shore COTMA Conference there.

Mr Kingsley then indicated that during this Conference he had discussed in some detail with TTMS Delegates the possibility of the TTMS hosting the 1996 Conference in Hobart.

David Verrier then, on behalf of the TTMS, invited COTMA to Hobart in 1996.

It was then moved Gilbert/Hyde "That the 1996 COTMA Conference be hosted in Hobart by the TTMS". Carried. Mr Verrier was asked to convey the thanks of all to the TTMS Committee.

1998

Moved Bell/Verrier "That the Christchurch Conference be deferred from 1996 to 1998". Carried.

2000

Ballarat (BPTS) as already determined (25th Anniversary of COTMA).

35. Vale

One minute silence was observed to mark the unfortunate passing, since the last Conference, of Bob Serle (Secretary TMSV) and Barrie Shakes (THS).

36. Thanks

The Chairman thanked the following:-

Victorian Ministry of Transport (transport of Birney 217);
PTC (Met Tram and Met Bus) (support, and provision of bus 324);
TMSV, Andrew Hall (TMSV), Graham Bennett (TMSV) and John Phillips (BTPS) (buses);
LaTrobe University for the use of the Phoenix Centre;
The Bendigo Trust as hosts; and especially Dennis O'Hoy as Conference and Committee Chairman.
Mr O'Hoy replied, thanking all for participating, and particularly thanking Guest Geoffrey Claydon for his total contribution and involvement.

37. Close

The Chairman closed the Meeting at 12:20 hours.

CONSOLIDATION OF "THE RECOMMENDED MINIMAL GUIDELINES FOR TRAM DRIVING RULES FOR TRAMWAY MUSEUMS BELONGING TO C.O.T.M.A.", AND THE "PROPOSED AMENDMENTS TO THE RECOMMENDED GUILDELINES FOR TRAM DRIVING RULES FOR C.O.T.M.A. MUSEUMS"

Selection of the Candidate for Tram Driving

It is the business of each museum to set the selection criteria, bearing in mind individual museum policies, laws between states and New Zealand law.

The one criteria that must be standard is that the Candidate must have a current Medical Certificate, or he must hold a current valid recognition of fitness from an employer that allows the member to operate passenger carrying vehicles used for public transport employment, including trams, trains, buses, aircraft, ships and the like.

Medical Certificate

The Medical Certificate shall be to the standard of the example illustrated. It is valid for three years, which is in step with normal road traffic authorities in regard to commercial passenger carrying vehicles, and shall be recognised at other COTMA museums should the member transfer his active membership from one museum to another.

Selection of the Tram Driving Course

It is the business of each museum to set the course, as this is outside the scope of this Working Party and as each museum has a total variance of tramcars different from each museum. It would simply mean reproducing each museums own rules, which in turn would be useless knowledge to all other museums.

The Driver Trainer or Trainers should be different from the position of Examining Officer. They should not be the same people.

Driver Trainer

A Driver Trainer shall be selected and endorsed by the individual museum committee. Practical experience and teaching ability are part of the selection criteria of the Driver Trainer.

Examining Officer

To be appointed by the relevant museum. The selection of the Examiner is subject to any National, State or Local Government regulations. If the law of the Land overrides the museum being able to appoint the Examining Officer, obviously the Law is upheld.

Examination

The examination can be written, or oral, and a compulsory practical. Each museum is to keep a copy of the written exam by the candidate. If there is no written exam a written report on the oral exam is to be completed by the Examining Officer and kept by the museum.

Certification of the Candidate

Individual Certificates of Competency are to be issued by the museum for which the candidate drives. Each museum is to have the responsibility to design and supply the Certificate.

Regular Attendance at Tram Driving

A tram driver must drive at least one shift every six month to retain the qualification.

Retraining and Regular Performance Tests

Each individual museum will set its standard for retraining drivers who go over the six months without driving and develop a standard to monitor the standard for tram driving skills.

Alcohol and Drugs

The Laws relating to zero blood alcohol and freedom from drugs which could potentially impair the operation of tramcars or machinery under appropriate OHS regulations shall be acknowledged and followed.

Restricted Licences

A restricted licence be developed to allow members who are not accredited to drive under the formal criteria to operate trams under "Restricted Circumstances" with regard to their particular circumstances and the relevant museums decision on the matter.

Retirement

Persons over the age of 70 years must provide a yearly Medical Certificate to be able to continue to hold a full driving qualification.

DRAFT AGREEMENT

COTMA And The PTC

1. In the pursuit of restoring and operating heritage tramcars, the various Member Museums of COTMA are from time to time dependent on the technical and physical assistance of the PTC. It is important that requests to the PTC for such assistance are co-ordinated, and the most appropriate vehicle for such co-ordination is COTMA.

2. COTMA recognises that, well before the inception of COTMA in 1975, the TMSV was the adopted Museum of the then MMTB. As such the TMSV enjoyed a direct working relationship with the MMTB. The Memorandum of Understanding between COTMA and The Met recognised the continuation of that relationship. COTMA therefore accepts that the TMSV, as a Member Museum of COTMA, will continue to negotiate directly with the PTC.

3. Other Member Museums are requested to consult COTMA as to their needs from the PTC. COTMA will then advise the Museum as to the appropriate course of action to be taken. This may involve COTMA pursuing the request on behalf of the Museum, or by facilitating an approach whereby the Museum itself can then proceed directly to negotiation with the PTC.

4. In consequence, individual members of Member Museums (including members visiting from interstate or from NZ) wishing to negotiate personally with Officers of the PTC should first consult with the Executive Officer of COTMA prior to approaching the PTC. The Executive Officer of COTMA will recommend as to whether COTMA will pursue the need on behalf of the individual member, or will facilitate an approach whereby the individual member may proceed directly to discuss the issue with nominated Officers of the PTC.

5. Where individual members have already established a working relationship for a specific issue in terms of clause 4, COTMA does not wish to stand in the way of successful achievement of the sought outcomes, but should be kept informed of negotiations, and asks that its wishes and advice be respected whenever such personal negotiations may be in conflict with the needs of any other Member Museum.

6. It should be understood that clauses 4 and 5 do not only protect fellow Member Museums, but are also designed to protect the Museum of which the individual person is a member from any action or negotiation which is contrary to the ambitions of that Museum or which could be embarrassing to it.

Associations Incorporated Act 1981
[Victoria]

COUNCIL OF TRAMWAY MUSEUMS OF AUSTRALIASIA INC.

STATEMENT OF PURPOSES AND RULES

Statement of Purposes

1. **THE NAME** of the proposed incorporated association is **COUNCIL OF TRAMWAY MUSEUMS OF AUSTRALIASIA INCORPORATED.**

2. **THE PURPOSES** for which the proposed incorporated association is established are:-
   (1) To provide a forum and means of communication for all Museums in Australia and New Zealand dedicated to the preservation of the Australasian tramway heritage and to represent them and further their interests;

(2) To encourage co-operation between such Museums, and particularly to enhance the preservation of the Australasian tramway heritage by facilitating the sharing of experience, expertise, material, skills and information in the attainment by those Museums of their objectives; and
(3) To enable the members of such Museums to widen their experience, skills and knowledge and to participate in the preservation of the Australasian tramway heritage more effectively, fully and enjoyably by facilitating mutual contact and assistance between such Museums and their members.

Rules

1. NAME

The name of the Association is **COUNCIL OF TRAMWAY MUSEUMS OF AUSTRALASIA INC.**

2. APPLICATION OF INCOME AND PROPERTY

The income and property of the Council whensoever derived shall be applied solely towards the promotion of the purposes for which the Council is established, and no portion thereof shall be paid or transferred directly or indirectly to any Member in any way except:-

(a) Payment in good faith of remuneration to any Member, officer or servant of the Council for services rendered or goods supplied to the Council in the ordinary way of business or the payment of interest at a rate not exceeding the rate for the time being charged by the Council's banker for overdrawn accounts or money lent to the Council by any Member, officer or servant;
(b) Proper rent for premises demised or let to the Council by any Member or former Member.

3. MEMBERSHIP

(1) Any tramway museum shall be eligible for Membership of the Council;
(2) An applicant for Membership of the Council shall apply in or to the effect of the form from time to time prescribed by the Executive Committee, which shall be accompanied by the entrance fee then prescribed and such other material as shall be required by the Executive Committee or the Council;
(3) Each application for membership of the Council shall be considered by the Conference General Meeting next following its receipt by the Council: a Conference General Meeting may approve, defer or reject an application without assigning any reason therefor, causing the applicant to be promptly advised of its acceptance, deferral or rejection;
(4) If an application is rejected, any entrance fee and annual subscription accompanying it shall be promptly returned to the applicant and no further application from that applicant shall be entertained within one year from that rejection;
(5) Each Member shall pay an entrance fee and an annual subscription of such amount as a Conference General Meeting shall from time to time determine;
(6) The Membership of any Member whose subscription has fallen into arrears for a period of not less than twelve months may be terminated by the Council. The Membership of a Member shall continue until it is wound up, its incorporation is cancelled or it is otherwise dissolved or it resigns by written notice to the Executive Officer or its Membership is terminated or it ceases to be eligible for membership under these Rules; there shall be no other provisions for disciplining members;
(7) No right or privilege of a Member shall be transferable or transmissible in any way but shall cease on the Member ceasing to be a Member;
(8) The Executive Officer shall keep a register of Members containing the full name, postal address, date of joining, and any other details directed by the Council to be inserted therein.

4. MEETINGS

(1) (a) An Annual General Meeting of the Members of the Council shall be held during each calendar year on a date to be fixed by the Executive Committee;
(b) The business of the Annual General Meeting shall be:
(i) To confirm the minutes of the previous Annual General Meeting and any Special General Meetings other than a Conference General Meeting;
(ii) To receive and adopt financial statements for the preceding financial period; and
(iii) Any other business as required.

(2) (a) A Special General Meeting may be held on such occasions as the Executive Committee deems necessary, and within two months after receipt by the Executive Officer of a requisition therefor from four Members;

(b) A General Meeting shall be held in conjunction with each Conference of the Council (which Conference shall be held as determined by the Council), such a meeting being called a "Conference General Meeting":

The business of a Conference General Meeting shall be:

(i) To confirm the Minutes of the previous Conference General Meeting;
(ii) To receive and adopt the Executive Committee's Report on the proceedings of the Council since the previous Conference General Meeting;
(iii) Pursuant to Rule 6, to elect the Executive Committee, and to elect the Auditor for the ensuing period until the next Conference General Meeting;
(iv) To transact any special business of which at least one month's notice has been given to the Executive Officer;
(v) To transact any other business properly brought before the meeting; and
(vi) To make arrangements for future Conferences of the Council;

(3) Notice of the date, time and place of each General Meeting shall be forwarded by facsimile transfer or airmail to all Members, in writing, no less than 21 days before the date of the meeting and in the case of Special General Meetings shall specify the general nature of any special business to be placed before that meeting;

(4) (a) A Member shall be entitled to be represented at a General Meeting by one Representative who shall be entitled to speak and vote thereat;

(b) A Member may appoint one Representative and one or more alternate Representatives by notice in writing to the Executive Officer signed by a proper officer of that Member. An alternate Representative shall be entitled to attend General Meetings, and in the absence or by direction of the Member's Representative, to speak and vote on any matter or election thereat but so that a Member shall not cast more than one vote on any matter or election;

(c) A Representative or alternate Representative appointed by a Member which has not paid all entrance fees, annual subscriptions fees and charges then due by it shall not be entitled to speak or vote at any meeting or any poll demanded thereat;

(d) A Representative or alternate Representative may but need not be a member of the Member of Council by whom he is appointed;

(e) If there is an equality of votes on any question that motion shall be lost;

(f) Voting on any matter shall be by show of hands provided that if a motion that an election be by ballot is carried then that election shall be by secret ballot; there shall be no proxy voting;

(5) No business shall be transacted nor any election made at any General Meeting unless a quorum of one-half of the members (a fraction being taken to the next higher number) plus one is present by Representative. If a quorum is not present within thirty minutes of the time appointed for the meeting it shall lapse except in the case of an Annual General Meeting at which the Members then represented (not being less than two) shall constitute a quorum;

(6) The Chairman shall preside at a General Meeting; in his or her absence the Representatives then present shall elect a Representative or alternate Representative to act as Chairman of the meeting.

5. EXECUTIVE COMMITTEE

(1) The control and management of the affairs of the Council shall be vested in an Executive Committee which shall be comprised of the Chairman, Executive Officer, Treasurer, and as many other members as shall be fixed by the Conference General Meeting;

(2) The powers of the Council shall be exercised through the Executive Committee, which may exercise all such powers as are not by these Rules required to be exercised by the Council in General Meeting but subject to the directions of a Conference General Meeting;

(3) Any person being a member of a Member of the Council shall be eligible for election to the Executive Committee or appointment to the Secretariat;

(4) The Executive Committee shall meet in such manner and at such times as it shall think fit, and may be convened on the requisition of the Chairman, Executive Officer, or any two members of the Executive Committee;

(5) Notice of a meeting of the Executive Committee shall be given by the Executive Officer to each member in writing, or orally;

(6) No business shall be transacted at any meeting of the Executive Committee unless at least two members are present;

(7) At every meeting of the Executive Committee the Chairman shall preside; in his absence the members present shall elect a member to act as Chairman of the meeting;

(8) (a) Each member of the Executive Committee shall have one vote;
(b) Voting shall be by show of hands;
(c) If there is an equality of votes on any question it shall be resolved in the negative;

(9) Any vacancy existing or occurring among the membership of the Executive Committee may be filled by the appointment by the Executive Committee of an eligible person;

(10) The continuing members of the Executive Committee may act notwithstanding any vacancy in the membership of the Executive Committee;

(11) A Member may submit any matter to the Executive Committee for consideration by notice in writing to the Executive Officer;

(12) A resolution of the Executive Committee signed by all or all but one of its members (provided that it or a copy of it has been forwarded to all members of the Executive Committee) shall be as valid and effectual as if carried at a duly constituted meeting of the Executive Committee. The resolution may take the form of one or more like documents.

6. ELECTION AND APPOINTMENT OF OFFICERS

(1) The members of the Executive Committee shall be elected at each Conference General Meeting, in the following order;

(a) Chairman, who shall also be Chairman of the Council;
(b) Executive Officer, who shall also be Executive Officer of the Council;
(c) Treasurer, who shall also be Treasurer of the Council;
(d) As many members as from time to time determined by the Conference General Meeting;

and shall hold office from the time of their election until the conclusion of the elections at the next succeeding Conference General Meeting;

(2) A Representative or alternate Representative may nominate an eligible person for office when nominations are called for at each Conference General Meeting, with that person's consent either personally or in writing;

(3) The Secretariat shall include:-

(a) The Executive Committee, and
(b) Such other officers of the Council as a Conference General Meeting or the Executive Committee may appoint;

(4) A Conference General Meeting or the Executive Committee may from time to time create any post appointment or office, allocate to it such duties, and appoint to it on the conditions and for the term such eligible person as it may from time to time think fit;

(5) The office of a member of the Secretariat shall become vacant if he or she:-

(a) resigns that office by one month's notice in writing;
(b) ceases to be an eligible person;
(c) is removed from office by a resolution carried by postal ballot by at least three-quarters of the Members;
(d) dies or becomes of unsound mind;
or, unless the Executive Committee otherwise determines, he or she
(e) becomes bankrupt or makes any arrangement or composition with his or her creditors generally;
(f) is convicted of any criminal offence and punished by a sentence of imprisonment;
or, if he or she is not a member of the Executive Committee, if he or she
(g) is removed from office by the Executive Committee.

7. SUB COMMITTEES

(1) The Executive Committee may from time to time appoint Subcommittees for such purposes and to exercise such of its powers as it may deem fit;
(2) A Subcommittee shall consist of one or more eligible persons nominated by the Executive Committee;
(3) Each Subcommittee shall keep a record of its proceedings and shall furnish a copy thereof to the Executive Officer of the Council;
(4) A Subcommittee shall operate in accordance with any regulations imposed and directions given by the Executive Committee.

8. MINUTES

(1) The Executive Officer shall be responsible for ensuring the keeping of minutes of all meetings of the Council and of the Executive Committee;
(2) A Representative shall be entitled to inspect the Minute Book at any reasonable time on application to the Executive Officer.

9. ACCOUNTS AND AUDIT

(1) A banking account or accounts shall be maintained in the name of the Council with such branch or branches of such Bank or Banks or financial institution registered with the Reserve Bank of Australia as the Executive Committee may from time to time determine, and all moneys received by or on behalf of the Council shall be banked therein without delay;
(2) All cheques and other negotiable instruments shall be signed by any two members of the Executive Committee or by one member and one other person appointed by the Executive Committee;
(3) True accounts shall be kept of all sums of money received and spent by the Council, and the matter in respect of which each receipt or expenditure occurs, and of the property assets and liabilities of the Council.
(4) The accounts shall be closed on the 31st day of March in each year and a statement shall be made out of the receipts and expenditures for the past year and a Balance Sheet shall be prepared.
(5) Once at least in every year the accounts of the council shall be examined by one or more properly qualified accountants or auditors.
(6) The funds of the Council shall be derived from entrance fees, annual subscriptions, donations and such other sources as the Executive Committee or a Conference General Meeting determines.
(7) The Treasurer shall be responsible for ensuring the keeping of the accounts of the Council, the safe custody of securities, the safe custody and banking of all the moneys of the Council, the application of the funds of the Council in accordance with the directions of the Executive Committee or a Conference General Meeting, the presentation at each Executive Committee meeting of a statement showing the financial position of the Council, and the presentation annually of the audited financial reports. The accounts and books of the Council shall be available for inspection by the Representatives at any reasonable time on application to the Treasurer.

10. REGULATIONS

(1) The Executive Committee may from time to time make, vary and repeal all such Regulations not inconsistent with these Rules as it shall think expedient for the internal management and well-being of the Council.

(2) All Regulations made by the Executive Committee hereunder shall be binding on the Members until repealed by the Executive Committee or set aside by resolution at a Conference General Meeting of the Council.

11. INTERPRETATION AND AMENDMENT OF RULES

(1) All questions of the interpretation of these Rules shall be determined by the Executive Committee.

(2) These Rules and the Statement of Purposes of the Council shall not be altered except in accordance with the Act.

12. SEAL

(1) The Common Seal of the Council shall be kept in the custody of the Executive Officer.

(2) The Common Seal shall not be affixed to any instrument except by authority of the Executive Committee and the affixing of the Common Seal shall be attested by the signature of the Chairman or Executive Officer and one other member of the Executive Committee.

13. NOTICES

(1) Notice may be given by the Council to a Member by forwarding it by pre-paid airmail post or facsimile transfer to that Member at its registered address or address for service of notices as notified by the Member and shall be deemed to have been served seven days after the day of posting or on the day of dispatch by facsimile transfer;

(2) Notice of a General Meeting shall be given to each Member.

14. WINDING UP OR CANCELLATION

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 the Memorandum, Rules or constituent document of which prohibits the distribution of its income or property amongst 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.

15. INTERPRETATIONS

In these Rules, unless the context requires otherwise,
"The Act" means the Associations Incorporation Act 1981 of Victoria or any modification or re-enactment thereof;
"Chairman" means the person elected pursuant to Rule 6 (1) to be Chairman of the Council and of the Executive Committee;
"Council" means the Council of Tramway Museums of Australasia Inc.;
"Eligible person" means a person eligible pursuant to Rule 5 (3) for election or appointment to office;
"Executive Officer" means the person elected pursuant to Rule 6 (1) to be Executive Officer of the Council;
"Member" means a tramway museum, which is a member of the Council, and **"member"** means a person who is a member of a Member, Committee or Subcommittee (as the case requires);
"Representative" means a person appointed by a Member to represent that Member at a General Meeting of the Council;
"Treasurer" means the person elected pursuant to Rule 6 (1) to be Treasurer of the Council;
"Tramway Museum" means an Australasian tramway museum
(a) duly incorporated under the laws of its country, state or territory;
(b) prohibiting in such manner and to such extent as the Council deems sufficient the distribution of its income and assets to its members; and
(c) having the ownership or bona fide control of at least one preserved tramcar or trackless trolley (commonly known as trolley bus) with the object of the preservation thereof for the public benefit.

PRE AND POST CONFERENCE ACTIVITIES

Friday, 2nd December, 1994

Buses from Spencer Street Railway Station and Melbourne Airport to Bylands for an inspection of the Tramway Museum Society of Victoria facilities, rides on the trams, and a barbecue lunch. The buses then continued to Tooboorac for afternoon refreshments and on to Bendigo.

Wednesday, 7th December, 1994

Buses from Bendigo to:-

Maldon - inspection of Castlemaine and Maldon Railway facilities and rolling stock, then
Ballarat - Ballarat Tramway Preservation Society (lunch),
Haddon - Melbourne Tramway Preservation Association.
Eureka Stockade.
West Coast Rail Maintenance and Restoration Centre.
Dinner, slide night and overnight at the Brewery Tap Hotel/Motel in Ballarat.

Thursday, 8th December, 1994

Buses to Melbourne for a tram tour in SW6 855 from South Melbourne Depot, including lunch at Malvern Depot, inspections at Hawthorn Depot and Driver Training School, and Preston Tramway Workshops. All Melbourne overnights were at the Charnwood Motor Inn at St Kilda.

Friday, 9th December, 1994

By bus to A.B.B. Dandenong for talks and inspection, Malvern Depot for lunch and the tramway Historical Collections, with a talk by Met Tram Managing Director Russell Nathan, PTC Driver Training Centre at Dynon.

Saturday, 10th December, 1994

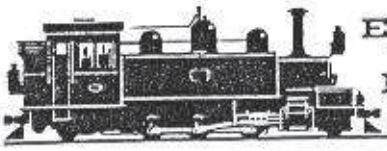
Visit to SteamRail/ElecRail facilities at Newport. Special train (Dog Box Motor 107M and Double-ended Tait Motor 470M) around the underground loop, then to Ashburton and Belgrave. Inspect Puffing Billy facilities, ride steam train to Lakeside and visit the model railway. Dinner with the AETA on the Duke of Gloucester Railcar at Spencer Street Railway Station.

Sunday, 11th December, 1994

By bus to Clydesdale Park at Drouin for a barbecue lunch, inspection of buses restored and under restoration, rides and drives, and meet with the Bus and Coach Society and Victorian Bus Preservation Association members.

Special Thanks to:

Ian Weir (Contracts Manager, ABB), Norm Maddock (Malvern Historical Collections) (and for lunches), Vince Ciaffaglione (PTC Driver Training), Phil A'Vard and Graeme Breydon (Puffing Billy), Alan Tovey (BCSV), Colin Hirst (VBPA), Keith Findlay (Steam Rail), Scott Bray, Lindsay Thompson, and all at Elec Rail, Alan Rees (Acting Depot Manager, South Melbourne), Les Jean (for visits to Hawthorn and Preston), Lachie Berryman at the Charnwood, Richard Gilbert (BTPS) and Craig Tooke (MTPA) for Wednesday 7th December Bill Kingsley for Thursday 8th to Sunday 11th December, and bus drivers John Phillips, Rod Atkins, Andy Hall, Graeme Bennett, Dennis Bell and Tim Borchers.



EMERALD TOURIST RAILWAY BOARD

INCIDENT OR DEFECT REPORT (IDR)

NAME AND POSITION OF PERSON REPORT FORWARDED TO	NAME	POSITION

NAME OF PERSON SUBMITTING REPORT	NAME IN BLOCK LETTERS	POSITION OCCUPIED

NAMES OF OTHER PERSONS INVOLVED	NAMES IN BLOCK LETTERS	POSITIONS OCCUPIED

NAMES, ADDRESSES AND TELEPHONE No. OF WITNESSES	NAMES IN BLOCK LETTERS	ADDRESSES AND TELEPHONE Nos.

WHEN INCIDENT OR DEFECT OCCURRED OR OBSERVED & WEATHER	DAY	DATE	TIME	WEATHER CONDITIONS
		/ /	a.m. p.m.	

LOCATION	(use telephone pole numbers where applicable)

FULL DETAILS OF INCIDENT OR DEFECT	(if space insufficient, write on back or use additional sheets)

SIGNATURE OF PERSON SUBMITTING REPORT AND DATE SENT	SIGNATURE	DATE REPORT SENT
		/ /19

Where applicable, this Report must show locomotive numbers, number and class of vehicles, identifying numbers and names of equipment, Train numbers and sketch plan together with as precise a description of the incident or defect as possible and of subsequent action (if any) which was taken. THIS REPORT IS NOT A SUBSTITUTE FOR IMMEDIATE TELEPHONE ADVICE TO BRANCH MANAGERS AND OTHERS CONCERNED IN ALL CASES WHERE THIS IS NECESSARY.

CONFIDENTIAL - (2nd edition 1994)

Bendigo Heritage Tours.
76 Violet Street, Bendigo, Victoria, 3550.

DRIVER'S MEDICAL REPORT

Telephone: (054) 438117. FAX: (054) 438341.

Patients to complete this section only (Please use BLOCK letters)

Surname/Family Name		Mr., Mrs., Ms., Miss.	Licence Number:
First Name/Given Name	Second Name	Date of Birth / /	**Consent of Patient** I hereby consent to the forwarding, by the examining practitioner, of this report to Bendigo Heritage Tours and I understand that I shall be responsible for any medical expense incurred in connection with the compilation of this report. **Patient's Signature:**
Address:			

To be completed by Medical Practitioner

How long have you known the above named person?

How long have you been treating this person?

Have you any personal knowledge of their medical history? No ☐ Yes ☐

History - Has he/she ever suffered from any of the following?

1a Epilepsy?
No ☐ Yes ☐ If yes, state what type:

Date of Last Attack

Are blood serum levels known? No ☐ Yes ☐

Is he/she seen regularly by a Neurologist? No ☐ Yes ☐

Please detail Medication overleaf.

1b Blackouts, Fainting Attacks or Dizziness?
No ☐ Yes ☐ If yes, state which and whether they have been investigated.

Date of Last Attack

2 (a) Diabetes Mellitus?
(b) Hypoglycaemic reactions?
No ☐ Yes ☐ If yes, to (a) or (b) state if hospitalization was necessary.

Type of reaction - was consciousness impaired?

Cause of Reaction (if known)

Date of Last Attack

3 Heart disease or disorder?
No ☐ Yes ☐ If yes, give details.

4 Psychiatric disorder?
No ☐ Yes ☐

If Yes, was psychiatric treatment or hospitalization necessary? No ☐ Yes ☐

Nature of Disorder.

Name of Hospital.

Admission date | Discharge date

Please detail Medication overleaf.

5 Excessive use or abuse of alcohol or drugs?
No ☐ Yes ☐ If Yes, please give details.

6 Rheumatism or joint disorder?
No ☐ Yes ☐ If Yes, please give details.

7 Any other illness, including particulars of any accident or injury or any cognitive defects which could affect ability to drive an electric tram?
No ☐ Yes ☐ If Yes, please give details.

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EXAMINATION:

8 EYES.

Is an examination by an Optometrist or Ophthalmologist required? No ☐ Yes ☐

Are corrective spectacles or contact lenses to be worn when driving? No ☐ Yes ☐

Colour vision: Passed ☐ Failed ☐

Visual acuity unaided: 6 L ____ 6 R ____

Visual acuity aided: 6 L ____ 6 R ____

Visual fields (confrontation test)

Diplopia or Strabismus

9 EARS:

Hearing

10 **Clinical Data: (Include relevant findings on examination, e.g., B.P., E.C.G., E.E.G., etc.)**

11 **Final Diagnosis and Current Treatment (Incude medication & any likely side-effects from the medication)**

INFORMATION FOR DRIVERS:-
This Medical Report is current for a period of three years from the date here-on.

DRIVERS OVER SIXTY YEARS OF AGE:-
Drivers who have reached sixty years of age are required to have a MEDICAL REPORT completed on a twelve monthly basis until their seventieth birthday.

LOSS OF MOTOR VEHICLE LECENCE:-
Where a tram driver has lost his/her Motor Vehicle Licence (meaning has been excluded from driving a Motor Vehicle for a period of time), such a person will also be automatically excluded from driving a tram in a public place, for the same period of time.

12 **Should any special conditions or restrictions apply?**
No ☐ Yes ☐ If Yes, please give details.

13 **Is he/she fit (from a medical point of view) to hold a Licence to drive an electric Tram where the Driver is required to assist incapacitated passengers into and out of the vehicle?** No ☐ Yes ☐

14 **Are future medical examinations necessary for assessment of his/her fitness to hold a driver's licence?**
No ☐ Yes ☐ If Yes, how often?

COMMENTS: Doctor to post this Medical Report to the General Manager, Bendigo Heritage Tours, 76 Violet Street, Bendigo., 3550.

Doctor's Signature: _____ Date / /

Doctor's Name - BLOCK letters:

Address:

Qualifications | Telephone: