CONFERENCE 1990

WELLINGTON, NEW ZEALAND

Proceedings of the Joint

Conference of the

Council of Tramway Museums

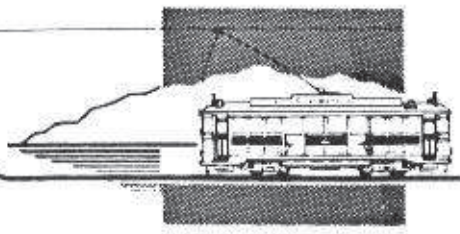
of Australasia

and the

National Federation of Rail

Societies Incorporated

1st - 8th June 1990



WELLINGTON TRAMWAY

MUSEUM INCORPORATED

P.O. Box 2612, WELLINGTON, NEW ZEALAND

ACKNOWLEDGEMENTS

On behalf of the Wellington Tramway Museum Inc., organiser and host Museum, I would like to acknowledge the support and contribution of the large number of people which made Conference 1990 a success.

I am especially grateful to the following persons who gave their time freely to lead a workshop session or present a paper:

Tim Borchers, Bendigo Trust
Bruce Gamble, MOTAT
Richard Gilbert, Ballarat Tramway Preservation Society
John Le Cren, former Staff Photographer, New Zealand Railways
Peter Rendall, Wellington Tramway Museum
Alan Smith, past Deputy National Librarian, National Library of N.Z.
Roger Toleman, Ministry of Transport
Craig Tooke, Melbourne Tramcar Preservation Association

The Organising Committee valued the support and guidance of Bill Kinsley, Executive Officer, Council of Tramway Museums of Australasia and Paul Dillicar, President, National Federation of Rail Societies, throughout the two years of planning and organising that went into Conference 1990.

Thanks are also due to Peter Rendall and the Omnibus Society for organising a very enjoyable trolley bus tour of Wellington.

Last, but not least, special thanks to all the members of the Organising Committee - Phil Austin, Diana Berry, Peter Berry, Marlene Burling, Trevor Burling, Richard Gray, Keith McGavin and Bryce Pender - who, while continuing with their usual Museum duties, worked hard to ensure Conference 1990 was a success and to record the event in these proceedings..

Les Stewart
Chairman, Conference 1990 Organising Committee
Wellington Tramway Museum Inc.

January 1993

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INCORPORATED
NEW ZEALAND

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NATIONAL FEDERATION of RAIL SOCIETIES
INCORPORATED
NEW ZEALAND

SECTION 1

PARTICIPANTS AND

PROGRAMME

PARTICIPANTS AND PROGRAMME

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FORWARD

THE 1990 YEAR

The 150th Anniversary of the signing of the Treaty of Waitangi was the Central Focus of the 1990 year in New Zealand. It was also a milestone year in the history of New Zealand, for a number of other important anniversaries. These include:

- 1,000 years of known habitation of these islands
- The 150th anniversary of both Auckland and Wellington cities
- The 100th anniversary of New Zealand's modern electoral system - one man, one vote - and the 97th year of one woman, one vote
- 100 years of the establishment of solidarity of the Union movement through major legislative reform providing worker protection and rights
- 100 years since the beginnings of the welfare state, with the first legal acknowledgement of the role of Government in providing health services
- The 75th anniversary of the Anzac Gallipoli landings

1990 was also a milestone year in the history of the Wellington Tramway Museum with the celebration of 25 years public tramway operations at the Museum in Queen Elizabeth Park, Paekakariki.

In the spirit of 1990, the Wellington Tramway Museum Incorporated was pleased to be the hosts for the first ever joint conference of the Council of Tramway Museums of Australasia and the National Federation of Rail Societies.

COUNCIL OF TRAMWAY MUSEUMS OF AUSTRALASIA

The Council of Tramway Museums of Australasia (COTMA) provides a forum and means of communication for all museums in Australia and New Zealand dedicated to the preservation of the Australasian tramway heritage. COTMA also has a role in representing them and furthering their interests.

By encouraging co-operation between its member museums by facilitating the sharing of experience, expertise, materials, skills and information, COTMA enhances the preservation of the Australasian tramway heritage and assists member museums attain their own goals.

COTMA facilitates mutual contact and assistance between the member museums and their members. This enables individual members of COTMA's member museums to widen their experience, skills, knowledge and to participate more effectively, fully and enjoyably in the preservation of the Australian tramway heritage.

COTMA held its first conference in Ballarat, Victoria in 1975 and conferences were held annually until 1978. Since 1980 conferences have been held biennially. Members museums are kept informed of events, issues and other matters affecting them through a newsletter published at regular intervals.

An area that COTMA has been very succesful in has been coordinating, on behalf of its member groups, the aquisition and distribution of surplus vintage tramway equipment from tramway operators in Melbourne, Adelaide and Brussels.

NATIONAL FEDERATION OF RAIL SOCIETIES INCORPORATED

NEW ZEALAND

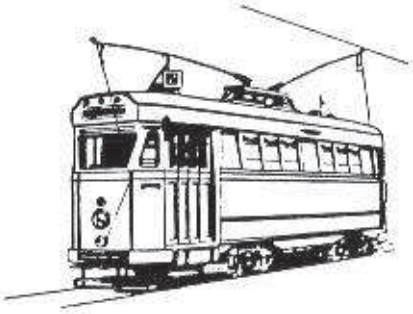
In 1972 a meeting of representatives from New Zealand's railway and tramway preservation groups met in Wellington to discuss ways in which they could work together to further their mutual interests. As a result of that meeting, the National Federation of Rail Societies Incorporated (NFRS) was formed.

The Federation's principle activity is the facilitation of the exchange of information and materials between member groups. Every year, over Queens Birthday Weekend, representatives gather for a conference where delegates meet formally and informally to discuss a range of matters affecting rail preservation in New Zealand. A regular newsletter between conferences keeps member groups in touch during the year.

One of the Federation's other principle activities is to represent and further the interests of its member groups at a national level. The Federation is in regular discussion with Government departments and agencies over regulatory issues that affect its members and it is involved in facilitating and negotiating a range of commercial contracts on behalf of its member groups.

The Federation has had a number of success stories in its brief history. Among them is the successful negotiations with New Zealand Railways Corporation which enabled member groups, firstly, to operate their own passenger rolling stock on New Zealand Rail's tracks and then to operate vintage steam and diesel locomotives.

WELLINGTON TRAMWAY MUSEUM INCORPORATED



The Wellington Tramway Museum Incorporated (WTM) was the organising and host museum for Conference 1990. The Museum is a member of both COTMA and NFRS.

The Wellington Tramway Museum was formed in 1964 when Wellington's tramway system was in its last days. A small band of dedicated enthusiasts decided to build a working tramway to preserve Wellington's trams for future generations. Although there were a number of sceptics at the time, with the contribution of many hours of effort by numerous individuals over the years, the dream of that small group and those who followed has been accomplished - a 2 km working tramway at the Museum's site in Queen Elizabeth Park, Paekakariki.

Today, with the Museum in its second quarter century, it is working on developing tramway displays comparable with the best museums of its type in the world. To achieve that goal, the Museum is planning to build a new workshop building and then develop the existing multi purpose tram barn for display facilities.

The Museum is an incorporated society, membership of which is open to all persons interested in furthering the Museum's aims. It is a non-profit organisation and all surplus funds are reinvested in the development of the Museum. Tram fares and membership revenues are the main source of funds.

CONFERENCE 1990 PARTICIPANTS



Delegates to Conference 1990, the combined conferences of the Council of Tramway Museums of Australasia and the National Federation of Rail Societies Incorporated.

CONFERENCE 1990 PARTICIPANTS

Australian Electric Transport Museum (South Australia) Inc.	Chris Andrews Mark Skinner
Ballarat Tramway Preservation Society	Carolyn Dean Richard Gilbert Chris Jacobson John Phillips
Bendigo Trust	Dennis Bell Tim Borchers Denis O'Hoy
Brisbane Tramway Museum Society	Peter Hyde
Bush Tramway Club Inc.	Bob Mann
Canterbury Branch, N.Z.R. & L.S. (Ferrymead Railway)	Frank Rowlands Allan Spooner
Council of Tramway Museums of Australasia (Officers)	Bill Kingsley John Radcliffe
Friends of the Fell Inc.	Noel Meek Graham Murrell
Gisborne City Vintage Railway Inc.	Ron Scott Graeme Trim
Glenbrook Vintage Railway Trust	Julie Pointon Ted Pointon John Stichbury
Goldfields Steam Train Society Inc.	Ron Brown
Maitland Tramway Park and Museum Ltd	Jack Nyman Lewis Nyman

Melbourne Tramcar Preservation Association Inc.	Dean Filgate Craig Tooke
National Federation of Rail Societies Inc. (Executive)	Paul Dillicar Ken Henderson Russell Paul
New Zealand Railway and Locomotive Society Inc.	John Clayton Glen Summers
Opua and Kawakawa Railway Preservation Society Inc.	Ian Cranston
Otago Excursion Train Trust	Chris Northover Arthur Rockliff Clark Simmonds
Otago Railway and Locomotive Society Inc. (Ocean Beach Railway)	Cecil Bachop Peter McCallum
Perth Electric Tramway Society (Inc)	Noel Blackmore Martin Grant Barrie King Kevin Parker Scott Parker Barrie Peacock Lindsay Richardson John Shaw
Railway Enthusiasts Society Inc.	Michael Austin Paul Heigton
South Pacific Electric Railway Co-operative Society Ltd.	Don Campbell Anthony Cody Richard Jones Bob Merchant Don Parkes Bruce Worthington
Steam Incorporated	Steve Porter Richard Taylor

Tramway Historical Society Inc.	Larry Day Trudi Day Wendy Day Frank Doherty Dave Hinman Graeme Richardson Alan Roi Murray Sanders Barrie Shakes John Shanks
Tramway Museum Society of Victoria Inc.	Keith Kings Len Miller Bob Serle Keith Stodden
Waikato Branch, N.Z.R. & L.S.	David Cumming
Weka Pass Railway Inc.	Geoff Allen Allan Campbell
Wellington Tramway Museum Inc.	Trevor Burling Mike Flinn Richard Gray Keith McGavin Morris Moller Barry Ollerenshaw Bryce Pender Peter Rendall Les Stewart
West Coast Mechanical and Historical Society Inc. (Shanty Town)	Barbara Tibbles Ian Tibbles
Western Springs Railway, MOTAT	Jim Savage
Western Springs Tramway, MOTAT	Jack Brewerton Bruce Gamble Ian Stewart

In addition, Conference 1990 welcomed the following family members travelling with out of town delegates:

Ballarat Tramway Preservation Society	Stuart Dean Timothy Dean
Goldfields Steam Train Society Inc.	Judi Brown
Otago Railway and Locomotive Society Inc. (Ocean Beach Railway)	Alma Bachop
Perth Electric Tramway Society (Inc)	Winifred Blackmore Lorraine Parker Michelle Parker Margaret Peacock Robin Richardson

CONFERENCE 1990 PROGRAMME

Unless times and places are indicated meals and coffee breaks were taken at convenient times during the day.

Friday 1 June 1990

7.00pm Registration and Drinks

Saturday 2 June 1990

8.30am Day long field trip to:

* Foxton to visit the Foxton Trolley Bus Museum and to ride some of the buses.
* Palmerston North for a look over the North Island Main Trunk electrification facilities
* Woodville travelling through the Manawatu Gorge behind steam locomotive F 163.

7.30pm Debate - "That Railways are Overgrown Tramways"
Dr John Radcliffe, Chairman of COTMA, lead the COTMA team arguing the affirmative, while NFRS President, Paul Dillicar's NFRS team did their best to outwit the tramway followers.

Sunday 3 June 1990

8.45am Welcome and opening announcements.

9.00am Development of the Volunteer Worker. John Burrows of Human Resource Development lead delegates through an "experiencial learning exercise" which highlighted issues relevant to the management of our volunteer work-forces.

12.00 noon Lunch with opening address from M.P. for Kapiti, Hon. Margaret Shields.

2.00pm Continuation of the morning session.

3.30pm Parallel Sessions Group 1.
* Regulatory framework for New Zealand Railway and Tramway Museums - Mr Roger Toleman, Ministry of Transport.
* Code of Electrical Practice (COTMA groups).

4.30pm Parallel Sessions Group 2.
* Archives - Alan Smith
* Photography as an Aid in Museum Work - John Le Cren
* Tram and Carriage Roof Coverings - Chaired by Les Stewart

7.30pm A time for delegates to catch up on what has happened at the various museums since the last conference with slides, videos etc.

Monday 4 June 1990 -COTMA Programme

9.00am Parallel Sessions Group 3.
* Handy Hints for Restoration Work - Chaired by Trevor Burling.
* Trolley Buses; What Requirements do Groups Have?; What is COTMA's Role? - Chaired by Peter Rendall.

10.15am Parallel Sessions Group 4.
* Is Your Museum Dying? - Richard Gilbert.
* Brill 21E Truck and Other Tram Bogie/Truck Requirements - Tim Borchers.

11.15am Parallel Sessions Group 5.
* Overhead Construction and Maintenance - Craig Tooke.
* Wellington Tramway Museum 1990 Projects - Les Stewart.

11.45am Conference Photograph.

1.00pm Afternoon and evening field trip incorporating
* Wellington Tramway Museum for the Official Re-Commissioning of Wellington Double Saloon Tram 159.
* Southwards Car Museum where not is there a wonderful collection of vintage and veteran cars but also a Wurlitzer Organ. Drinks and dinner followed a demonstration recital on the Wurlitzer and an opportunity to view the museum's car collection.
* Wellington Tramway Museum for some evening tram rides on the 1990 Illuminated Tram and other trams.

Monday 4 June 1990 - NFRS Programme

9.00am	NFRS Annual General Meeting - all day.
11.45am	Conference Photograph.
5.00pm	Delegates transported to Railway Station, Ferries and Airport.

Tuesday 5 June 1990

9.00am	COTMA General Meeting - all day.
7.30pm	Evening Address - Guest Speaker Dr Bruce Gamble.

Wednesday 6 June 1990

8.30am	All day trolley bus tour of Wellington taking in as many routes as possible, using a variety of trolley buses and including a tour of the Kilbirnie Workshops (originally built for trams), a ride on the Cable Car and a look through the Cable Car winding room.
6.30pm	Dinner at the St. George Hotel.

Thursday 7 June 1990

8.30am	All day visit to the Wellington Tramway Museum, an opportunity for delegates to "play" trams without having to worry about fare paying passengers.

Friday 8 June 1990

8.30pm	Delegates transported to Railway Station, Ferries and Airport.

OPENING ADDRESS

Hon Margaret Shields
Minister of Consumer Affairs
Member of Parliament for Kapiti

Thank you for the opportunity to speak at this conference.

I bring you the greetings and best wishes of the Minister of Transport, Bill Jefferies, who regrets that other commitments prevent him from being with you today.

A special welcome also to those of you who have travelled here from Australia.

It is important that people with similar interests can come together to share ideas and experiences at events such as this.

Railway links have always been important to the development of this country.

New Zealand's long, narrow shape helped promoted the place of the railway in our history.

Your efforts guarantee a continuing place in our lives for those early engines.

The opportunity to experience the feeling of rail provides important educational opportunities for all our children.

The formation of preservation societies during the 1960's ad 70's ensured the survival of many locomotives, tramcars and carriages, equipment that would otherwise be left to rot in sidings throughout the country.

The fact that commercial railway operations must function in the midst of stiff competition underlines the continuing importance of historical and enthusiast operations to provide services that would otherwise disappear altogether.

Commercial rail operations in New Zealand have undergone a massive change in recent years to place them on a proper commercial footing.

A Bill before Parliament at the moment will place the Railways Corporation's core business in a fully commercial framework.

But no matter what the nature of the operation - historical, enthusiast or commercial - all must operate in a safe manner.

A fundamental goal of the government is to ensure that the public can have confidence in the safety standards of all rail or tram transport.

Currently before the House, the legislative moves to a more commercial structure for Railways has prompted the need to look closely at the safety regime covering all railway operations, and to define standards operators must keep.

The recent tragedy in Australia is evidence of the scale of disaster that can occur when things go wrong.

The Ministry of Transport is working in association with Railways operators and other government departments to establish a safety regime applicable to all operators including historic and enthusiasts to whom existing legislation does not easily apply.

In line with current developments in other transport sectors the basis of the safety regime will be the safety audit.

As such all operators will be required to meet set standards of quality and safety.

This will be guaranteed through audits of each operator's management system rather than an over-emphasis on direct inspection.

Such a system provides the best means of ensuring that technology across a broad spectrum - from the earliest steam locomotive to the most up-to-date mono-rail or light rail transit system - meets the appropriate safety standards.

Under such a system the continued operation of all soundly managed ventures is unimpeded.

It is envisaged that the New Zealand Federation of Rail Societies will be a major player in the co-ordination of safety issues among its members.

Roger Toleman, the newly-appointed Manager of Corporate Policy in the Ministry of Transport will be speaking on the proposed safety regime later this afternoon.

This will give you an opportunity to discuss the proposals with an official who has played a large part in their development.

The Government acknowledges the wealth of knowledge resident in your groups and hopes to be able to continue to draw on that in the future.

I wish you well for the remainder of this conference and for the future.

At the conclusion of her address, Mrs Shields presented two awards on behalf of the National Federation of Rail Societies. The Public Terminals Award was won by the Pleasant Point Railway Museum and Historical Society Incorporated and the A & G Price Locomotive Restoration Award went to Friends of the Fell Incorporated, Featherston for their restoration of Fell locomotive no. 199.

1990 ICI PAINTS/NFRS

TERMINALS AWARD

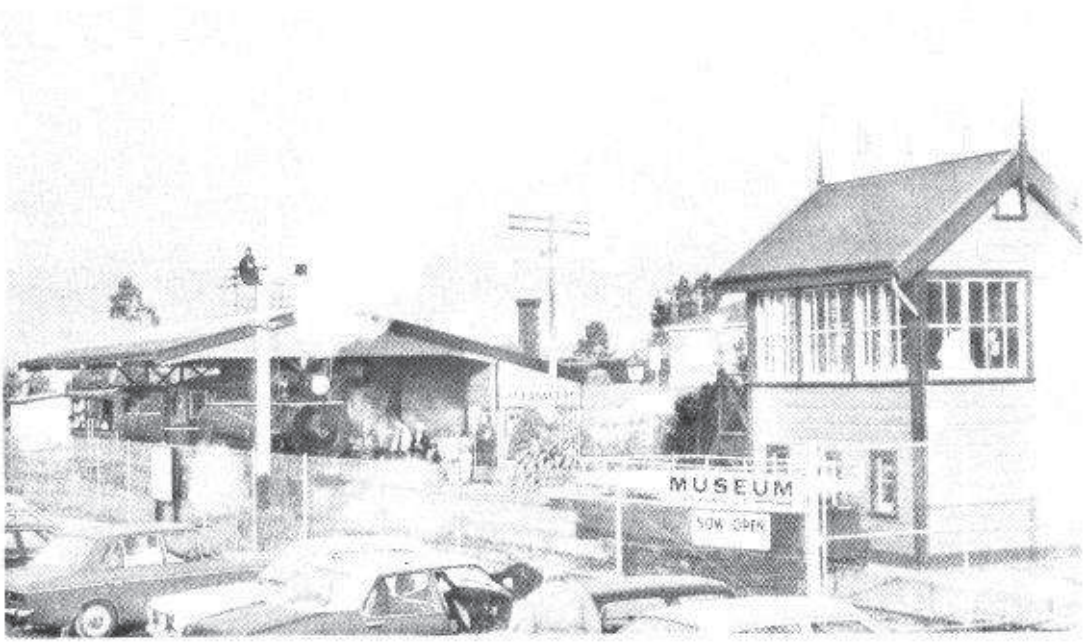
ICI Paints Decorative Division has great pleasure in joining the National Federartion of Rail Societies in congratulating the Pleasant Point Railway and Historical Society as winners if the 1990 ICI Paints/NFRS Terminals Award

In recognising the outstanding achievement of the Society in the concept, presentation and sheer hard work put into their Pleasant Point Museum Station Terminal, the judges were unanimous in their praise for the volunteers responsible. We are pleased to announce that in accordance with the sponsorship arrangements, 100 litres of ICI Decorative Paints, to be chosen by the Society, will be supplied upon request.

D.D. Hinman P.G. Gattley P.J. Dillicar

Judges

27 May 1990.

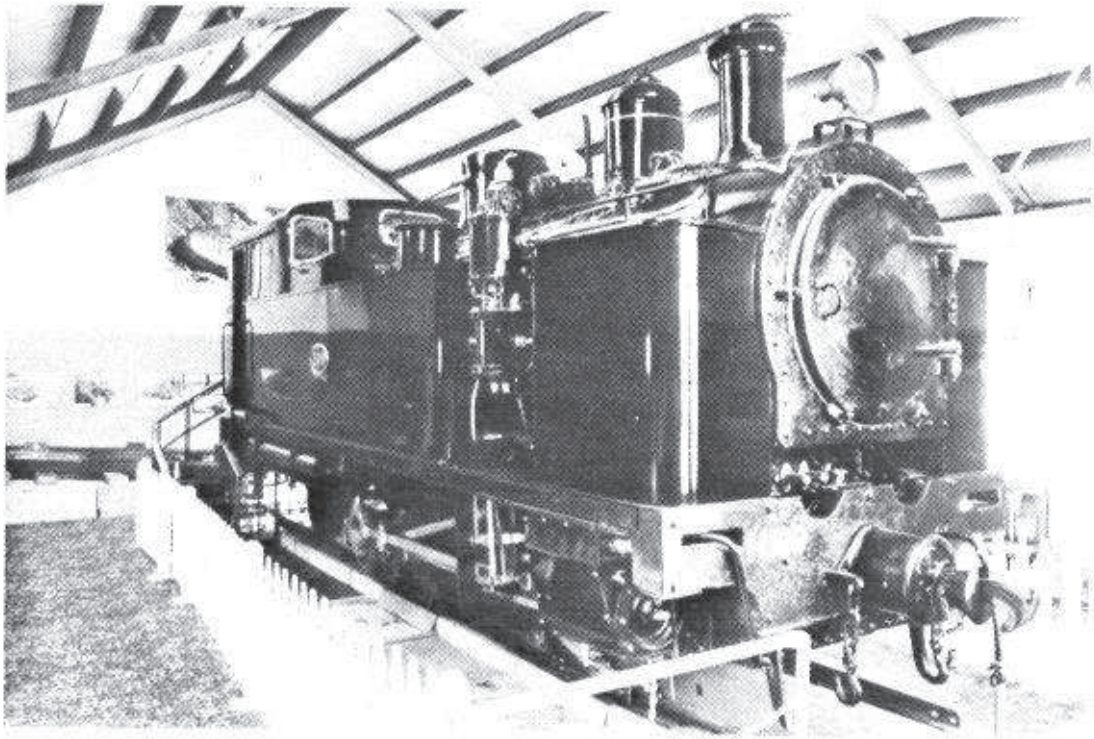


The Pleasant Point Museum and Railway, South Canterbury. *Photograph: Bryan Blanchard*

A&G PRICE LOCOMOTIVE RESTORATION AWARD 1990

As always, the judges have been faced with a difficult task in choosing which groups should receive the A&G Price Locomotive Restoration Award for 1990. After careful deliberation however, they have unanimously chosen Friends of the Fell Incorporated of Featherston for their excellent restoration of the unique Fell type incline locomotive No. 199, the original of the New Zealand Railways' "H" class.

Although it was not practicable to restore this locomotive to a steamable condition, arrangements were made so that the operation of the wheels and valve motion can be displayed to visitors to the Fell Engine Museum at the press of a button. It is also possible for visitors to step down into the pit beneath the engine to inspect the arrangement of the inside engine with its horizontal driving wheels arranged for gripping the centre rail.



H Class Fell Locomotive No. 199 on display in Featherston. *Photograph: Friends of the Fell.*

"H" 199 is the only surviving example in the world of a locomotive built according to the patents taken out in the 1860's by John Barraclough Fell, an Englishman who was born in 1815. It was the first of a batch of four 0-4-2 type tank locomotives built by the Avonside Engine Company of Bristol, England, in 1875 for use on the Rimutaka Incline on the Wellington and Masterton Railway, which was then under construction. It commenced regular service when the railway was completed to Featherston in 1878, and remained in service until 1955, when the Incline was by-passed by a deviation through the 8.8 kilometre Rimutaka Tunnel.

Subsequently "H" 199 was placed on display in a Featherston park, where it remained exposed to the weather for more than 22 years. In 1980, when the organisation known as Friends of the Fell Incorporated was founded, it was decided to attempt to retain, house and restore the locomotive in Featherston. Actual restoration work began in March 1981, and the team was fortunate in obtaining the services and advice of a former Fell engine fitter, who had helped to service the locomotives at Cross Creek for eight years.

That the efforts of this dedicated group have been eminently successful was plain for all to see when the Fell Engine Museum was officially opened on 16 April 1989. It has been estimated that at least 8500 to 9000 hours of voluntary labour went into this project. Congratulations are due to all who have been associated with this task.

R.J. Mann T.A. McGavin D. Black

Judges

KEY NOTE ADDRESS

LIGHT RAIL TRANSIT - DREAMS, NIGHTMARES AND REALITY

Bruce Gamble

Until returning to New Zealand in 1985 to join Beca Carter Hollings and Ferner, Bruce Gamble was Professor of Civil Engineering at the University of Calgary in Canada. He now has senior responsibility for building diagnostics and forensic engineering at BCHF, but also manages to maintain a major involvement in urban transport planning.

Bruce has been active in the debate over public transport in Auckland since 1981. His studies then, while on leave in Auckland, convinced him that Light Rail Transit (LRT) had a major role to play in Auckland. Since that time, he has undertaken several studies, the most recent being a social and environmental impact assessment of the proposed LRT system in central Auckland.

Bruce has always been a railfan, although trams are his weakness. He is a member of MOTAT and the Western Springs Tramway where tram restoration is his major activity.

For the Key Note Address of Conference 1990, Bruce provided delegates with an entertaining review of his experiences and involvement with light rail in Calgary, Canada and, closer to home, the planning for light rail in Auckland, New Zealand.

SECTION 2

WORKSHOPS

NATIONAL FEDERATION of RAIL SOCIETIES
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WORKSHOPS

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DEVELOPMENT OF THE VOLUNTEER WORKER

Led by John Burrows, Human Resource Development

Delegates were led through an "experiential learning exercise" which highlighted issues relevant to the management of our volunteer work-forces.

The conference delegates were divided into 14 groups each of 6-7 people. The groups were as follows:

1.	S. Porter	2.	I. Tibbles	3.	R. Paul
	J. Stichbury		B. Mann		L. Stewart
	C. Simmonds		T. Pointon		K. Henderson
	F. Rowlands		P. Heighton		D. Hinman
	A. Campbell		A. Rockcliff		J. Radcliffe
	R. Taylor		G. Allen		B. Kingsley
4.	C. Dean	5.	P. Hyde	6.	J. Pointon
	L. Richardson		K. Stodden		A. Mitchell
	J. Shanks		C. Tooke		R. Brown
	R. Gilbert		B. King		A. Spooner
	D. Campbell		K. Kings		D. Cumming
	J. Shaw		R. Jones		B. Tibbles
7.	C. Bachop	8.	I. Cranston	9.	R. Scott
	J. Savage		R. Brown		P. McCallum
	N. Meek		G. Trim		M. Austin
	J. Clayton		C. Northover		G. Murrell
	B. Serle		G. Summers		B. Peacock
	B. Ollerenshaw		L. Nyman		T. Borchers
10.	F. Doherty	11.	K. Parker	12.	T. Day
	I. Stewart		M. Grant		J. Brewerton
	D. O"Hoy		R. Gray		M. Moller
	B. Shakes		A. Cody		D. Filgate
	L. Day		N. Blackmore		M. Skinner
	C. Jacobsen		B. Worthington		S. Parker

13. G. Richardson
C. Andrews
B. Gamble
A. Roi
L. Millar
M. Sanders

14. D. Bell
W. Day
D. Parkes
J. Nyman
B. Merchant
J. Phillips

In his opening comments, John Burrows pondered why people might be drawn to our sort of organisation. He raised the question of his son's car - a VW - and asked delegates what were its characteristics. It was suggested they were:

- Slow
- Noisy
- Smelly
- Unstable

but that these qualities were more than outweighed by positive qualities:

- Reliable
- Has character
- Durable

Our organisations are based on empathy with machinery - however John asked us to concentrate in this session on the "human machinery" - (the voluntary worker - our VW!) and how to keep it "well oiled".

A good starting point was to draw on and share the collective experience of the group. (With more than 80 delegates participating and, on average, probably 10 years experience to draw on probably 800+ man-years of knowledge was available)

Satisfactions and Dissatisfactions

Delegates were asked to consider the following statement:

> *Personally your involvement in the pursuit of your interest will have given you "satisfactions" - what are they? - the "highs"*
>
> *and also disappointments or dissatisfactions - what are they - the "lows"*

Each delegate wrote a list of own highs and lows and a group discussion was held in an endeavour to rank the most important. The most important satisfactions were:

- Challenge
- Team Effort (producing result)
- Friendship/Fellowship
- Team Work
- Realisation of a Goal
- Satisfied Customers (lots of loot!)
- Relaxation
- Part of Decision Making
- Support of Spouse
- Obsessions fulfilled
- Learning new skills
- Planning for the future
- Emotional impact of achieving
- Public Recognition

Important dissatisfactions were:

- Personality clashes
- Lack of Human Resources
- Factionalism
- Negative attitudes
- Establishing new members
- Frustration
- Lack of communication
- Lack of priority
- Lack of skills
- Unwillingness to accept standards
- Lack of recognition
- Dishonesty
- Skills not being called upon
- Inconsideration
- Too many chiefs

John made the point that if the above are the important things to the delegates they are most likely to be important to our volunteer workers.

Quality of Decision

Q	x	A	=	ED
Quality of Decision		Acceptance by those actioning the Decision		Effective Decision

Three situations were proposed:

1. I'm an experienced leader and I tell the team what to do.

Q = 8 (out of 10)
A = 1 (out of 10)
ED = 8

Typically: Decision Time |----|
Implementation Time |----------|

2. I'm an experienced leader and I involve the team in coming to the decision.

Q = 8 (out of 10)
A = 8 (out of 10)
ED = 64

Typically: Decision Time |--------|
Implementation Time |----|

3. I have a damn good idea and I dictate that it be done.

Q = 9 (out of 10)
A = 0 (or negative)
ED = 0 (or negative)

i.e. the job never gets done

Typically the total time involved in decision making and implementation is typically minimised in situation 2 above.

Desert Survival Exercise

Delegates took part in a major team exercise entitled *Desert Survival* The exercise require each individual, and later each team, to determine which items in a given list were the most essential for survival in an American desert. The exercise was designed to demonstrate the differences in quality of decision between an individual's decision making process and that of a team.

In the team debriefing after the exercise John stressed the importance of identifying:

- The problem i.e. biggest problem - dehydration
- The objective i.e. survival
- The best strategy i.e. get found

John raised the idea that team work provides the opportunity for SYNERGY - that is, that the total output of the team will be greater than the sum of the individuals' outputs alone.

Teams, he said, can do it better provided they have:

- Task Skills (they share or pool their knowledge of the task)
- People Skills

For the record, the team results in the Desert Survival exercise were:

Team		1	2	3	4	5	6	7
Average individual	57	60	58	56	64	70	Not recorded	
Team result	42	48	38	40	54	50	?	
Gain	15	12	20	16	10	20		
Best	44	50	34	41	33	60		
Number Better	0	0	1	0	1	0		

Team	8	9	10	11	12	13	14
Average individual	49	70	68	69	57	68	51
Team result	26	62	58	38	40	52	46
Gain	23	8	10	31	17	16	5
Best	31	52	53	54	32	42	38
Number Better	0	2	1	0	1	2	1

Training and Induction

An important issue is "how do we get to train and induct the new volunteer worker?

Sometimes attendance is sporadic.
Sometimes repeat training is needed.
Sometimes the "trainer" would rather be "doing".

There is a lot of knowledge about this locked up in our 'collective brain'. So here is our task. Blank cards were handed out and delegates were asked to record their ideas, one per card, on:

"How can we effectively induct and train the new voluntary worker?"

The cards were collected, shuffled and dealt out to the teams. The teams' job was to sort and prioritise the ideas and report back on those ideas considered to be most important by the team.

Important requirements for effective induction and training of new voluntary workers.

- Inform (about the facility, it's history)
- Introduction (aims, objectives, people)
- Encourage by involving
- Develop personal relationship
- Immediate involvement
- Avoid cliques
- On-going involvement
- 'Buddy' system - training
- Determine skills/abilities/needs/wants (i.e. interests)
- Encouragement and thanks
- Involvement in social activities
- Morale (of the whole place)
- Diplomacy and tact
- Provide a chance for fulfilment

Conclusion

The voluntary worker will respond if we understand and act upon what switches him or her on or off. We should think of our own "satisfactions" and "dissatisfactions", use team work and team knowledge to solve problems and to create the right climate to motivate the voluntary worker.

NEW ZEALAND RAILWAY AND TRAMWAY SAFETY REGIME

Presented by Roger Toleman, Ministry of Transport

Legislative Scope of Review

A review of current legislation which deals with railways, tramways and other transport systems using fixed infrastructure has been carried out. The following acts and associated regulations are involved:

District Railways Act 1908;
Local Government Act 1974;
Local Railways Act 1914;
NZ Railways Corporation Act 1981;
Public Works Act 1981; and the
Tramways Act 1908

Requirements for Licensing

There is obviously an initial need to identify railway and tramway operators, particularly in regard to Government monitoring of safe operation. The simplest and most logical way to do this would be to require operators to be licensed under the Transport Services Licensing Act 1989. This involves no quantity control, but would provide a simple form of identification as a basis for the safety audit procedures covered later.

There are also a large number of small railway systems used by fairground railways and model engineering clubs that can carry passengers. These are presently covered by the Machinery Act 1950 (Amusement Devices Regulations). To eliminate any conflict between these regulations and the safety regime proposed for "large" railways, the most simple division point is the track gauge. The systems covered by the Machinery Act all effectively have a track gauge of less than 550mm, while the systems covered by this proposal all exceed this gauge.

Any person responsible for providing or using a system using track with a gauge between the rails greater than 550mm and/or providing or using rail vehicles for the public carriage of passengers or freight would then be required to hold a licence under the general terms of the Transport Services Licensing Act 1989.

Private sidings off a railway system, involving no ownership of rolling stock, would be deemed to be part of that system and not require a separate licence. Works railways, providing they did not cross a public road, would be treated as industrial machinery for safety control.

Safety Audit Model

A safety audit model applied to the railway and tramway mode can therefore have following procedural stages:

a) Legislation sets general safety principles for railway systems, including the scope of Safety Agreements;

b) The general scope of the Safety Agreement would be specified by Regulation to include inspections; infrastructure design and maintenance standards; vehicle design and maintenance standards; train crew and operating staff training and certification; operating, signalling and traffic control practices. The document would be restricted to matters relating to safety;

c) All existing railways and tramways are identified by the procedures already outlined;

d) Each identified railway or tramway operator sets minimum safety targets and prepares detailed documentation of proposed safety practices, in terms of legislative requirements and its business aims;

e) Ministry of Transport appoints a competent auditor who examines and recommends approval of safety practices set out in the draft Safety Agreement;

f) Agreement concluded between Ministry and operator;

g) Operator is then responsible for operating within agreed Safety Agreement;

h) Amendments to the Safety Agreement would be processed in the same manner;

i) Ministry of Transport would be responsible for periodic audit of operator compliance with Safety Agreement, either directly or by use of a third party.

j) In the event of repeated non compliance, legislation would have penalty provisions, up to and including licence restriction, suspension or removal.

Steam Boilers and Overhead Electricity Supply

Two aspects of railway and tramway engineering are currently dealt with in separate general legislation.

a) For all railways other than the NZ Railways, boilers of steam locomotives are currently inspected in terms of the Boilers, Lifts and Cranes Act 1950. The NZ Railways Corporation still have powers to certify boilers to its own standards. Given the specialist nature of railway steam boilers, it seems appropriate that inspection by "proper persons" of the standards relating to these should be included in the particular Safety Agreements, through an amendment to the requirements of the Boilers, Lifts and Cranes Act or successor legislation, including regulations. All operators would then be on the same basis.

b) Matters relating to supply of electricity for tramways and railways are currently covered by the Electricity Act 1968 and the Electrical Registration Act 1979 and related regulations. New Zealand Railways again has an exemption. In order to be consistent for all operators, it would be appropriate to include responsibility for these matters in the particular Safety Agreement, by amending the appropriate legislation.

Transitional Arrangements

The initial development and preparation of Safety Agreements is likely to take some time, particularly for the enthusiast railways, who rely on volunteer work forces. There will therefore need to be a significant period of transition, as follows:

a) All operators to hold an appropriate transport service licence within three months of the legislation being passed;

b) Existing safety legislation in the Public Works Act or the NZ Railways Corporation Act 1981 to apply as appropriate to all operators for an agreed interim period, subject to satisfactory progress towards completion of a Safety Agreement;

c) All Safety Agreements to be completed by 1993, with provision for reasonable extension at the Secretary for Transport's discretion where justified;

d) Any new operator proposing to start after the legislation is passed, other than a former component of the NZ Railways Corporation, to have a Safety Agreement in place before operations start.

Accident Investigation

There needs to be an accident and incident reporting (and investigation) mechanism that:

a) Applies to all operators;

b) Provides adequate information for identification of adverse trends;

c) Provides for external investigation and public reporting of serious accidents.

All serious accidents on any railway and tramway system should be required to be reported to the Ministry of Transport. At that stage, there would be a mechanism for identifying accidents that were serious enough to warrant detailed public investigation. The procedures would be similar to those introduced in the Civil Aviation Law Reform Bill.

The Ministry has already developed a proposal for an independent Air Accidents Investigation Commission, and has signalled that it is ultimately intended to develop this into a Transport Accidents Investigation Commission to investigate serious transport accidents across all modes.

Extending the scope of the Commission to include investigation of railway accidents, together with the reporting system noted above, would provide the necessary structure to monitor and investigate railway and tramway accidents.

Transport Corridor Management

A number of existing legislative provisions also relate to the safety management powers of the railway operator over the transport corridor for which it is responsible. These particularly relate to:

a) level crossings, particularly of roads;

b) control over lights adjacent to railway signalling;

c) protection of the integrity of the track bed and other structures from erosion or other soil destabilisation;

d) rights of action against trees and other external structures overhanging onto the railway.

e) stock trespass

These matters, which are presently divided between the NZ Railways Corporation Act 1981 and the Public Works Act 1981, apply equally to all fixed infrastructure transport systems and should be retained in legislation.

There is also a legislative requirement for addressing issues of management responsibility;

a) where two corridors, such as road and rail, cross;

b) where two systems run together, such as in a tramway line along a street, or on combined road and rail bridges.

These are required to establish appropriate areas of responsibility for maintenance and construction. Again, they should apply equally to all operators.

CODE OF ELECTRICAL PRACTICE FOR COTMA GROUPS

Chaired by Craig Tooke, Melbourne Tramcar Preservation Association

Introduction and Background

The main aim of the session was to reach agreement in principle that museums will look at the draft "Electrical Operations Rules 1988" produced by the Melbourne Tramcar Preservation Association

Following some bad electrical accidents in Melbourne the coroner had been directed to enquire into the reasons for the accidents. Craig Tooke felt strongly that any accidents on museum operations could result in severe repercussions on all museum operations, and felt that a common standard should be produced and used as a guide.

A draft standard, based mainly on Melbourne Tramway practice, has been produced and distributed to all member groups following agreement at the last COTMA conference to progress this matter. However, there had been limited response from museums.

General Discussion

Mark Skinner (Australian Electric Transport Museum) asked whether the SEC (State Electricity (Victoria)) had been involved in drafting the code because if the document is to be worthwhile there is a need to keep the SEC involved. Craig advised that no approach to SEC at this early stage.

Richard Gilbert (Ballarat Tramway Preservation Society) questioned the need for the amount of detail in the document.

Jack Nyman (Maitland Tramway and Museum) advised that his museum had already put the document to their local supply authority who are considering it.

Tim Borchers (Bendigo Trust) felt that to put the present document to SEC at this stage would be counter-productive because of repercussions which could ensue although Mr Borchers added that the SEC would no doubt like to have an input.

Bill Kingsley (Ballarat Tramway Preservation Society) mentioned that the SEC were perfectly happy with the expertise that Ballarat had, even allowing Ballarat staff to work on the tram overhead attached to their own poles.

Richard Gilbert (Ballarat Tramway Preservation Society) advised that Ballarat is looking at its operational standards and agreed that some regulation is better than none. He was of the view it was better to have our own rules than rules imposed from outside.

Jack Nyman (Maitland Tramway and Museum) was concerned that an accident, where there are no regulations, could have serious repercussions.

Tim Borchers (Bendigo Trust) noted that museums were already required to comply with Occupational Health and Safety regulations. He advised that Bendigo would not be bound by the draft regulations.

Craig Tooke asked the meeting whether it felt there was a need, in principle, for a self-regulatory document.

It was moved by Jack Nyman (Maitland Tramway and Museum) and seconded by Mark Skinner (Australian Electric Transport Museum)

> "that the meeting agree that there is a need in principle for a self-regulatory document."

Discussion on the motion:

Murray Sanders (Tramway Historical Society) considered the present draft is excessively complex but the motion is supported in principle.

Mr Campbell (South Pacific Electric Railway) advised that he felt the draft document was well meaning but SPER would not be directed by it as it has its own procedures.

Richard Gilbert (Ballarat Tramway Preservation Society) felt the draft document should be broadened.

Messrs Kingsley and Skinner (Australian Electric Transport Museum) commented that the draft is oriented to operational considerations as opposed to construction.

The motion was put and carried with Bendigo Trust dissenting

Craig Tooke recommended to the meeting that a way to proceed would be to recommend the COTMA General Meeting that a sub-committee be formed to formulate the proposed regulations.

After considerable discussion this was agreed to by concensus.
Bill Kingsley (Ballarat Tramway Preservation Society) felt that persons for the sub-committee should be nominated now and it was agreed that the meeting recommend to the COTMA General Meeting that:

- a sub-committee be formed to progress this matter consisting of a representative of each of the four Victorian museums plus Mr Noel Blackmore of Perth.

- Craig Tooke be Chairman .

- that a draft code of practice be available by Christmas 1990 with a full report to the COTMA AGM in 1991.

It was noted that there would be no compulsion on any individual museum to adopt the rules that they should be basic and simple. Any further comments should be directed to Craig Tooke or Bill Kingsley.

ARCHIVES

Presented by Alan Smith, past Deputy National Librarian, National Library of New Zealand

- Consideration of what constitutes archives.

- The way in which archives are preserved is as, or more, important than the act of preservation.

- In NZ the National Archive has first call on any material emanating from Central or Local Government or Public Body.

- Important therefore to come to arrangement with local branch of the National Archives so that:

    - importance of material held by them is recognised.
    - understanding is reached on dealing with new material.

- Don't overlook the 'Oral History Archive' (Hugo Manson and Judith Fyfe). Includes $1 million grant from Australia.

- Also the NZ Film Archive

  Tram and railway history may appear incidentally in movie footage of other items, e.g. street scenes, celebrations etc.

- Pragmatics of Archives Preservation

    - If in doubt preserve it - catalogue later - keep the material in the order acquired.

    - A stable environment is important.

- Sales Potential

  Don't overlook the market for nostalgia/memorabilia.

PHOTOGRAPHY AS AN AID IN THE MUSEUM

Presented by John Le Cren, former Staff Photographer, New Zealand Railways

John Le Cren worked for 38 years in New Zealand Railways Photographic Library. In his prepared notes, reproduced below, he backgrounded the role of the Photographic Library and cited specific examples of how photographs assisted the Railways in various aspects of its business. Throughout the session, John illustrated his talk with examples of some of the photographs referred to. He also cited other examples where photographs had been used in claims against manufacturers, as evidence in Court after accidents and to assist in planning new civil works such as new tunnels and rail yards.

Introduction

In July 1966 the *Evening Post* newspaper published, across ten columns, a photograph of Railways Cook Strait Ferry, *Aramoana*, clearing Wellington Harbour into the teeth of a southerly gale. "If you are not a good sailor," said the caption, "Don't look at this picture." It showed the ferry deep down by the bow into a giant swell, decks angled steeply, with the stern well out of the water. Surf foamed down from propellers revolving in mid-air and the twin tank rudders were also clearly to be seen. A *Post* photographer had used a 600mm lens on his 35mm camera from Fort Dorset to gain an impressive set of pictures, one which was published and several others donated to Railways where they were filed in the photo library. So impressed was the department with these scenes of their first Cook Strait Ferry, the illustration became top promotion.

Sir Alan Gandell, General Manager of Railways asked me to prepare quite a number of [prints of the] one that was selected. The prints were to be small enough to pack into a brief case for world-wide distribution. He was off to find another shipbuilder to build the second ferry of the fleet which in turn became the *Aranui*. On his return, he told us "The Japanese refused to believe the picture was real. They thought it was faked. And they have typhoon seas." He also gave the views of the shipbuilders in Europe and the U.K. who had viewed [the picture] or been given a copy. Denny Brown shipbuilders of Dumbarton were delighted to receive a copy of the sturdy ship they had built and see how it coped with enormous seas far across the world. So too were the English Electric Company which built the six traction motors in the *Aramoana*, as well

as three alternator engines. They too were to power the new ship *Aranui* and a copy of their first N.Z. Railways ship was proudly displayed in the office of the Chief Executive.

As I explain, elsewhere in this talk, Railways' staff photographers built up considerable experience in making pictures of cracks, breaks, and damage to expensive engine components under guarantee from overseas makers. In the course of several years, five main engine crankshafts of *Aramoana's* 1745 h.p. twelve cylinder diesel engines were cracked or broken. Each one was photographed, the breaks on all occurring on the centre main bearing journal. The sixth was removed from its engine as a precaution, and all were replaced with later model, counter-balanced crankshafts, as were fitted to the *Aranui*. Many tests were carried out in the engine rooms of *Aramoana* in order to prepare a claim against the manufacturers for replacement under the terms of guarantee. Engineers waited several months for a suitable big southerly storm to test the electric governors which effectively control speed up and spin of ship propellers when they are raised above the water. Many other examinations were made of crankcases, engine mounts etc. to determine whether distortion was to blame. No other cause, except weakness in the crankshaft, being found, Railways put their claim to English Electric.

The response was to be shown the Evening Post photograph. "What did you expect?" Not one penny piece was ever received for those broken crankshafts.

It was often asked why such a comprehensive library of photographs, negatives and written information concerning a great many occasions and property in the affairs of New Zealand Railways, from topics which were current at the time to events reaching far back in time, to well beyond the turn of the century, was held and staffed by the Publicity and Advertising Branch of the Railways Head Office, and what part this material played in the promotion of transport systems operated by the Department.

The very interesting contents of that photo library and some of the uses it was put to is the subject I am talking about.

I must first point out that the Publicity and Advertising Branch is now closed and the photo library has been located in the care of the National Archives in Wellington, where it is freely accessible to the public for viewing, researching or purchasing prints from negatives filed there.

Photo Library Wins a Compensation Claim

During the fifties, a shipment of twin-car railcars from the Drury Car Company of Lancashire arrived in Wellington as deck cargo. The bodies of the cars were too long for the holds of the ship. The end cab windows of the consignment had

been protected by traditional timber boxing, but not the windows along the sides. Heavy seas had broken through these side windows and raged up and down the interiors of several cars, resulting in extensive damage.

Shipping agents refuted a claim against them by New Zealand Railways for the damages, pointing out that all previous consignments of passenger rolling stock had been given end windows only protection against the actions of steel slings during lifting by dock cranes at either end of the voyage.

"Not so," Railways claimed, "All previous cars, multiple electric unit bodies had timber protection on all windows for sea voyage."

Electric multiple units had been shipped to New Zealand from the U.K. in 1938 and early in the 1950's. Staff searched the records of letters and accounts for details of the timber protection. None could be found. Possibly arrangements had been made verbally at the time of shipment by engineers when the cars were loaded. It was not the sort of statement needed to win a compensation claim.

Normal procedure included photographic coverage by staff of the Publicity and Advertising Branch of all cargoes of new locomotives or rolling stock. A search of the library confirmed this, but it transpired all the timber side boxing was removed aboard the ship before the floating crane *Hikitea* drew alongside the vessel. Luck changed when it was found that one of the photographers had climbed a wharf crane ladder for a vantage view which showed several multiple units as they sat, welded tightly to the deck of the ship *Huntington*. All had the entire window areas protected by timber boxing.

Fully repaired, these railcar twin-car sets entered service. Often known by the public as Fiat railcars because of their Italian engines.

Centenary of Driving First Spike on the North Island Main Trunk

During the planning of the programme for an official celebration of the driving of the first spike on the North Island Main Trunk Railway, on land beside the Puhunui Stream near Te Awamutu, the photo library produced a copy of an official group taken one hundred years before, at the original ceremony. The illustration (reference no. E-4596) enabled Railways staff to identify the various speakers while in other libraries searches were carried out for the reported, newspaper published speeches made by these people. The exciting archival photograph became a central key to the celebration. Tailored costumes and top hats were produced akin to the personalities, while Waikato Maori elders offered the original cloak worn during the freeing of the land for the entry of the railway. A visit to Te Awamutu met with enthusiastic amateur actors from a Te Awamutu College and the wheelbarrow shown in the historical scene was tracked down in an Otorohanga Historical Society museum where it had been

preserved for a hundred years. The newspapers' speeches were transcribed and became lines which were well rehearsed by the Te Awamutu College group of actors.

The day of the centennial celebration began with the re-enactment ceremony beside the Puhunui Stream, south of Te Awamutu. Restored Ka and Ja steam locomotives were on the site with a train of vintage museum carriages. It was a most successful day for all the parties concerned.

TRAM AND RAILWAY CARRIAGE ROOF COVERINGS

Chaired by Les Stewart, Wellington Tramway Museum

Tram and railway carriage roofs were traditionally covered with canvas stretched over the roof and sealed with a heavy linseed oil based paint. However, over time with exposure to sunlight and the weather the canvas and paint has a tendency to crack and allow rain water to leak through the roof. Other materials are now available which have advantages over canvas and the workshop examined two alternatives - butyl rubber and fibre glass.

Butyl Rubber

Bruce Gamble from MOTAT spoke about their experience in re-roofing Fiducia 257 with butyl rubber and showed a video of the actual re-roofing.

Butyl rubber is marketed under several different trade names including Butynol and Butylclad. Useful information on materials and application methods can be obtained from Skellerup Industries.

Benefits of Butyl rubber include:

1. Longevity
2. Good resistance to ultraviolet light and ozone
3. Impervious to water
4. Unaffected by normal ambient temperature levels
5. Easily moulded around compound curves and retains its flexibility
6. Can be painted with water-based acrylic coatings

Butyl rubber comes in rolled sheet of various colours (greys, tans, black) and thicknesses (0.75, 1.0, 1.5, 2.0mm) and in a normal width of 1500mm. It is widely used in building construction as a roofing membrane, laid directly over plywood or concrete decking with a contact adhesive. There are numerous commercial installers, although installation is well within the capabilities of most skilled tram and railway restorers who have watched the process.

On Fiducia 257, two lengths of mid-grey, 1.5mm butyl rubber were laid with a 70mm lap down the centre-line of the roof. A special lap tape was used to ensure the roof was completely weather tight. The roof on this tram is a

mixture of plywood, curved sheet metal and wooden battens. Good adhesion was ensured by giving all areas a priming coat of diluted contact adhesive well before the final stage. No problems were found where it was necessary to stretch the sheet slightly at the tight compound curves over the cabs. The final appearance is indistinguishable from canvas.



Laying butyl rubber on the roof of Fiducia 257 at MOTAT. *Photograph: Ian Stewart.*

It is intended to keep the roof painted with acrylic roof paint. If this is maintained, the normal guaranteed life of 25 years should be extended indefinitely.

The cost for 257 was $1,100 which included supply of the material and installation which took 2.5 hours. The cost compares favourably with canvas which costs approximately the same.

In answer to questions:

- Butyl rubber can easily be repaired by applying contact adhesive to the patch and the area to be patched.
- As with any organic material, fire-resistance is not high. It is no worse than painted canvas.
- Application over timber treated with CCA preservatives may require a

barrier coat to prevent the residual oily solvents in the wood from softening and degrading the butyl rubber.

Bruce showed a video of the tradesmen laying the butyl rubber on tram 257's roof. Any enquiries regarding copies of this video should be made to the Tramway section of MOTAT.

Fibreglass

Arthur Rockliff of The Otago Excursion Train Trust spoke on their experience of using fibre glass for re-roofing their rolling stock. The first one was completed approximately 12 years ago and it has caused no problems since.

One advantage fibre glass has over butyl rubber is its rigidity. Because of its composition it stiffens up the whole carriage and assists in the carriage's stability.

Before application all old canvas and other old coverings should be removed, all holes in the wood patched, protruding nails removed or punched under the surface and the whole roof surface smoothed off.

A standard fibre glass mat is laid over the roof first and then the epoxy resin mixture is spread over the mat. It takes about 20 minutes to harden at a temperature of 15^{o}C. Once the fibre glass has fully cured a coat of acrylic paint can be applied to assist in preventing deterioration from ultra violet light.

Holes for roof mounted items such as ventilators are stuffed with newspaper before fibre glassing. Once cured, the fibre glass covering the hole can be cut out, the newspaper removed an the ventilators reinstated.

Current costs are unknown but fibre glass is probably dearer than butyl rubber.

There is a possibility that stress fractures could occur if the fibre glass forms too hard a shell and prevents flexibility of the car frame.

HANDY HINTS AND NEW IDEAS FOR RESTORATION AND MAINTENANCE

Chaired by Trevor Burling, Wellington Tramway Museum

This workshop provided an opportunity to exchange handy hints and new ideas to assist in all aspects of maintenance and restoration of tramcars, railway carriages and permanent way - mechanical, electrical, woodwork etc.

Epoxy Resin Compounds in Wood Restoration/Conservation

Bruce Gamble (MOTAT) described MOTAT's experience of using epoxy resin compounds for:

1. Repair of structural timber work
2. Plugging holes
3. Re-lamination
4. Preserving timber by impregnation

MOTAT have been using low-viscosity epoxy resins and hardeners marketed (in N.Z.) by West Systems for use in boat building. However, other similar low-viscosity epoxies (e.g. Ciba-Geigy's Araldite range of materials) are also suitable for tram and railway carriage restoration work. After mixing with an appropriate hardener, the syrup can either be thinned or mixed with various fillers and pigments depending on the end purpose.

In load-bearing timbers where strength is important, a careful balance must be struck between removing rot or other damage, maintaining as much of the original strength as possible and ensuring that the epoxy replacement has a good bond to sound timber. The alternative of splicing in a new section of timber should be considered, particularly where appearance is a factor. However, the use of epoxies to impregnate doubtful areas surrounding the slice and/or as an adhesive can be helpful even in these cases. If in doubt get a qualified opinion!

For structural work MOTAT's preferred procedure is:

- Trim out any rot back to sound timber (drill, chisel or rotary burr).

- Saturate the cavity with a primer of thinned down epoxy and leave until it starts to harden (this may be up to 12 hours) - a very important step.

- Fill the hole with epoxy compound and leave to harden

- Trim the surface

Several types of fillers have been tried in these mixtures, including saw dust, wood flour (saw dust sieved to get only the finest particles), lightweight micro silica ("micro balloons") and polyester micro-fibres. These artificial wood mixtures are like making concrete - liquid binder, course filler and fine filler. The more binder, the more fluid the mix. By juggling the proportions everything from a dough (used on vertical surfaces) to a "self-levelling" compound can be produced.

A high proportion of wood allows the area to be shaped, sawn, and screwed into, and provides resilience. However, too much wood reduces the strength. Mixing in polyester micro-fibres improves the strength. Too much epoxy makes the patch hard to work and somewhat brittle. A good general purpose mixture, where little reworking is required is (proportions rough and by volume):

- 40% epoxy resin
- 20% wood flour (or micro-silica)
- 40% polyester micro-fibres

MOTAT uses epoxies a lot for plugging holes, particularly where rusted nails and screws have had to be (painfully) extracted, or where oversized screws have enlarged the holes. Where the hole is in a vertical surface, the first step is to form a dam. MOTAT usually just uses masking tape. (in difficult or critical cases, a glass pipette with a right angled bend can be inserted.) A runny mixture of epoxy and a small volume of polyester micro-fibre is then poured in - preferably preceded by the primer treatment. Usually, a nail or piece of wire must be jiggled around in the hole to get out all the air bubbles. A little pigment in the mix helps if the area is eventually to be varnished.

Thinned epoxy is used not only as a primer, but also as a means of re-laminating areas of plywood where water has damaged the original glue (e.g. the casein type) and in strengthening/stabilising/sterilising rot. A good publication on the last application is available from Ciba-Geigy: "Araldite in Wood Conservation", Publication No. 24714/e

A solvent/thinner with the following composition is recommended:

- 75% xylene
- 15% isopropanol
- 10% ethyl acetate

However, MOTAT has used PA10 thinners and other epoxy solvents and found them satisfactory. Dilution of not more than 20% solvent to 80% epoxy, decreases the viscosity significantly allowing saturation of the wood.
When re-laminating ply, MOTAT's method is to pepper the panel with holes, leaving the front ply intact. The panel is then propped up or clamped and diluted epoxy poured in from the rear. A similar approach is used for areas of rot in other timbers, using a series of holes radiating from a small number of points at the surface.

Jack Nyman (Maitland) noted that experts say to dry wood properly and use paraloid micro balloon filler as long as there is no fungus present.

In answer to other questions:

- Holes do not have to be primed to bond the filler, but it does help in stopping the filler shrinking into the wood pores, leaving a void.

- MOTAT has no experience in repairing or laminating Masonite with epoxy.

- The filler MOTAT uses for plugging holes can be shaved with a chisel and is very resilient. Pull out tests on screws have demonstrated equal strength to the original timber.

Any further queries can be forwarded to MOTAT

Overhead Poles

Overhead poles need to be treated to stop white ants and Perth Electric Tramway Society have found that a suitable treatment is bitumen oil. It was noted that in NZ tanalised pinus radiata poles are used but this would not stop white ants as they will burrow underground and up the centre of pole.

Sleepers

The Tramway Historical Society have had success in using ground treated tanalised pinus radiata sleepers coated with engine oil on the exposed top surface to stop water penetration.

Maitland Tramway Park and Museum suggested that, as Australia Rail are using steel sleepers, it may be worth looking into if the costs are acceptable.

Wellington Tramway Museum are using ground treated tanalised half rounds on a section of track to evaluate if they are suitable.

Bendigo Trust are using red gum sleepers at A$16 per sleeper.

Delegates were warned that they should be careful if using creosote as it is carcinogenic.

Conservation of Timber

When disposing of trams, timber should be recovered for future use rather than burning it.

TROLLEY BUSES

Chaired by Peter Rendall, Wellington Tramway Museum

Each museum present advised the group on their current situation in respect to trolley buses.

Tramway Historical Society

The trolley bus side of the museum is an integral part of the organisation and is part of tramway history in Christchurch.

The museum has an example of a trolley bus from every city in New Zealand which operated them, however they do not have sufficient overhead erected to permit running. Wellington 103 has had a short trial run only. Within the museum a diesel bus group exists and this compliments the trolley bus aspect of preservation.

Trolley buses have been part of the Tramway Historical Society's philosophy for the past 25 years and much restoration is needed before the section will have a viable operation in a museum setting.

Melbourne Tramcar Preservation Association

Nothing established yet and are still thinking about the concept.

Museum of Transport and Technology

MOTAT owns quite a few trolley buses and has a small running loop erected but it is not complete and needs upgrading. Museum interest is not high and future is not clear. Unless this interest picks up there is a strong possibility that the buses could end up as static exhibits.

Australian Electric Transport Museum

AETM has only one diesel bus but 4 trolley buses, however interest in buses is not high. None of the buses are operable but parts are on hand to allow restoration if interest can be generated. One, a Sunbeam, is in the same condition as it was when it ceased duty and should not be difficult to get going.

The buses are all under cover and are used as static exhibits.

Perth Electric Tramway Society

PETS has two Sunbeam buses, one could go without too much trouble, however operation of these two trolley buses is difficult in competition with trams, and may well end up as static exhibits.

Tasmanian Transport Museum Society

TTMS has two operable trolley buses but no suitable site to operate them. Would like to get them a road setting to permit proper operation.

Wellington Tramway Museum

WTM possesses four trolley buses, two at Queen Elizabeth Park, one leased to the Motor Coach Museum Trust at Foxton and one in storage at Ormondville. However, member interest is not high, especially as Wellington City Transport still operates trolley buses. As the future of trolley buses is uncertain, a watching brief is being kept to see what happens. WCT is still a source of spare parts.

General Discussion

Bill Kingsley asked if Wellington City Transport (WCT) could just keep the Courtenay Place Railway Route open so as to keep the trolleys running or whether the Wellington Tramway Museum had ever considered taking over a route.

Peter Rendall explained the changes currently being implemented in the public transport sector in New Zealand with the WCT and other local authority operators having to form companies to run their services. If the trolley buses survive in Wellington it would be as a single entity with only one or two closures. The Wellington Tramway Museum has never considered taking over a route. The WCT also has four preserved trolley buses and their future is questionable if trolley buses are phased out.

John Radcliffe noted that spare parts are important especially as Wellington is the only system in operation in this part of the world and asked whether WTM co-ordinate between WCT and museum wanting to acquire parts including overhead.

General discussion then took place about the need to have access to WCT supplies, especially if they were disposing of them. It was agreed that:

1. Ian Little be approached in order to ascertain whether he was interested in being the contact for trolley bus parts and liaising with WCT.

2. COTMA should consider inviting the Motor Coach Museum Trust at Foxton to join (proposed by Mark Skinner), especially as trolley buses are part of COTMA's constitution, but the wording of the constitution might need to be modified.

3. If Ian Little is interested, museums be invited to prepare a list of parts they need.

John Bettle noted that WCT still manufactured parts, including overhead parts, and these were available for both tram and trolley bus operation.

IS YOUR MUSEUM DYING?

Presented by Richard Gilbert, Ballarat Tramway Preservation Society

This talk is about the membership of museums or more particular, as I see it, the ageing membership and lack of new entrants to membership.

Let's look at the formation of our museums. They were formed during 1950's, '60's and '70's. Those formed in the 1950-60's were formed at times of great change.

The war had been over for some years and a whole new boom of development and changes were taking place in communities. The old shackles and values were out.

Transport, of course, was in this field of change.

In the railways, the overgrown tramways, the steam locomotive was being displaced by the diesel locomotives. In street transport, the tram and the trolley bus were being replaced by the diesel bus.

There was a clamour among the few who were interested, to record them on film, and there were those who took the unprecedented steps to purchase vehicles with the intention of operating them.

The museums formed in the '70's were an ongoing pursuit of the same ideals of the museums set up earlier. To those who formed the museums of the '70's it seemed that anything formed 10 to 20 years before was something that happened in the dark ages. Now it has snuck up on those who formed these museums of the '70's. Our museums have been going for virtually 20 years.

We should look back and take stock of ourselves.

Are we going well? Does the enthusiasm and the drive of those formative years still exist or have we slowed down, had a loss of some members and not much of a gain of new members?

A lot of people who started these museums are still running them.

Puffing Billy - the popular 2'6" gauge railway operating near Melbourne, which was at the height of its membership in the 1960's, had a schools section. A lot of schools around Melbourne had railway clubs and as such, groups from these

schools lent a hand at restoring the railway, along with the many volunteers directly working for the Society and I was one of those workers. I think it is fair to say that most of us joined at a time when this type of recreation was fashionable. In the days past, there weren't many other recreational interests other than using your abilities to perform physical tasks.

We must look around and say, do we have a problem of gaining new members and do we have an ageing membership? **Is your museum dying?**

Today there is so much to do on a Sunday, things that you just couldn't do in the times our museums were set up. You couldn't buy butter, petrol or beer. There were no markets, shopping or picture theatres operating. Some councils even chained up playground equipment.

And so - we joined and helped create a tramway museum, or else we stayed home and mowed the lawns.

But for the younger generation there are a lot of activities. Electronic games, computers, sporting competitions and changes in perceived ideas of recreation. **Is it still acceptable to young people as a recreation today?**

We should say, was our museum set up for a cause, or a certain euphoria which existed at the time, or has it created its own dynamics and laid some foundations that will see it go on to up and coming generations?

We must keep gaining new members. We can't hog our museum - we can't have too many members. We heard at the workshop yesterday, the discussion about welcoming and involving new members.

How do we get new members? In the pursuit of our pastime and the pressure of running it, are we overlooking our ageing situation and should we take time to collectively think about and plan a strategy?

Do members here feel they have the same situation that I have spoken about here? Do any feel they don't have a problem?

Young people like to experience new things. They may not stay with a tramway interest but they must be fostered and for those who do stay, or at least come back some years later, the museum has gained. The museum gains even if they stay for only a short time. Young people don't want to be involved in rule stricken societies. Where an age requirement to achieve a particular position is some time away, it seems like centuries to some people. We all have to have these minimum age rules in the Traffic areas, but our tramway has gotten around it in one way - assistants on single trucks. we have to have rules - let's be as welcoming as we can.

We have to relate to what young people see of our tramway when they join it. Unlike many of us, who by being involved in our museum, have rekindled the memories we have of trams running around the system we know, the new member develops his interest because of what he sees now in front of him as it exists.

Do we have a plan of welcome, in the form of productive tasks for a new member? Do museums continually get new member applications, say monthly? Do we see those new members or are they armchair ones?

Getting the new members: You can't create them. They usually have a basic interest in the tramway/railway world and from that point you foster it. There are new generations of young people around us, and although we know of our museum and its membership facility we tend to forget these new generations have to be informed of what we offer. Advertising our society to them in the tramway/railway publications may make them aware of our membership that is offered. When they join us we can then follow through the steps of welcoming them and fostering their particular interest in the museum, in the ways that were discussed in the workshop yesterday.

Do you feel that the point exists that we have to put our societies before the potential younger members who have a basic railway interest?

Look at the reasons members may join:

Not necessarily historical
Technical, Educational, sense of achievement purely pastime.

Achieve something they wouldn't otherwise do - drive and work trams.

Applies to older - new members.

We have all put so much into our respective museums, both for the pursuit of our personal interest and for the betterment of the heritage of the nation, so much so that we must put an effort into tempting the community, the new generations about us, to joining up and thereby ensuring a continuity of the preservation and operation of our dearly loved collections.

General Discussion

Bruce Gamble (MOTAT) said we have to develop an aggressive marketing approach. Railways are possibly getting interest at the expense of tramway

museums. The profile of trams in the public eye is not high and may be we have to get families involved in addition to individuals.

John Radcliffe (Australian Electric Transport Museum) quoted extracts from a UK Museum publication regarding population trends in society and its effect on the number of volunteers available, i.e. falling birth rates and older populations with its consequent effect on people who normally make themselves available. The problem is how to address the change in society.

Dick Jones (South Pacific Electric Railway) felt that we must encourage those who wish to join a museum to actively participate such as driving trams, which have the advantage over trains as they are much easier to actually drive.

Martin Grant (Perth Electric Tramway Society) questioned whether anybody had thought about canvassing schools

Richard Gray (Wellington Tramway Museum) noted that they had written to all the schools in our area but apart from one or two applications to join, results have been disappointing although there could be long term results.

Martin Grant (Perth Electric Tramway Society) suggested that maybe we should be looking for teenagers who are taking woodwork and metal work at school.

Lewis Nyman (Maitland Tramway Park and Museum) noted that sporting groups are competing with us and in some instances parents are reluctant to let their children join museums as they will be unattended. We must encourage parents and their families to come to museums and participate in its activities. We must try and identify those people who simply want to get away from home as distinct from those with a genuine interest in tramways.

Richard Gilbert (Ballarat Tramway Preservation Society) asked whether it is because people want an alternative to their normal work and join a museum to further this interest? Armchair members still play an important role in keeping membership numbers up. The Western Australian Railway Society at Hoffen Valley has a large number of junior members who are very active. The railway has a high profile and people join and stay.

Bruce Gamble (MOTAT) said we should invest in younger children by making ourselves available by talking to them, running special trips etc.

John Phillips (Ballarat Tramway Preservation Society) posed the question - if we join up younger members will they keep their interest up? We have to ensure we don't develop into a child minding organisation and we also need to have a balance of compatible ages. The average age of many members is between 40 and 50 and very few younger members. What we really need is a plan of welcome to induct new and potential members. Interpersonal relationships can

either help or hinder co-operation amongst members. We need to:

1. advertise in Rail magazines.
2. Develop a welcoming/admission policy.
3. Parent members to encourage their children if they show an interest.
4. Invite participation/membership.

Kevin Parker (Perth Electric Tramway Society) noted that Sunday papers in Perth have a tourist feature and suggested that use could be made of such a facility to advertise and promote patronage and membership.

John Radcliffe (Australian Electric Transport Museum) concluded the session stating that we need to raise our social status to a higher level to avoid the image that we are a bunch of nuts. We must encourage newspapers and TV to take more interest in our activities. We need to make more use of special occasions and maximise our publicity before the general public including some gimmicky things if this can be done. We have to get away from the image that we are a bunch of hobbyists - we are in the tourist industry and must project ourselves.

BRILL 21E TRUCK AND OTHER TRAM BOGIE/TRUCK REQUIREMENTS

Chaired by Tim Borchers, Bendigo Trust

Background

Tim Borcher's engineering firm has been investigating the feasibility of manufacturing a batch of 21E trucks if there was sufficient demand. The purpose of the meeting was to gauge the likely demand and to decide on the next steps.

Progress to Date

- Originally they were all going to be of one gauge and design (for cost efficiency). However Tasmania wanted 3ft 6ins gauge and Wellington 4ft.

- Issues considered have been:

    - do we need a large production run involving overseas (American) exports
    - can they be fabricated cheaply.
    - do museum's have the purchasing power
    - overseas sales could provide export incentives (up to 70% on setting up costs).
    - practical needs

- The following are available:

    - Working diagram
    - Pattern parts list
    - Patterns
    - Foundry
    - Specialised machinery

    So all is on hand to enable manufacture.

- Considered best to use a standard motor.

- The output would be a fully tested, braked and motored truck.

- Envisaged payment 50% up front, 50% on delivery.

- Cost will depend on numbers but likely to be in the range $10,000-$20,000. Unless large numbers are produced the cost will probably be at the high end of the range..

Museum Requirements

	Wish List	Likely Actual Purchase
THS	-	-
WTM	3*	1*
MOTAT	nil but some parts may be purchased	
Maitland	2	1
TMSV	-	-
Bendigo	1	-
Ballarat	-	-
MTPS	-	-
Adelaide	-	-
Perth	5	2
Tasmania	2	2**
Total	13	6

* 4ft gauge
** not present so to be confirmed. Would be 3ft 6ins gauge

Gauging

Motors will fit within a 3ft 6in gauge truck. Regauging seems possible.

Wheels and Axles

Tim Borchers advised that it is usually better to order new wheels and axle sets from Commonwealth Steel because of their reasonable price.

Keith Kings advised that 26.5"/28" tyres will probably be available from Melbourne.

Murray Sanders (Tramway Historical Society) mentioned that they had had success with building up worn tyres but other delegates advised of possible cracking/splitting problems. Ian Stewart (MOTAT) said the process was probably okay if the tyre was thick enough.

Wheel and Axle Set Requirements

Perth	6 x 33" wheels
THS	4 sets of spoked 33"
MOTAT	30" tyres, 20" tyres
Adelaide	26" tyres

Conclusion

Mr Borchers advised that he will continue to work on the 21E trucks proposal and, as a next step, will come up with a price.

OVERHEAD CONSTRUCTION AND MAINTENANCE

Presented by Craig Tooke, Melbourne Tramcar Preservation Association

Craig's presentation, based on Melbourne experience, referenced the following:

1. Melbourne and Metropolitan Tramways Board Instructions in Overhead Construction.

2. Facts and Data on Overhead Trolley Wire Construction - Compiled by T.G. Stiff.

3. Trolley Wire Renewal.

It was noted that in any museum, there are normally only 3 or 4 people who have an aptitude for overhead.

There was a view that COTMA itself should have centralised person who has an inventory of what overhead spares and skills/knowledge are held by museums in order that individual museums can assist one another. This could also encompass other facts such as where overhead can be purchased. It was felt there is no common understanding between museums at present.

Overhead maintenance is often only a spare time activity and it is important that tram drivers report any maintenance that is required. It was recommended that a form should be made available for tram drivers to note faults as an aid to ongoing preventative maintenance. Overhead procedures should be updated at regular intervals and then conveyed to each museum.

Many museums are using overhead fittings from trolley bus systems but in some instances old fittings are best used, especially if the old style image is to be attained. It was suggested that a list of patterns for the various old style overhead fittings held by various museums be prepared and circulated.

Care has to be taken when purchasing used trolley wire as it can be false economy if the wire is too well used. To help reduce costs new wire could well be purchased in bulk by a number of museums and shared amongst them.

The COTMA store in Australia has a limited amount of overhead stocks available which can be made available.

MELBOURNE AND METROPOLITAN TRAMWAYS BOARD

INSTRUCTIONS IN OVERHEAD CONSTRUCTION

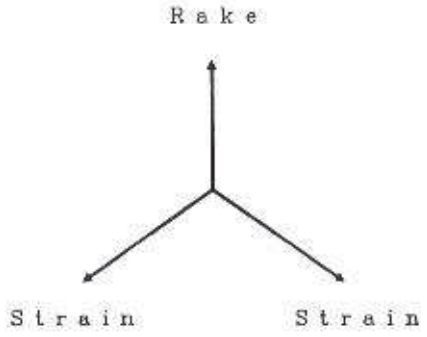
1. Hole Digging

A step must on no account be dug. Hole must be taken down at the same diameter all the way. When it is necessary to blast, the hole must be covered with heavy wood sleepers.

Special boring tool is to be used for digging hole below 3ft deep, if ground is suitable.

2. Pole Setting

All poles must be given exact rakes given in paragraph 4. Use special plumb for this purpose. In cases where poles are under strain in two directions, rake must divide the angle between them thus. All poles shall be set with tops approximately in line.



Concrete shall be mixed on footpath if available, otherwise small mixing platform to be used. Mix twice dry and twice wet, not using too much water.

3. Pole Base

Neatly finish off surface of concrete with trowel slightly above surface on footpath, sloping up all round from outside edge to pole. Apply plaster of 1 cement to 3 sand to concrete before it has set.

4. Rake of Poles

Poles shall be set with the following rakes:-

Steel Poles:	Anchor	1" in 3 feet
	Span	0.5" in 2 feet
Wood Poles:	Anchor	1.5" in 2 feet
	Span	1" in 2 feet

5. Stringing Trolley Wire

Mount trolley reel on shaft to run freely thereon. Anchor end to anchor or trolley already installed.

Maintain tension by brake on rim of wheel, never on the copper.

Pull to correct sag and tie to span with temporary tie.

Use long parallel faced clamps.

Use no cam come alongs, chains or other short grip devices.

6. Sag of Trolley

100 ft. Span

(a)	30°F	3.5"	2350 lb. tension
(b)	60°F	4.25"	1800 lb. tension
(c)	90°F	5.25"	1450 lb. tension
(d)	120°F	7.25"	1050 lb. tension

120 ft. Span

(a)	30°F	4.75"	2350 lb. tension
(b)	60°F	6.25"	1800 lb. tension
(c)	90°F	7.5"	1450 lb. tension
(d)	120°F	10.5"	1050 lb. tension

Sags vary as square of length.

7. Permanent Installation of Trolley

After the trolley wire has been temporarily tied up with the proper sags and the line anchored, the trolley wire must be carefully traced for twists or turns, and as this operation progresses, place line ears and hangers in correct position and attach.

Remove all kinks with a wooden mallet and block.

Upset all clamp screws of mechanical ears to prevent slacking back. File off ragged edges.

8. Trolley Wire Anchor Wires

Use heavy span wire, 5/8 inch turnbuckles, and egg insulators.

9. Location of Poles and Trolley on Curves

Poles shall be spaced and the trolley wire shall have pull overs located as shown on table hereunder, and the pull overs offset inside the centre line of track as shown on diagram herewith.

Use mirror gauge if track is in position, if track is not in position read offset diagram and add 8 inches for super-elevation (taken as 2 inches).

Thus for 100 ft. radius curve,	Offset from diagram	4 inches
	Add for super-elevation	8 inches
	Total offset at centre of curve.	12 inches

All offsets towards inside of track.

Radius of Curve (feet)	Spacing of Pull off (feet)	No. of Pulls between supports	Distance apart of poles (feet)
50	7	4	35
60	8	4	40
70	9	4	45
80	10	4	50
90	11	4	55
100	12	4	60
125	13	4	65

Radius of Curve (feet)	Spacing of Pull off (feet)	No. of Pulls between supports	Distance apart of poles (feet)
150	14	4	70
200-300	18	3	72
300-400	19	3	76
500	20	3	80
750	25	3	100
1000	33 1/3	2	100
1500-2000	50	1	100
Above 2000	100	0	100

10. Span Wires

Close Tie all loops, cut in egg insulators at 6 feet from pole and at 2 ft 6 ins" from trolley wire. Measure all spans at ground level and make up in shop, allowing for rake of poles.

11. Curve Wiring

All pull off points should be marked on the ground level and all necessary measurements for lengths of pull off wires and tie wires taken there from and supporting network made up accordingly. "After completion all nozzles to be given a coat of Biturene paint".

With new type of pull off no turnbuckles or span wire adjusters are required on outside of curve. Use span wire adjusters as may be required on inside of curve. All curves should be carefully watched and adjusted after cars start running.

12. Height of Trolley Wire

Adjust all spans so that trolley is 18 ft 6 ins" above rail at fittings.

13. Sag of Feeders

Sags shall be as follows:-

100 ft spans

60°F	17 inches
90°F	20.25 inches
120°F	23.5 inches

110 ft spans

60°F	20.5 inches
90°F	25 inches
120°F	28.5 inches

120 ft spans

60°F	25 inches
90°F	29 inches
120°F	35 inches

14. Painting Poles

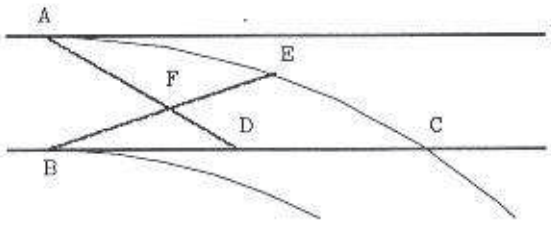
a) All steel poles shall be thoroughly cleaned down with scraper and wire brush before any paint is applied. They shall then be given two coats of approved paint, green on base and grey from 5 ft 6 ins upwards. All numbers shall be stencilled on in black, and all stopmarks in red, black and white. For 18 ins at ground level poles shall be given two coats of asphalt paint - 15 ins above and 3 ins below top of concrete.

b) Wood poles - after erection and completion of concrete base, the pole shall be given two coats of asphalt paint to a height of 18 ins above ground level.

c) Lettering - all poles shall be numbered.

15. Locating Frogs

All preliminary location of frogs should be made as shown on the diagram hereunder:



A & B = Ends of switch castings
C = Nose of track frog
D = Midpoint of BC
E = Midpoint of AC
F = Location of Frog

16. Erection of Crossing

All overhead crossings should be fixed in a bay of the trolley wire, i.e. pull off wires should not be attached to the crossing but to pull off fittings in positions to put the crossing between them. This gives a straight run through the crossing and minimises wear and dewirements.

FACTS AND DATA ON OVERHEAD HEAD TROLLEY WIRE CONSTRUCTION

COMPILED BY T.G. STIFF

Few people who travel daily on the tramway network stop to consider the work necessary to provide and maintain an efficient and continuous transport system.

Considering one phase only, that of supplying power to drive the trams: This requires an intricate system of overhead wiring with its inherent electrical and mechanical problems.

To transmit power from the 25 automatic substations strategically placed over the system to the trolley wire and thence to the actual tramcar it has been necessary to erect approx. 13,168 poles, 534 wall attachments (in lieu of poles) to support 274 miles of trolley wire weighing 341 tons, and 116 miles of feeder cable weighing 538 tons.

In addition, in order to provide facilities for track telephones, supervisory control and testing approximately 544 miles of overhead pilot wire are attached to these poles.

Erection of Poles

Unless the nature of the ground is rocky and requires the use of a crow bar or blasting, all poles are dug by special boring tools which gives a hole of uniform diameter for the full depth of the pole which is 5 ft for a 30 ft centre pole, 6 ft for a 32 ft pole and 7 ft for a 35 ft pole. All poles must be given exact rake (for which a special plumb is used). In cases where poles are under strain in more than one direction, rake must divide the angle between them. Rake is necessary on poles so that, when the load is applied, the pole will not pull up quite perpendicular. Poles erected exactly perpendicular appear to the eye to be converging at the top. Poles are set in concrete and neatly finished off slightly above ground level sloping up all round from outside edge to pole.

In the case of anchor poles which will be subjected to heavy loading, it is necessary to put in additional concrete at the heel and breast.

Steel Poles

The most satisfactory means of preserving steel poles has been found to be a heavy coating of (red lead) and then two coats of aluminium paint. This should last approximately 5 years before poles require further painting.

Wood Poles

The danger line of wood poles is approximately 1 ft above and below ground lines where air and dampness are able to attack the wood. The most satisfactory method of staying this decay is to "char" the pole over this section with oxyacetylene flame and then, when the pole is hot, treat with "Creosote".

Suspension of Trolley Wire

The trolley wire is clipped into an ear which is bolted to a hanger. This hanger slips on to the span wire which is supported between poles on either side of roadway.

Pole bands anchoring the span wires are attached to the pole in such a position varying with the width of the road to provide a sag of 1 in 10 for 0.126 trolley wire and a sag of 1 in 7 for 0.2 trolley wire.

The trolley wire is maintained at a height of 18 ft 6 ins above rail level in the span support. Efforts are made to keep the maximum distance between spans to 110 ft giving a trolley wire sag of 6.5 ins at a temperature of 60^{o}F midway between poles.

With span spacings in excess of 110 ft, keeping the normal tension to 1800 lbs. would incur too much sag and excessive freedom of movement causing abnormal side wear of the trolley wire. Excessive sag in trolley is also not pleasing to the eye and the only alternative is to excessively strain the wire. As the section of the wire decreases with wear, it will not stand this strain but will only stretch and excessive sag is the result.

The span wire is a 7 strand 12 gauge galvanised steel wire. A 5 ins reel insulator is attached to pole band by means of a shackle. At a distance of 5 ft from the pole an egg insulator is cut into the span likewise an egg insulator is cut in midway between trolley wires, and at a distance of 30 ins outside each trolley wire. Thus there is treble insulation between trolley wire and pole and single insulation between trolley wires. Trolley wires are jumpered by 0.25 or 0.3 VIR cable every 10 poles for 0.126 wire and every 5 poles for 0.2 wire.

Over a number of years, trouble was experienced in the corrosion of span wires, particularly on routes adjacent to the sea front. The cause of this trouble was the accumulation of road dust and dampness on the insulator which built up and finally allowed passage for a low current across the insulator. This was most pronounced near the sea front where the salt spray deposited on the insulators.

Various types of insulation were tried, but it was found that the 5 ins reel insulator gave the best protection due to a better drip surface, a larger protection surface, a better appearance and was easier to erect and maintain.

Curve Construction

The distance between pull-offs on curve work will vary according to the radius of the curve. As shown in the table hereunder, it will be seen that the smaller the radius of the curve the shorter the distance will be between pull-offs. The reduction of angle at each pull-off is approx. 5^{o} to 7^{o}. Thus in a 60 ft radius 90^{o} curve, it will be necessary to have approximately 18 pull-offs. If the change of angle at each pull-off is greater, excessive wear on the trolley wire will result.

Radius of curve in feet	Space of pull-offs in feet (max)	Radius	Spacing of pull-offs in feet (max)
50	7	200-300	18
60	8	300-400	19
70	9	500	20
80	10	750	25
90	11	1000	33-1/3
100	12	1500-2000	50
125	13	Above 2000	100
150	14		

The pull-offs and ears will be offset inside the centre line of track. This offset will vary according to the radius of the curve, the smaller the radius of the curve the greater the offset. The main object is to endeavour to keep the trolley skid at a tangent to the curve. The amount of offset to allow for on curves was first arrived at from the following formulae:

$$S = \frac{EH}{G} + R - \sqrt{R^2 + P^2 - Q^2 - L^2}$$

Where

S = Radial offset of trolley wire towards centre of curve
E = Super elevation of outer rail
H = Height of trolley wire above rail

G	=	Track gauge
R	=	Radius of curve
P	=	Distance from centre of car to pivot of trolley base
Q	=	Distance from centre of car to centre of track
L	=	Horizontal distance from pivot of trolley base to point of contact between trolley skid and trolley wire

All values in terms of feet

This formula was found to have its limitations on account of so many different types of cars in operation. It was found that by multiplying the formula by a constant of 0.73 it gave a good theoretical figure for offsets on curves, and all curves are installed at these offsets. As there are a number of different types of cars in service and some routes have a majority of a certain type of car running on them, it is necessary in practice to adjust each curve according to wear.

The offsets vary from 7.5 ins for a 60 ft radius curve, to nil for a 500 ft radius curve. This offset does not include offset for super elevation of tracks.

As the trolley wire around a curve has a tendency to "roll", it is necessary that care be taken to put the pull-off wire through the correct slot in the double pull-off in order to counteract this tendency.

To obtain the best working conditions on a curve it is necessary to ease the tension in the trolley and make the curve "float". To do this the straight trolley wire is anchored back at the entrance of the curve. This gives a cushioning effect when the trolley wheel comes into contact with the fittings. This cushioning effect reduces the wear on both fittings and wire cuts down dewirements and the trolley wire remains in its correct position for longer periods.

Crossings on Special Work

Pull-off wires should not be attached to crossings, but crossings should be placed in between spans or between pull-offs. This gives a straight run through the crossing and minimise both the wear on the crossings and the chance of dewirements.

Locating Frog Positions

For the standard switch now being used on the system, the preliminary location of the overhead frog may be taken as 9 ft from the end of the switch casting. This will be found to be a good working figure on installation but adjustments must be made to give the best working position. Guard bars should be installed

with frogs where the frog is likely to cause a trolley wheel trap.

Design of Overhead Network on Curves and Junctions

The only hard and fast rules that can be applied to the design of overhead network is the maximum spacing for the radius of curve concerned and the correct placing of crossings and frogs. Every curve and crossing must be wired on its own particular layout. Some of the points that have to be considered are:

1. The angle of intersection of the streets concerned.
2. The width of the streets.
3. The layout of footpaths.
4. Obstructions on kerb, lines of trees, poles, electric light poles, fire alarms, post office boxes and booths, underground obstructions etc.
5. "Drive-ins" and entrances to shops, factories or homes must be left clear.
6. Contour of locations. It is significant that of all the curves on the system of the MMTB there are only two curves which are identically wired. Junctions which have identical track layouts have had to be wired totally different because of some of the above features.

Maintenance and Renewal of Trolley Wire

Once the trolley wire is erected, its life can be shortened to a very marked degree unless the wire is correctly centred. If the wire is incorrectly centred, excessive side wear will shorten the life of the wire whereas correctly centred wire will give uniform wear and longer life. In adjusting wire, the ear should always be knocked away from the wear.

In the event of the trolley wire being gouged into at the entering or trailing end of an ear, it is often possible to cover up this weak point by knocking the ear either forwards or backwards, this bringing the weak point actually into the ear. This should be done before the fault becomes bad enough to warrant either a chafer plate or an anchor across the ear. In the event of the wear near the ear becoming spread over a section too long for the shifting of the ear to cover up the wear a chafer plate should be fitted. The length of the chafer plate can be increased from time to time if the wear continues to show up outside the existing plate. If the trolley wire near an ear has been worn so thin or damaged so that there is doubt about its strength an anchor ear should be placed on either side of the ear and anchored across.

When to renew trolley wire on any particular route is a problem for the Engineer. The Leading Hand Linesmen will have gauges with which to measure the wire and when this gauge will go over the trolley wire (depth) it is his duty to notify the Mains Engineer who will then inspect the route and decide whether

to renew the wire or otherwise. Some of the points to be considered are as follows:

1. Location: This is a very important factor for, if the locality carries heavy pedestrian and vehicular traffic, the risk of a falling 600 volt wire cannot be taken.

In the case of a city area, a broken trolley wire could easily mean a long delay to traffic on a number of routes.

A congested area would impede a tower waggon getting to the seat of the trouble as well as delaying them in carrying out repairs.

2. Position of feeders relating to trolley wire: If the trolley wire has a feeder running parallel with it or a number of feeder taps at regular intervals, the loss of section in trolley wire is not so vital, but, if the trolley wire is a stub end feed resulting in a long trolley wire feed, the loss of section would cause a voltage drop, and cause overheating of the wire which would increase the probability of a broken or burnt down wire. The time this is most likely to happen is at peak period and the dense city area where we rely on "trolley wire feed" is the most likely locality.

3. The condition of the wire at fittings: The condition of the wire at fittings must be closely examined. If the wire has been subjected to excessive wear at the ears, necessitating long chafer plates and a number of places where the trolley has to be anchored over, it means that additional danger points have been created on the route.

4. The number of bad bays of trolley wire in the section: The number of bad bays in the section must be considered as it may mean that, by replacing these bays, the section would be okay for some considerable time, but the replacement of bays must not exceed the economic limit.

It can readily be seen that the renewals of trolley wire cannot be decided by measurements at each span alone, but must be taken on general conditions of wire, locality, density of service and accessibility. Thus every route must be considered on its own economical merits, for where wire of a certain size would be quite safe to leave on one route, it would not be wise to leave it on another route.

Overhead Feeder Cables

The feeders used by the Board consist of 0.1, 0.3, 0.5, and 0.6 copper cable although there are a few sections of 0.5 and 0.8 aluminium. The majority of the feeders consist of 0.5 and 0.6 copper cable. In running feeders, the sag

measured in the centre of the bay should be as follows:

	100 ft span	110 ft span	120 ft span
60°F	17 ins	20.5 ins	25 ins
90°F	20-1/8 ins	25 ins	29 ins

In the early days of the Board, trouble was experienced in jointing feeder cable. Owing to the high cost of the heavy feeder cable, it was not economical to terminate and anchor feeder cable at a pole and then jumper across. If this method was used it may have meant cutting off 80 ft or 90 ft or perhaps 100 ft of cable as waste. The splicing and thimbling of cable was found to be slow and expensive as well as not being mechanically sound in the event of a fire in a building close to the cable. A cone splicing sleeve was then developed. This sleeve gave a perfect mechanical as well as an electrical joint, and, in addition, was easy and quick to install. It has the added advantage of being placed anywhere in the bay of cable. When running this heavy feeder cable, a wheel is mounted on a bracket; this bracket has a shank which fits into a hole in the cross arm; the feeder cable runs on the wheel, thus doing away with any scraping or damage to the cable as well as relieving the load necessary to pull the cable into position. In anchoring feeder cable, it has been found that good practice is to reduce the length of the last two bays of cable and on the second last pole to put an anchor strain clamp on the cable as a preliminary anchor. The final anchor is made by means of a cone anchor terminal which is the same principal as the splicing cone.

With the exception of the various Porcelain Insulators, practically every fitting used on the overhead network has been designed by the Board's Staff and is manufactured in the Board's Workshops. These fittings have been designed for lightness, ease of erection and replacement, ease of adjustments and to give a better job of work. Over the years, it has been the aim of the Mains Branch to improve the type of network, and fittings, especially any that has been the cause of any trouble.

Trolley Wire Sections

Over the years, a number of various types and sizes of wire have been used. In the early days some 4/0 "Brown and Sharpe" section was used but this section did not allow for a non-fouling ear.

Then there was the British Standard non-fouling section of wire which enabled a non-fouling ear to be designed. Another good feature of this wire was that the head was small, giving a larger wearing section of wire, but this advantage was likewise a great disadvantage as the wire was not drawn from a round section and the small head and narrow throat being so much smaller in area than the

base section, overheating was caused in drawing the wire. This overheating caused flaws in the wire and many broken trolley wires were the result. The British Standard grooved wire 0.125 sq ins was then tried but this did not give a non-fouling section and was not persevered with. A design was then taken out for a grooved wire which was drawn from a round section and enabled a non-fouling ear to be used with it. A wire of 0.126 sq ins section and 0.2 sq ins section was then developed and has been used with success by the Board since 1935. The new British Standard wire very closely resembles these sections.

Trolley Wire Renewal

0.126 sq inch Trolley Wire:		
	Depth of New Wire	0.424 in
	Depth When Considered "Worn Out"	0.3 in
0.2 sq inch Trolley Wire:		
	Depth of New Wire	0.530 in
	Depth When Considered "Worn Out"	0.4 in

These measurements are taken as a datum figure only. When the trolley wire reaches these figures it is considered to be nearing the end of its economical as well as its safe life and needs constant attention and careful watching.

In practice when the depth of the wire is down to these figures it has been found that the section has been reduced to approximately 50% of the original wire, more particularly over the last few years. This has been brought about by:

a) the excessive speed and non-observance of rules by the average present day motorman.

b) the irregularities in most of the tracks on the system.

The combination of these two factors make it almost impossible to get good even wear on trolley wire, the result being side wear on the wire and hammering at fittings. Excessive side wear greatly reduces the section and hammering at fittings causes crystallisation of the wire thus increasing the danger of "breaks".

Some further points to be considered before deciding to renew trolley wire are as follows:

Location

The location is a very important factor for a number of reasons:

a) if the locality carries dense vehicular and pedestrian traffic the danger of a falling 600 V wire is very grave and could easily result in death, serious injuries or both.

b) in the case of the "City Area" a broken trolley wire could easily mean a long delay to traffic on a number of routes, thus incurring a big lose in revenue and inconvenience to the travelling public.

c) A congested area would impede a tower waggon getting to the seat of the trouble, as well as delaying the crew in making quick progress in repairing the break.

Position of Feeders Relating to Trolley Wire

If the trolley wire has a feeder running parallel with it, or a number of feeder taps at regular intervals the loss of section in trolley wire is not so vital, but if the trolley wire is a stud end feed resulting in a long trolley wire feed, the loss of section would cause a big voltage drop resulting in power losses as well as unsatisfactory operation of Rolling Stock equipment due to low voltage. It could also cause overheating of the trolley wire which would increase the probability of a broken or burnt down wire. The time this is most likely to happen is at "peak period" and the dense city area where we rely on "trolley wire feed" is the most likely locality.

Overall Condition of Wire at Fittings

The condition of the wire at fittings must be closely examined. If the wire has been subjected to excessive wear at the ears, necessitating long chafer plates, and a number of places where the trolley has been "anchored over", it means that additional danger points have been created on the route.

Bad Bays of Trolley Wire

The number of bad bays of trolley wire must be taken into consideration for the following reasons.

If the wire is not renewed, but a number of bays are so bad that new wire would have to be spliced in, the number of bays must be considered, as the price of two splicing ears are equivalent to approx. four-fifths the price of a new bay of wire. This is for the material only and would not include labour charges which would be considerable for each bay. It would therefore not be economical to put many single or double bays of wire in a section, as the remaining wire would only have a comparatively short life and the presence of extra fittings are potential danger points which need extra maintenance; whereas, if new wire was installed throughout the section, it would only need ordinary maintenance.

It can readily be seen that the renewal of trolley wire cannot be decided by measurements at each span alone, but must be taken on general condition of wire, locality, density of service and accessibility. Thus every route must be considered on its own economical merits, for where wire of a certain size would be quite safe to leave on one route, it would not be wise to leave it on another route.

WELLINGTON TRAMWAY MUSEUM

1990 PROJECTS

Presented by Les Stewart, Wellington Tramway Museum

As part of New Zealand's 1990 Celebrations the Wellington Tramway Museum undertook three major projects.

- 1990 Illuminated Tram
- Display of Double Saloon Tram 159 at the Sesqui Carnival
- Conference 1990

I don't need to talk about Conference 1990 at this forum, the fact that you are here speaks for itself. However, I will brief you on the other two to set the scene for the trip to the Museum this afternoon.

1990 Illuminated Tram

Just as was common practice for tramway operators in New Zealand and other parts of the world to celebrate special occasions with decorated and illuminated trams, the Wellington Tramway Museum chose to celebrate 1990 by decorating Wellington Double Saloon Tram 151 with hundreds of coloured lights.

A total of 560 lights were used, 84 on each of the two Kotuku boards, 160 on each of the NEW ZEALAND 1990 roof boards and 18 on each of the four dash boards. In addition to the lights, special 1990 bunting was draped around the tram.

The tram is operated in the evenings approximately once each month. Public response has been limited, although on the days when the tram is promoted over local radio patronage picks up.

In financing the project, the Wellington Tramway Museum acknowledges the assistance of:

- The New Zealand Lottery Board through the New Zealand 1990 Commission
- Fishermans Table Restaurant, Paekakariki
- Beach Road Takeaways, Paekakariki
- Parapine Timber (Paraparaumu) Ltd.
- Horowhenua Electric Power Board



Installing the roof mounted "NEW ZEALAND 1990" lights on tram 151, 1 January 1990.
Photograph: Les Stewart.

Also refer to "1990 Illuminated Tram" page 3 - 18

Double Saloon Tram 159 at the New Zealand Sesqui 1990 Carnival

The New Zealand Sesqui 1990 Carnival was planned to be the major 1990 celebration event in the Wellington region. Its organisers had promoted it as being "a showcase of our own past, our present and our future and a learning experience from others whose nations are older or diverse to ours". Unfortunately, Sesqui did not live up to its promises and closed its doors after only 12 days out of a scheduled 37 day season owing millions of dollars.

However, the Wellington Tramway Museum can look back on the whole sad affair with pride in the professional way it went about putting together a display for Sesqui.

In May 1989 the Sesqui organisers first approached the Museum to enquire whether we would be interested in displaying a tram at the proposed carnival. At this stage they were considering the possibility of organising a "Hall of Transport" in the Overseas Passenger Terminal on the Waterfront and the tram would be one of many old transport exhibits. We were interested and began negotiations with Sesqui.

However, it soon became evident that Sesqui was not really interested in giving away free space and we would be expected to pay the same rental as commercial exhibitors. Rather than give up, we turned our attention to obtaining sponsorship money to cover our costs. I put together an information pack backgrounding our project for Sesqui and sent it out to selected four potential sponsors. Much to our surprise and delight, Mike Flinn and myself secured a deal with Electricorp Marketing within one week of posting out the material.

Meanwhile, Peter Berry was leading a dedicated little team of workers on the renovation of Double Saloon Tram 159. It had sat in the barn untouched since the late 1960's when some restoration work was started but never finished. The roof was recanvassed, side panels replaced, new ceiling panels fitted, interior re-varnished and the exterior sanded down and repainted.

Much of our success in having a professional display ready on time lay in the way we organised ourselves. We deliberately opted for a very small committee of just three - Mike Flinn, Peter Berry and myself. Peter's responsibility was to organise the renovation of 159 and its transport to Sesqui, while I looked after the negotiations with Sesqui and Electricorp Marketing and organised the photographic display to go around the tram. We deliberately left Mike without any special responsibilities. His role was to provide an objective overview to the whole event making sure that Peter and I didn't get lost in the detail.

Naturally, there were many more people involved in the project than just Mike, Peter and myself. Without the entire membership team supporting and assisting the project we would not have made it to Sesqui on time and as planned.



Tram 159 on display at the Sesqui 1990 Carnival, February 1990. *Photograph: Les Stewart.*

Our display received favourable comments from the organisers and members of the public. However, Sesqui failed. Why? There are a number of reasons and many of them will probably never be known. However, our analysis of the situation points to four primary ones.

- **Timing**

  To break even people from all over the lower North Island, not just the Wellington Region, would have had to attend. However, Sesqui was not held during school holidays.

- **Cost**

  Ticket prices were simply too high given the economic conditions and for what the show offered.

- **It didn't deliver what was promised**

  In the lead up to its opening, Sesqui had been promoted as a "mini-expo" but it turned out to be only an up-market Winter Show

- **Lack of Media Backing**

  At some time the organisers must have got off side with the media because the media gave Sesqui very poor coverage in the weeks before opening and when it opened, the media tended to concentrate on the negatives rather than the positives. The Museum had sent its own media releases out when the tram went into the city but not one of the major papers covered the story yet we usually get our stories into one of the papers, even if it is only a small paragraph in the "of interest" columns.

All of these are useful lessons to us all here today. Make sure you never make these sort of mistakes when organising any special event.

It is also important to note that the Museum did not suffer any financial loss as a result of the failure of Sesqui.

Since its return from Sesqui, all the mechanical and electrical equipment on 159 has been checked and overhauled. The re-commissioning of 159 this afternoon marks the end of 12 months of hard work by a small dedicated team of workers. A year ago it was only a dream.

NATIONAL FEDERATION of RAIL SOCIETIES INCORPORATED
NEW ZEALAND

SECTION 3

FIELD TRIPS AND

SOCIAL ACTIVITIES

FIELD TRIPS AND SOCIAL ACTIVITIES

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SPARKS, SPARKS AND SPARKS

TROLLEY BUSES, ELECTRIC LOCOMOTIVES AND A STEAM TRAIN

Introduction

Conference 1990 started a little differently to previous conferences with a day long field trip, rather than commencing immediately with conference meeting sessions. This allowed delegates the opportunity to get to know each other before settling down into more serious discussion over the coming days. The field trip included:

- the Foxton Trolley Bus Museum.
- the North Island Main Trunk Railway electrification depot at Palmerston North.
- a train trip behind an F class 0-6-0 steam locomotive from Palmerston North to Woodville (through the Manawatu Gorge) and return.

Foxton Trolley Bus Museum

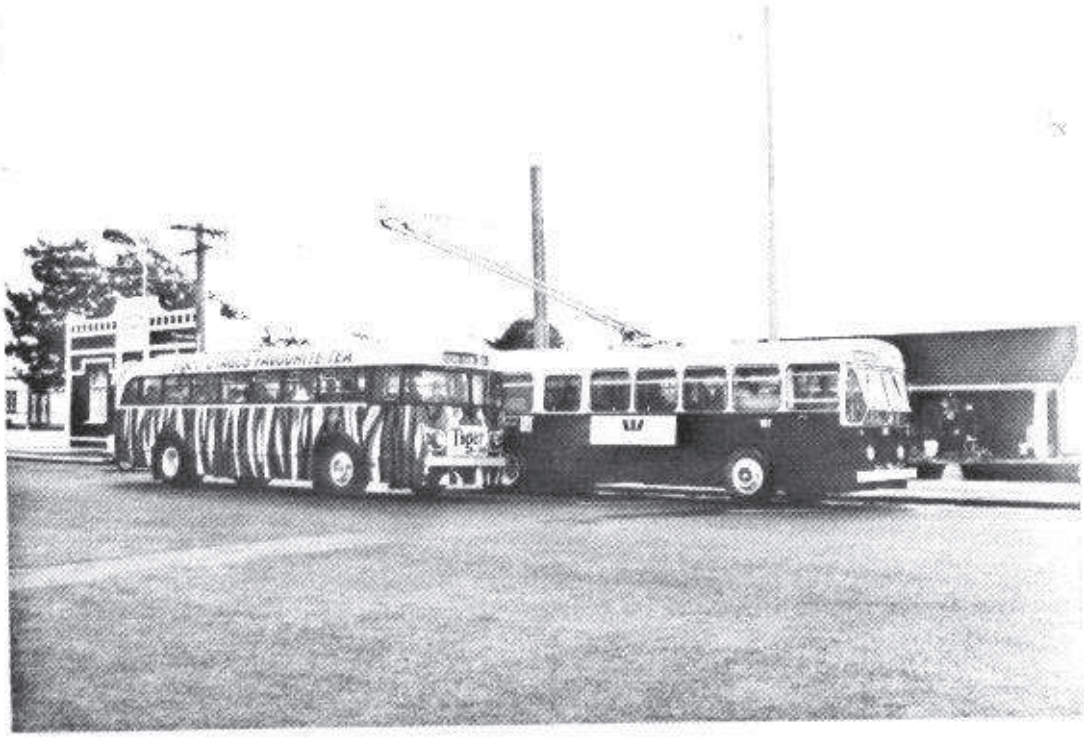
On the way north to Foxton various items of interest were pointed out to visitors by the coach drivers and by local delegates. Of particular interest were Steam Incorporated's Engine Shed on State Highway 1 at Paekakariki, and the Wellington Tramway Museum at McKay's Crossing, Paekakariki. Arriving at Foxton, delegates were delighted at the unusual sight of trolley bus overhead and several trolley buses in the main street of this small provincial town.

The trolley bus museum and line is the work of Ian Little, a dedicated trolley bus enthusiast, who over the years has collected a fleet of trolley buses from Auckland, Wellington and Dunedin. Ian had originally planned to build his working trolley bus museum at Featherston but after encountering many delays moved his endeavours to Foxton where the museum and trolley bus circuit was opened on 17 December 1988.

The trolley bus circuit follows Main Street, turning left into Wharf Street. At the bottom of Wharf Street, the line turns left again on to Harbour Street to follow the Manawatu river until Union Street where the line swings back onto Main Street. The depot building, on a rear section off Main Street, is capable of housing six buses so a number of buses are housed outside and on other sites. Power is supplied from an ex-Wellington trolley bus motor driven by a diesel motor.



Delegates at the depot of the Foxton Trolley Bus Museum. *Photograph: Les Stewart.*



Trolley Buses in the main street of Foxton. *Photograph: Les Stewart.*

After riding the buses around the circuit, inspecting the many other vehicles in storage there and taking advantage of the stop for morning tea, delegates boarded the buses for Palmerston North.

Electric Traction Maintenance Depot, Palmerston North

Palmerston North is the southern terminus of the recently electrified section of the North Island Main Trunk Railway, and the location of the main maintenance depot for the Class 30 electric locomotives which work the line.

The Depot Supervisor addressed the delegates on the salient features of the electrification and delegates were able to look over the Class 30 electric locomotives inside the depot. Although, delegates were free to look around the yard, most declined due to the pouring rain.



The Depot Supervisor addresses delegates at the Electric Traction Depot, Palmerston North. In the background are two Class 30 electric locomotives. *Photograph: Les Stewart.*

The electrification of the North Island Main Trunk was first planned in 1945 but was rejected in favour of diesel electric locomotives. The project was reviewed in 1975 on the basis of using indigenous fuels to generate electricity. Electrification of the 410 km section between Palmerston North and Te Rapa

began in early 1984 and was completed in June 1988. Works covered by the project included:

- Major earthworks to make room for overhead power poles and to ease gradients and curves.
- Lowering the floors of some tunnels and removing other tunnels to make room for the overhead wires.
- Installing a new signalling and communications system suitable for an electric railway.
- Placing underground most power lines and all telephone lines which crossed the railway.

Twenty two Class 30 locomotives were supplied by Brush Electrical Machines Ltd of England. Current is taken from the overhead wire at 25 kv A.C. and on board transformers reduce the voltage before it is converted into controllable D.C. power. The locomotives are fitted with regenerative braking. The key specifications for the locomotives are:

Length over couplings	19,610 mm
Width	2,700 mm
Height over housed pantograph	3,950 mm
Weight	108 tonnes
Axle load	18 tonnes
Continuous power output at rails	3,000 kw (4,000 hp)
Maximum continuous tractive effort	256 kN at 42 kph
Wheel arrangement	Bo Bo Bo

With the completion of the project, travelling time between Auckland and Wellington is now one and a half hours shorter and can be accomplished between two working days giving N.Z.R. a marketing advantage. Trains are now also 50% heavier. These benefits are made possible by the electric locomotives and the easing of curves and gradients as part of the electrification project.

F 163 to Woodville

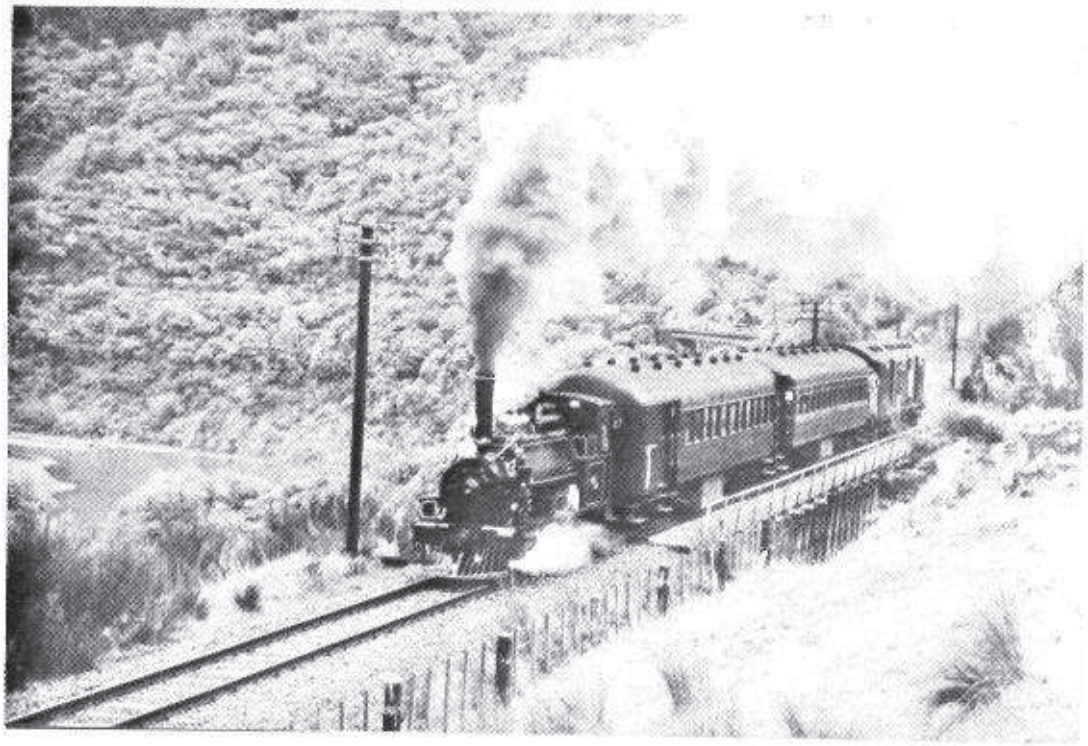
At Palmerston North Railway Station, delegates boarded a train, comprising F 163, two steel sided carriages and a modern FM guards van, for a trip through the Manawatu Gorge to Woodville and back. On board delegates were able to take in the scenery over lunch.

The Manawatu Gorge is a spectacular piece of country and comprises a cut in

the North Island's main dividing range which allows the Manawatu River, which rises on the east of the divide, to flow through to the sea on the west coast. This is thought to be one of the very few, if not the only, instance in the world where this phenomena occurs and is probably the result of earthquake action.

Both road and rail take advantage of this cut to pass through the mountain divide - the road hugging the southern face and rail the northern. The engineering of both is spectacular with bridge structures cantilevered out from the cliffs in places and, in the case of the railway, successive short tunnels.

In the Gorge, the locomotive stopped to take on water from a water tank which has been retained from steam days to provide a water supply in the event of fire in the area. A little further on, in one of the few suitable places, delegates had the opportunity to take photographs and videos of F 163 and the train with a panoramic view of the gorge.



F 163 in the Manawatu Gorge, 2 June 1990. *Photograph: Les Stewart.*

Woodville, the first township beyond the Gorge is a railway junction where one line heads north east to the east coast cities of Hastings, Napier and Gisborne and the other line heads south to Masterton and through the Rimutaka Tunnel to Wellington. Woodville has a large reversing loop so that entire trains arriving

in Woodville from Masterton and the South would not have to reverse in order to head towards Napier. F 163 took advantage of its existence and headed off into the fields and around the reversing loop so that it could be "funnel first" on its return trip.

The weather on the eastern side of the Gorge was much improved with a little sunshine while delegates waited at Woodville for the locomotive to be turned and prepared for the return journey back through the Gorge.

F 163 was built by the Scottish locomotive builders Dubs & Co of Glasgow in 1880, as one of a batch of eleven. In total 88 class "F" locomotives were built - at one stage they formed nearly one-third of all NZR locomotives. They were an extremely successful general purpose locomotive and the last two were not written off until 1964.

THE GREAT DEBATE

"THAT RAILWAYS ARE OVERGROWN TRAMWAYS"

Chairman: Les Stewart

Team for the Affirmative (C.O.T.M.A.)

John Radcliffe (Leader)
Dave Hinman
Lindsay Richardson

Team for the Negative (N.F.R.S.)

Paul Dillicar (Leader)
Russell Paul
Ken Henderson

Introduction:

Mr Stewart introduced the teams and announced he had appointed himself Chairman as, in the absence of a more suitable person, he was the most impartial by virtue of being Treasurer of the NFRS and Secretary of the WTM.

There were no rules except for time which was allotted on the basis of 5 minutes per speaker with a 3 minute summing up by the leaders at the end.

John Radcliffe (Affirmative):

Dr John Radcliffe began by establishing his teams credentials. Everyone knew the affirmative side and all of them had had expertise on tramway and railway matters having indiscriminately flogged equipment from such institutions over the years (laughter from the audience).

He then went on to argue that tramways preceded railways by citing dictionary references as confirmation:

- Tram derives from Traam in Low German
- A wooden road in the 17th and 18th Century

References in the Oxford English Dictionary were also quoted as supporting the view that railways evolved from tramways. The definition of a tramway dated from 1800 whilst that of a railway dated from 1832. Various items of Australian, New Zealand and British legislation were also quoted to emphasise the evolution from tramways to railways.

He also mentioned Benjamin Outtram, a British entrepreneur who produced a wooden mining tramway in the 18th Century.

Dr Radcliffe noted that the first Australian railway, at Victor Harbour in South Australia, was a tramway being established in 1856 and not having steam until 1885. Referring to Sydney, he recalled the more recent use of tramway equipment to get the Eastern Suburbs railway in Sydney into "a fit and wholesome condition" prior to opening.

Dr Radcliffe concluded by saying that railways derived from the earlier definition of tramways and were merely a little larger, "to whit, a little overgrown".

Paul Dillicar (Negative):

Mr Dillicar opened by pondering on where he had first heard of the topic of overgrown tramways and then recollected it was at a subcommittee meeting of the conference organising committee. (Mr Dillicar suggested the topic at the meeting. - Editor). He then tried to recall an overgrown tramway and remembered the Wellington Tramway Museum (WTM), referring to a photograph in a recent issue of Tramway Topics (published by WTM) which showed museum members out on a "tussocking expedition" - clear proof that the tramway was overgrown. It was so overgrown, in fact, that a HORSE!! (the nickname of a WTM member) had to be employed on the track gang (hoots of laughter).

Railways on the other hand were tidy and trim, not at all like tramways!

He then quoted a number of situations where railways were totally different to tramways and asked people to imagine the difficulties, if not the impossibility, of trying to take a full size passenger train up Queen Street in Auckland.

Finally and to conclude his case, Mr Dillicar mentioned the reported exploits (Moscow, 1 October 1989) of a Mr E. Frenkel who was a Soviet psychic healer and mentalist. This man he related, had stopped bicycles, automobiles and

trams to test his powers. But when he tried to stop a train he was killed instantly. Clearly a case of a railway being different to a tramway!

Dave Hinman (Affirmative):

Mr Hinman began his argument by commenting on the appropriateness of the Negative Teams' dress for a tramway subject. Two of that team being dressed in green, which was a common tramway livery, and the third being dressed in a bush singlet so typical of a bush tramway!

He then drew several comparisons between tramways and railways to illustrate that railways were overgrown versions of the former. These included:

Railway gauge in Australia often being larger
Railway mileage normally being greater
Railways being faster, tramways being slower
NZR 30 Class locomotives, which delegates had inspected earlier in the day, being an overgrown tram
NZR electric locomotives at Otira being called trams

Finally, he referred to the NZR light rail proposal for Auckland called a modern tramway in the NZR publicity and asked "what is heavy rail?". The answer, "heavy rail is overgrown light rail!"

Russell Paul (Negative):

Opened by commenting on dress sense being uniforms complete with badges. (He was suitably attired to prove it! Editor).

He then proceeded to argue that there was no similarity between trains and trams, even their purposes were different. Railways were there to cart freight and passengers thousands of miles with the passengers being conveyed in comfort. Trams he argued were clattering, rattling, overgrown electric motors designed to carry a few passengers a short distance in bone-shaking conditions and they frequently caused congestion by getting in the road of other traffic. Trams were often pulled by horses whereas railways had steam power.

Further he contended that tramways were not designed properly when a check rail was necessary for the full length of the line.

Mr Paul then quoted the Guinness Book of Records to show that the longest tramway in the world was of 105 kilometres in length compared to the longest railway (the Trans Siberian) at 9438 kilometres.

Finally he concluded it was a myth that railways were overgrown tramways and stated that "Trams can't take West Coast coal to Lyttleton" to prove it.

At this point the Chairman had to remove the speaker from the rostrum as the allotted time had expired. The Chairman commented that he had allowed the speaker 30 seconds extra at the start for dressing time (Applause).

Lindsay Richardson (Affirmative):

Mr Richardson began by saying the thread of the argument had been lost by the Negative and the fact remained that trams originated in the 18th Century whilst railways dated from 1825. In the intervening years there were a variety of tramways such as mineral, bush and port. In Western Australia tramways were frequently served by railway waggons.

He didn't give much credence to the argument that railways were too heavy to use tramways and cited the example of the East Perth tramway being used by the railway for coal supply purposes. (Interjection from the Negative "Aussies are different!" followed by "Wasn't the tram strong enough?")

Mr Richardson concluded by reiterating that railways are overgrown tramways.

Ken Henderson (Negative):

Mr Henderson requested 30 seconds dressing time to don a cap with an imitation pantograph mounted on top and to carry a rivet counter (abacus) as no self respecting rail fan would be without one.

He indicated he had been delegated to do the serious part of the debate but wanted to know "who the guy was who dreamt up the topic for the debate as he should be punched, clipped, hump-shunted into a round house and retubed?" (laughter) (Mr Henderson was unaware that his own leader dreamt up the subject -Editor). He also noted that he preferred to spend his Saturday nights at Conferences watching 200 slides taken from the back of the Southerner between Ashburton and Timaru (laughter).

Mr Henderson's understanding was also that the word tram came from low German but stated that in the Negative's dictionary r came before t and therefore by extension railway came before tramway. There was also a Latin connection as railway is derived from the Latin regular/rule. This prompted him to suggest that Caesar may have been the first train spotter and that railways had been around a lot longer than tramways.

The initials of COTMA came in for some comment as well. As revealed in his

wife's mirror, COTMA should read AMTOC which is an ancient Mason-like organisation called the "Association of Manic Tram Observers". They even have a secret handshake called a "Dead Man's Handle". In other words these people were closet rail fans.

After a brief spell of comparing trams to mobile billboards and commenting on a tram shown in a church window dating back to 1350 in Freiborg he ran out of time and was escorted from the rostrum.

John Radcliffe (Summing Up for the Affirmative):

Dr Radcliffe referred to the case presented by the Negative as an "overgrown bunch of incredulity" in its attempt to justify that railways had some independent claim to existence.

He then proceeded to restate the evidence for the Affirmative's case.

Referring to developments in the transport sector, he noted that electric trams have lead to trackless trams, and railways have lead to trackless railways and the country is full of them!

Dr Radcliffe concluded the case for the Affirmative by commenting that the issues all support railways as being overgrown tramways and that no case could be made to contradict them.

Paul Dillicar (Summing Up for the Negative):

Mr Dillicar referred back to Frenkel, the Soviet psychic and mentalist, to show that railways could never be overgrown tramways. He considered this to be the ultimate test of powers.

There was also an attempt by him to show that WTM was in fact trying to prove that they were a railway which provoked some mirth.

He considered the case well and truly proved that railways weren't overgrown tramways.

Conclusion:

The Chairman commented on the amount of ill-conceived logic he had heard during the debate (applause) and then asked the audience to vote for a winner by a show of hands. A draw was declared.

RE-COMMISSIONING OF WELLINGTON DOUBLE SALOON TRAM 159

The Era of the Double Saloon Tram

1913 was a year of significant change for Wellington's tramway system. While the Tramways Amendment Act of that year effectively outlawed many of the older cars, September 1913 heralded a whole new era in Wellington tramway design with the introduction of the first of the double saloons. Over the next 22 years 140 double saloon trams were built at the Wellington Corporation Tramways' Newtown and Kilbirnie Workshops. The double saloon was Wellington's standard tram design for this period until the first of the Fiducia class was introduced in 1932.

In their original form, the double saloon tram had two enclosed compartments (called saloons and hence the name), one at each end, and an open centre section. Social custom of the day required gentlemen to sit in the open section, where smoking was allowed, while the saloons at each end were the preserve of the ladies.

There were two series of double saloons. The first series of 69 double saloons were numbered from 92 to 160. The second series, numbered from 161 to 231, had the same basic layout but the ends were given a streamlined effect by incorporating the destination and night signal lights within the roof line.

By the 1930's, the travelling public were demanding greater comfort, so the centre compartments were partially enclosed. Upholstered seats also began to appear about this time in the new double saloons. Doors had previously been added to the driver's platform to afford the tram driver additional protection from the weather.

Technologically, the introduction of the double saloon was significant in that they were the first Wellington trams to be fitted with airbrakes. The first 9 double saloons were known as "Small Airs" being 305mm (1ft) shorter than the remainder known as "Large Airs".

A Brief History of Tram 159

Tram 159 was built at the Newtown Tramway Workshops in 1929. It was withdrawn from service on 30 July 1960 and donated to the Oregon Electric Railway Historical Society by the Wellington City Council. The Oregon group

had plans to ship 159 to the U.S.A. and run it on their museum in Glenwood, Oregon. While shipping arrangements were being made, the Wellington Tramway Museum agreed to store 159. However, high shipping costs eventually forced the Oregon group to abandon its plans for 159 and in 1984 they donated it to the Wellington Tramway Museum. The ownership papers were officially handed to the Museum at the 1984 COTMA Conference in Auckland by guest speaker Mr Jim Walker on behalf of the Oregon Electric Railway Historical Society.

Although some work was carried out on 159 in the late 60's and early 70's, 159 sat idle until May 1989 when the Museum began planning a display at the Sesqui 1990 Carnival (refer "Wellington Tramway Museum 1990 Projects - Double Saloon Tram 159 at the New Zealand Sesqui 1990 Carnival" page 2 - 57). Over two thousand hours of work over a nine month period renovating 159 for Sesqui 1990 and a further 500 hours of work were spent making it operational in the three months after Sesqui.



Tram 159 under restoration in November 1989. *Photograph: Les Stewart.*

The Re-Commissioning Ceremony

Monday 4 June 1990 was a red letter day for the Wellington Tramway Museum - the re-commissioning of Wellington Double Saloon tram no. 159. The weather was fine and mild and by 1.30 p.m. Museum members, their families

and friends, and the COTMA delegates from Conference 1990 were assembled around the departure platform.

Wellington Tramway Museum President, Mike Flinn, opened the proceedings extending a warm welcome to everyone present. Mr Flinn spoke briefly about the double saloon tram and in particular No. 159 outlining the events leading to todays ceremony. He thanked museum members for their efforts on the project, noting the exceptional efforts of Peter Berry. Electricorp Marketing received special thanks for their sponsorship which made it all possible.

Mr Flinn then introduced the Hon. Margaret Shields, MP for Kapiti. Mrs Shields spoke about the museum and its importance to the Kapiti Coast. In particular, she recalled the pleasure of taking her grand children for a tram ride at the Museum.

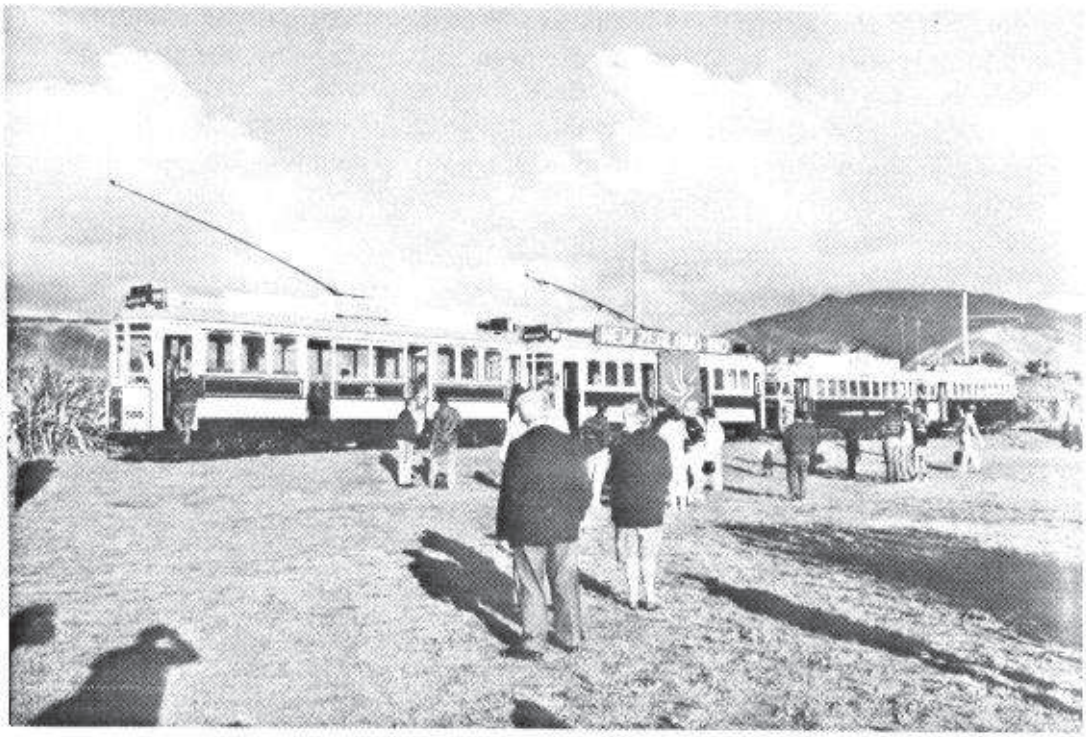
Mr Doug Heffernan, National Manager, Electricity Wholesale, then spoke about Electricorp Marketing's role in the project and their pleasure in being able to assist the Museum. Of particular interest to the assembled crowd, Mr Heffernan spoke positively of the resurgence of electric tramways around the world.



Mr Heffernan, at the controls of 159, during the re-commissioning ceremony, 4 June 1990.
Photograph: Stuart Harper.

At the close of Mr Heffernan's speech the tram barn doors were opened and 159, driven by Peter Berry, glided out of the barn and into view. Mr Heffernan then boarded the tram and under the watchful eye of Mr Berry drove 159 through a white tape across the track. Invited guests, Museum members and friends then boarded the tram for a trip to the beach with Mr Heffernan at the controls.

On arrival at the beach, everyone alighted and waited for trams 151, 239 and 238 to arrive making it the first time four trams were to be seen at the beach. After returning to the barn, afternoon tea was served and tram 159 provided free return trips to the beach for the remainder of the afternoon.



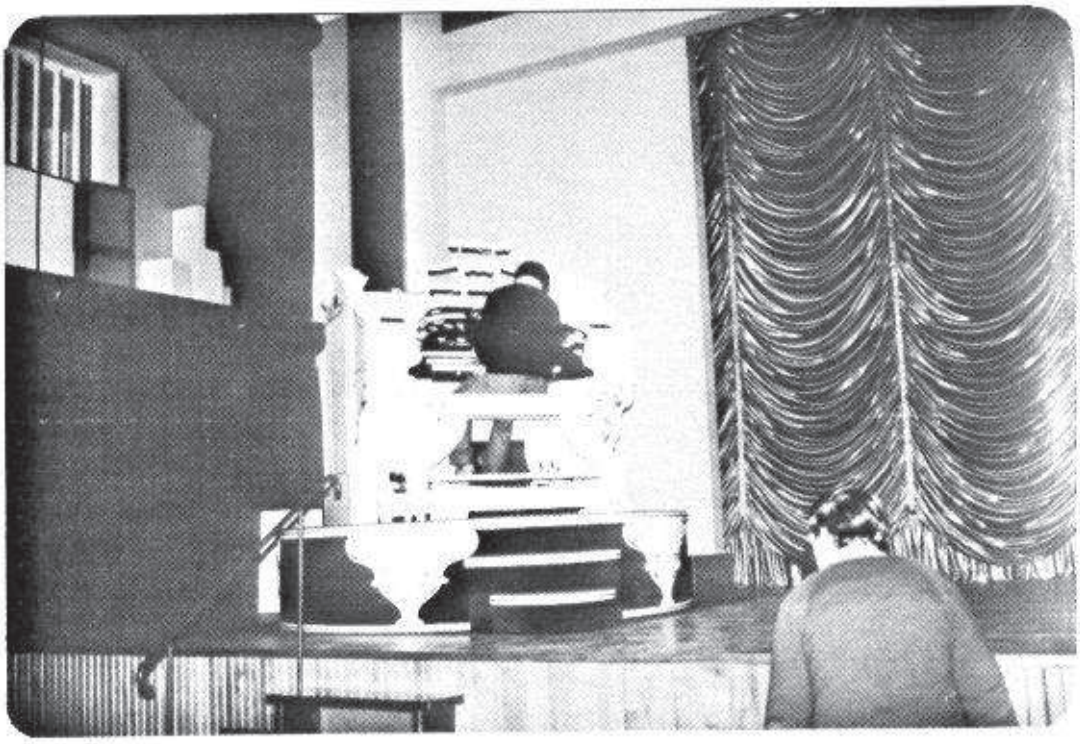
The four trams at the beach terminus, 4 June 1990. *Photograph: Les Stewart.*

SOUTHWARDS CAR MUSEUM

After the successful re-commissioning of Double Saloon Tram 159, COTMA delegates and were transported to the Southwards Car Museum at Otaihanga just north of Paraparaumu by Peter Berry's vintage Thornycroft bus. Those that couldn't fit on the bus followed by car.

Wurlitzer Theatre Organ

In the theatre attached to the museum is a Wurlitzer theatre organ which has been fully restored. The organ console even rises from below the stage and rotates as it would have done in the days of the silent movies. The capabilities of the Wurlizter Organ were ably demonstrated to the delegates by the local baptist minister who is one of a number of local people who give the regular recitals.



The Wurlitzer theatre organ at Southwards Car Museum. *Photograph: Les Stewart.*

The Car Collection

The world class collection of over 167 cars of different ages and styles has been assembled over many years by Sir Len Southward.

What makes this collection different from so many museum collections is its diversity. It is more than vintage and veteran cars. There are cars that can still be seen on the streets today such as Minis and Morris Minors and there are the unusual such as the car that belonged to Al Capone the American gangster with bullet proof glass the thickness of a matchbox lengthwise.

Cars are not the only items on display. There is a traction engine, a few aircraft and Sir Len's "Redhead" motor racing boat. Also on display is the Kapiti Coast Model Railway Club layout which keeps children, young and old, amused.

To round off the visit to Southwards Car museum, dinner was held upstairs on the mezzanine floor overlooking the collection of cars and other items.

1990 ILLUMINATED TRAM

After dinner at Southwards Car Museum, delegates returned to the Wellington Tramway Museum for a couple of hours of night time tram riding. This gave delegates the opportunity to experience and photograph the 1990 Illuminated Tram.

This 1990 Official Project is described in *Section 3 - Conference Workshops* in the paper *Wellington Tramway Museum 1990 Projects*. At the time of the Conference 1990 the 4 illuminated dash boards and the special 1990 bunting had still to be fitted. Nevertheless, 488 lights made an impressive display.



Delegates prepare to board the 1990 Illuminated Tram, 4 June 1990. *Photograph: Les Stewart.*

Also refer to "Wellington Tramway Museum Projects - 1990 Illuminated Tram" page 2 - 55.

THE ROYAL NEW ZEALAND POLICE COLLEGE MUSEUM

Introduction

On Tuesday 5th June, conference delegates received a guided tour through the Royal New Zealand Police College Museum. It was an opportunity to study various display techniques used by the curator and his staff and to view another aspect of New Zealand's history, depicting both the pleasant and darker side of society.

The Pubic Museum.

The primary purpose of the Police Museum is to collect and conserve items of evidence from a range of crimes for use in police training. However, the Police recognised the interest the general public have in their work and have developed a series of excellent static displays on a wide range of themes including the history of law enforcement in New Zealand, the modes of transport, and the tools and technologies used by the Police in solving crimes.

One of the most significant aspects of police work is the education of the public in aspects of crime prevention and social order and the New Zealand police have undertaken this task for many years and a special youth aid section have had officers going into schools and working with teachers to assist children in the development of acceptable social skills and attitudes. One of the displays is devoted to this feature of the work of the police in this country.

For many years now, the police in New Zealand have provided police services to our major ports, Auckland and Wellington in particular are ports with special Wharf police units who are equipped with special resources for maritime policing and rescue work such as launches. However, this has its sombre note with the going down of the Lady Elizabeth II in 1988 at the entrance to Wellington Harbour during a particularly atrocious southerly storm when some of the crew lost their lives.

One of the high profile services in police work is the dog handling section who with their canine counterparts are instrumental in the solving of crimes, particularly in the area of seeking out those who have left the scene of a crime or in search and rescue work in which the police are very active and often the first service to be called on when human life is at risk or a disaster strikes.

All around the world a career in an organisation such as the Police has a certain amount of public expectation attached to it and this can be very demanding and from time to time police officers deal with some rather unpleasant and dangerous situations that they meet in the course of their duty such as the dangers of protecting members of the community from the dastardly deeds that are committed by some people in our society, and the dedication to duty of some officers in times of disaster such as when the Wahine went down in Wellington Harbour at Easter time in 1968 to name but one.

Police forces all over the world have rewarded their staff for acts of bravery, long service and many other notable feats. The New Zealand Police Department is no exception to this and an excellent series of displays tells the stories of the many brave and dedicated officers that have served in the New Zealand Police both men and women.

One of the success stories of New Zealand Police work was the investigation of the Rainbow Warrior affair and this incident is the subject of one of the most recent displays at the museum where pieces of torn and twisted metal about 25mm thick are displayed. This provides a good illustration of the magnitude of the explosive device used by the French secret service (DSG).

Not all of the crimes that have been committed over the years could be classified as sordid or of a debased nature, from time to time some of the laws of the country have extorted some people to continue their activities undercover or illegally such as the whisky stills of the famous Hokonui area in Southland. As one enters the museum the first exhibit is a very well presented display of a "Hokonui Still" complete with cobwebs, verdigris, borer and a drip of the demon stuff coming out of the tap on the condenser. Apart from the objective of the exhibit, one could not help but appreciate the ingenuity that has gone into such an effort in fact the same could be said for all of the exhibits and as museum devotees, we couldn't help but feel inspired by this excellent standard of presentation.

The Non-Public Collection

One of the moral dilemmas constantly faced by the curator and his staff is what should be publicly displayed and what should be kept behind closed doors. While there is intense public interest in some of the more notorious crimes, the Police must be careful not to provide would be criminals with information on how to commit crimes or display items which may offend some sectors of the community.

Delegates were given a rare view of some of the exhibits kept out of the public view including a range of suicide machines, and weapons used in murders and vicious assaults. Sometimes this view depicted a rather lamentable and

disquieting aspect of society and in particular some of the unsavoury characters who have committed crimes in New Zealand in the distant and near past.

Besides providing a resource for Police training, it is not uncommon for people to visit the museum when researching information for historical books and films because crimes, as a rule, are very accurately documented.

WELLINGTON'S TROLLEY BUSES AND CABLE CAR

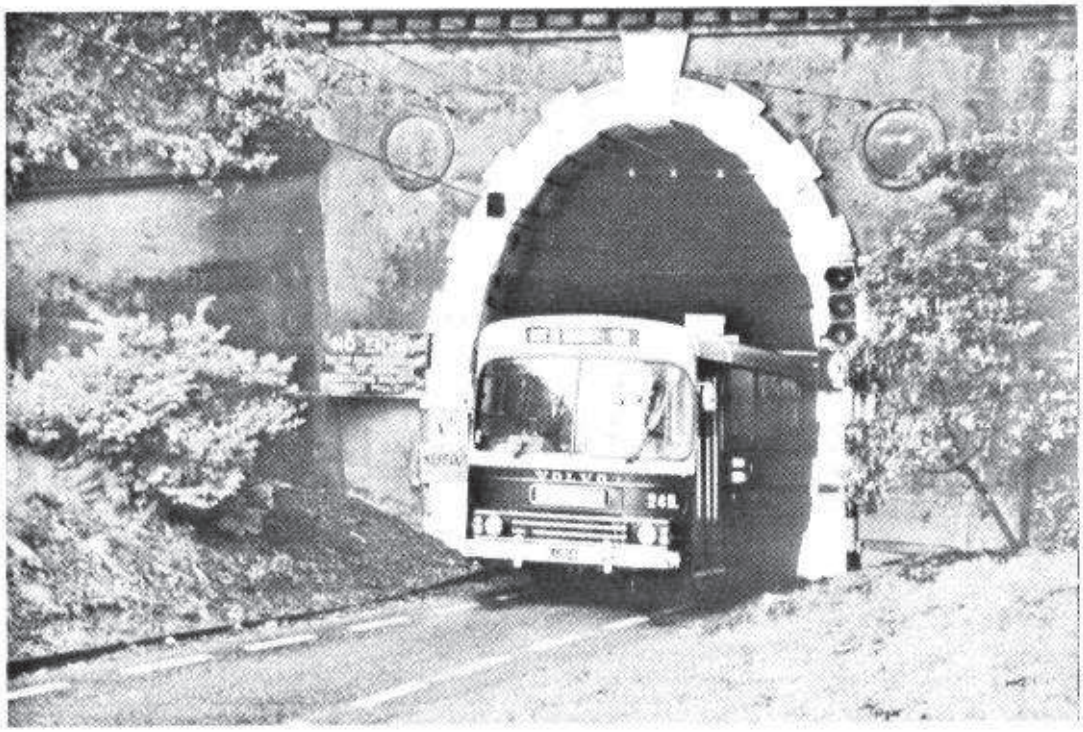
Introduction

Wellington has the last trolley bus system in Australasia so delegates took advantage of being in Wellington to tour the trolley bus system. Organised by the Omnibus Society, the tour took in all routes still operating and some wire in the central city used as non-service by-passes.

Volvo trolley bus no. 249 and Ansaldo trolley bus no. 133 were used for the morning portion of the tour while, in the afternoon, Wellington City Transport's two vintage trolley buses, B.U.T.'s nos. 39 and 88, were used.

The Volvo Trolley Buses

A total of sixty eight Volvo trolley buses were purchased by Wellington City Council, entering service between 1981 and 1986.



Volvo trolley bus 249 emerging from the Haitatai bus tunnel. *Photograph: Les Stewart.*

The Volvo trolley buses have a Hawke Coachwork body on a Volvo B58 chassis with Brown Boveri electrical equipment. Controls are fully electronic, the drivers foot pedal operates electronic logic circuits which control the D.C. choppers. The braking system combines air operated wheel brakes with a Thelma electro-magnetic retarder.

The introduction of the Volvos had its fair share of problems for Wellington City Transport. Overly high noise levels delayed the first one from entering service for six months while some design problems were rectified. Further problems occurred when Dalhoff and King, the N.Z. contractor supplying and assembling the chassis, went into liquidation. Eventually, Wellington City Transport and Hawke Coachwork joined together to complete the first batch of 33 trolley buses (nos. 201 to 233) by December 1983. A second series of 35 buses (nos 234 to 268) were introduced with some minor design modifications between 1984 and 1986.

The Ansaldo Trolley Buses.

The twenty Ansaldo trolley buses in the Wellington City Transport fleet were commissioned in 1984.



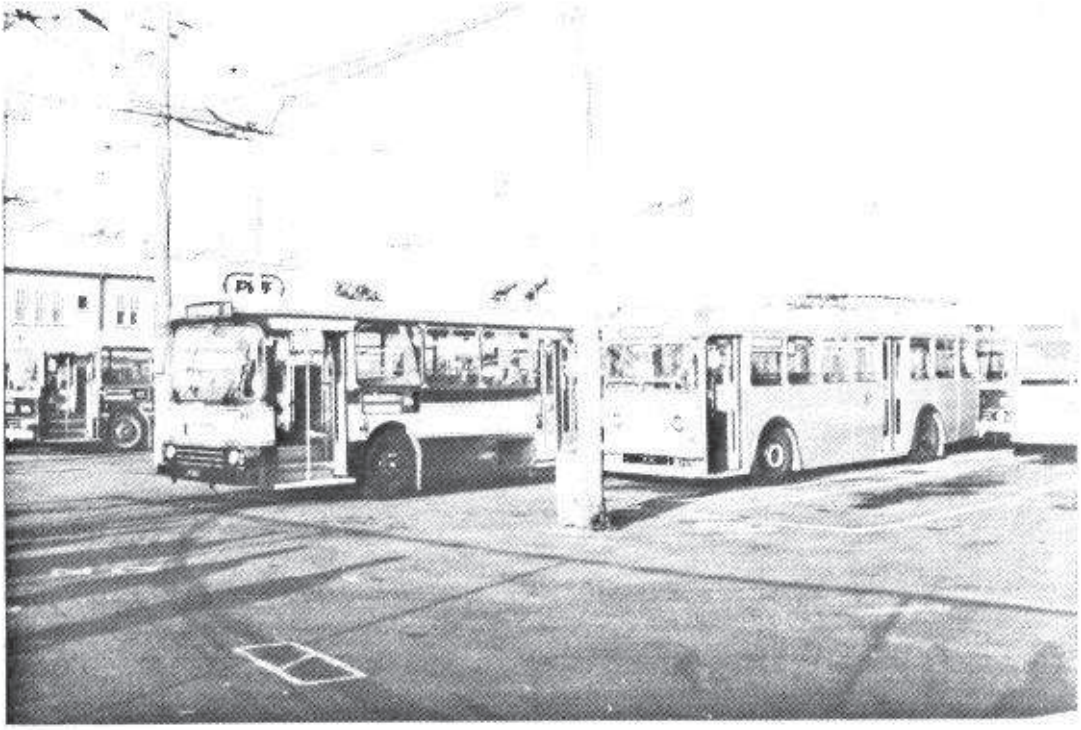
Ansaldo trolley bus 133 at the Kingston Terminus. *Photograph: Les Stewart.*

In the early 1980's Auckland decided to rebuild its trolley bus system and placed an order for 20 trolley buses. The local body elections in 1983 resulted in a in substantial changes in the membership of the Auckland Regional Authority. The new Authority reversed the decision to purchase the trolley buses and 20 partially completed trolley buses were on the market. Wellington was able to negotiate a favourable deal with Auckland and purchase the buses.

The Ansaldos have a New Zealand Motor Bodies *Hess* body on a Volvo B10M chassis and the electrical equipment is Ansaldo. A hybrid electronic/rheostatic control system is used where the drivers pedal activates electronic logic circuits which control electro-magnetic contactors. Braking is achieved through a combination of electronically controlled rheostatic traction motor braking and air operated wheel brakes.

B.U.T Trolley Bus No 39

Trolley bus no. 39 was one of 38 trolley buses supplied between 1951 and 1956 as part of the City Council's trams to buses conversion programme.



Silver Ghost trolley bus 39 (with poles down) at the Kilbirnie Bus Depot.
Photograph: Bryce Pender.

Leyland Motors supplied the British United Traction (BUT) E.T.B./1 chassis and the lightweight all metal body was supplied prefabricated by Commonwealth Engineering Co. Ltd. of Australia. The buses were assembled by the Council's workshops at Kilbirnie and by New Zealand Motor Bodies.

No. 39 is painted in the original silver livery of the Wellington trolley buses. As a result of this colour and their silent operation the early trolley buses came to be known as the "Silver Ghosts".

Motive power is supplied by a Metropolitan Vickers 125 bhp motor and control systems are rheostatic. The driver's foot pedal operates a master controller which is regulated by a hydraulic damper to give "notchless" acceleration and braking. Braking is achieved through a combination of rheostatic traction motor braking and air operated wheel brakes.

B.U.T. Trolley Bus No. 88

Ordered in 1961, Trolley bus no 88 was one of the last batch of 38 trolley buses purchased to replace the trams. They entered service in 1964, the year the trams finished.



Trolley bus 88 on the opening day of the No. 11 trolley bus route, 23 February 1985.
Photograph: Les Stewart.

As with no. 39, Leyland Motors supplied the B.U.T. RETB/2 chassis but the electrics were by English Electric. The control equipment is of a similar type to that of no. 39. The first 19 of this series (of which no. 88 is one) were imported fully built up with the bodies built by Metropolitan Cammell Weyman.

The bodies of the last 19 were built by New Zealand Motor Bodies.
During the mid 1980's no. 88 received a major overhaul as a trial to test the viability of extending the economic life of the aging trolley fleet.
Unfortunately, the programme did not proceed further and the old buses were eventually withdrawn. No. 88 and No. 39 have been retained by Wellington City Transport as part of their vintage collection.

Wellington Cable Car

Early in the tour, delegates rode Wellington's famous Cable Car.

The cable car service began on 22 February 1902. It was built and operated by the Kelburne Karori Tramway Company to provide rapid and frequent transport to the new housing estates being developed by the company in Kelburn and Karori.

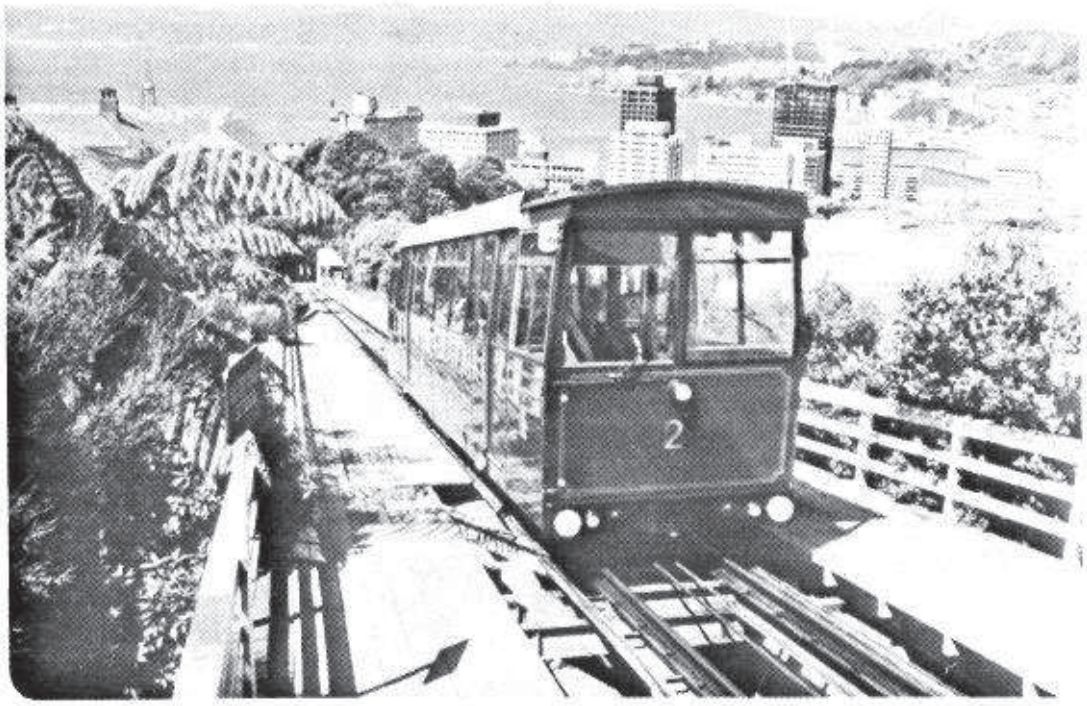
The two original cable cars, connected by a balance rope, travelled on separate parallel tracks. Starting and stopping the cable car was controlled by gripping a second moving cable in the traditional cable car manner. As demand grew trailers, which were converted horse trams, were added to each car. The winding gear was originally steam driven but this was converted to electricity in 1933. In 1946, the cable car was purchased by the City Council.

Unfortunately, in 1976 safety requirements meant that the system either had to undergo major upgrading or be replaced. The Council decided that a new cable car system was the best option and the old cable cars stopped running in September 1978.

The new cable car, built by Habeggar AG of Switzerland began operations in October 1979. It is a standing funicular which operates on the driven balance rope system. The two cars are at either end of a single rope which is driven by an electric motor.

Running on a single track with a passing loop at Talavera Station, each car has double flanged wheels on one side and flat (non-flanged) wheels on the other. This arrangement avoids the need for points as the double flanged wheels always follow the outer track ensuring the car always takes the same leg of the passing loop. The driving and braking mechanisms are electronically controlled and are fully automatic except that the drivers control the doors and the starting of the cars.

The line is 610 metres long rising 120 metres from Lambton Quay through three tunnels and over three viaducts at an average gradient of 1 in 5.06.



Wellington's new Cable Car commissioned in 1978. *Photograph: Les Stewart.*

At the Kelburn cable car terminus, delegates had the opportunity to inspect the winding gear in operation. The original winding house is still standing and to the surprise and delight of everyone, the original winding gear is still intact.

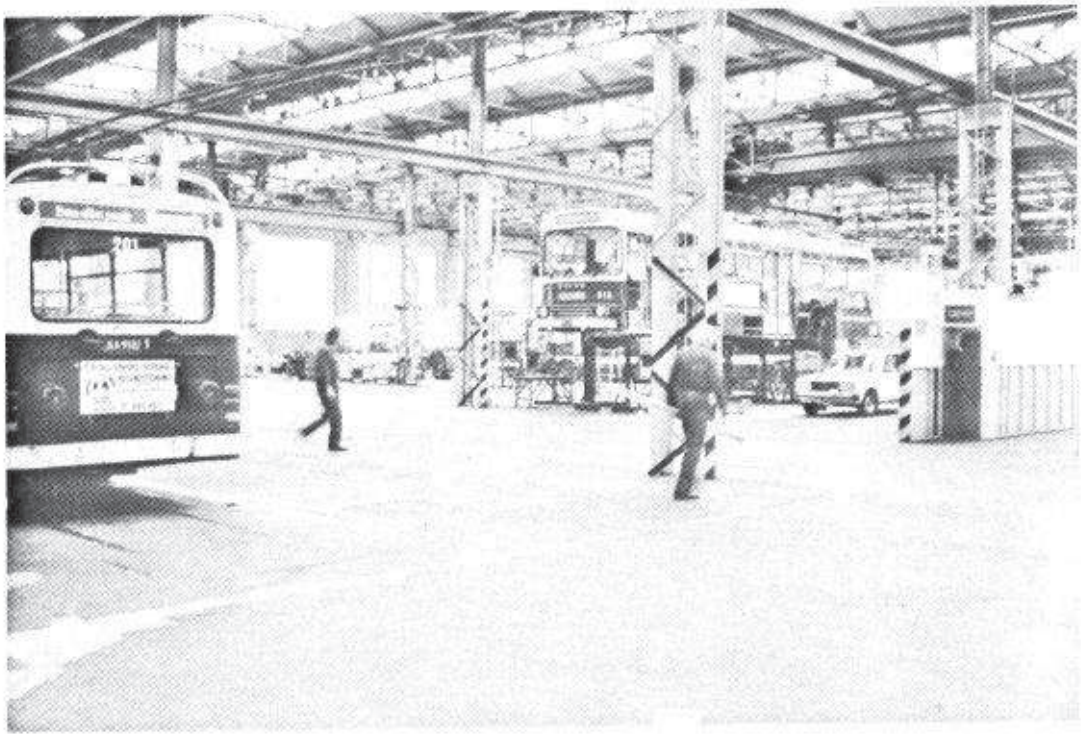
Kilbirnie Bus Depot and Workshops

After lunch the tour stopped at the Kilbirnie Bus Depot and Workshops where delegates had the opportunity to look through the workshops.

The workshops were built in the 1920's to service the growing needs of Wellington's tramway system. Many of Wellington's Double Saloon trams, all the Fiducia trams and, later, many of the trolley and diesel buses were built here. There are still signs of the tramway days with tram rails embedded in the floor in a number of places.

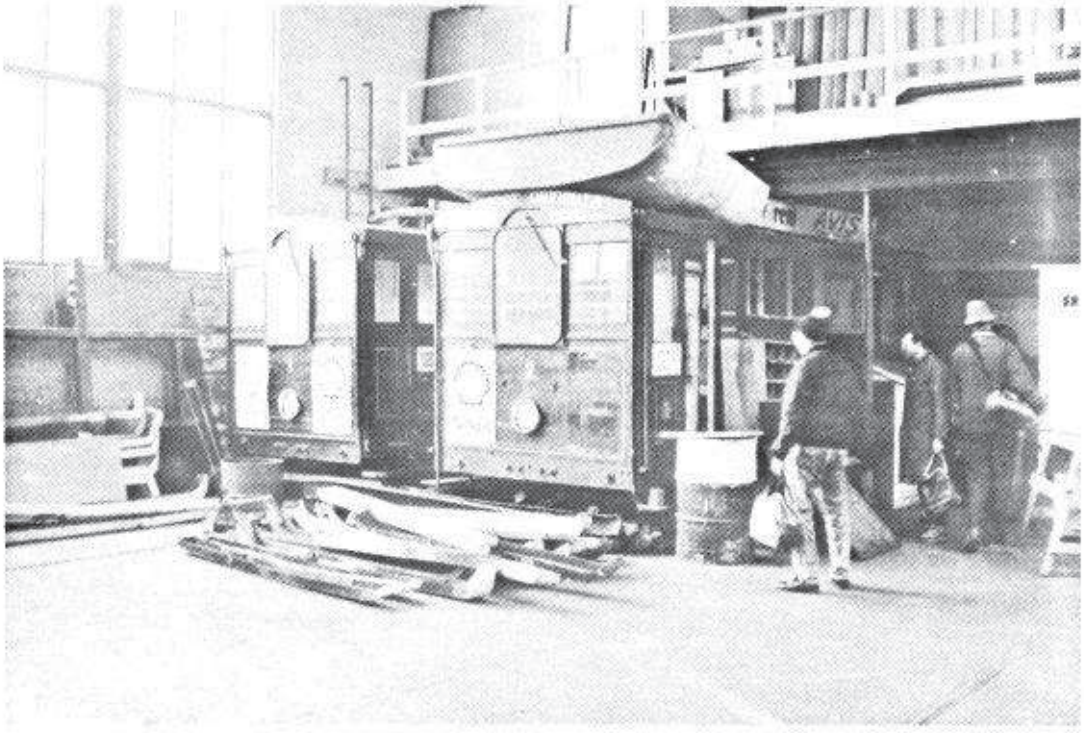
Wellington City Transport's entire bus fleet, both trolley and diesel, are maintained and serviced at Kilbirnie. A full range of specialist facilities are

available including body and paint shops, pits, hoists and the normal array of workshop machinery. The Kilbirnie Workshops also doubles as an operating depot and the yard is full with buses each night.



Trolley buses being serviced at the Kilbirnie Workshops. *Photograph: Les Stewart.*

A pleasant surprise for the out of town tramway enthusiasts was the sight of two of the original grip cars from the Kelburn Cable Car stored in one corner of the workshops. The grip cars are being stored until they can be permanently displayed. One of them is earmarked for display at the Wellington Tramway Museum.



Delegates inspect two of the original Kelburn Cable Cars awaiting permanent display. *Photograph: Les Stewart.*

SECTION 4

COUNCIL OF TRAMWAY MUSEUMS OF AUSTRALASIA

ANNUAL GENERAL MEETING

COUNCIL OF TRAMWAY MUSEUMS OF AUSTRALASIA

ANNUAL GENERAL MEETING

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COUNCIL OF TRAMWAY MUSEUMS OF AUSTRALASIA

DIRECTORY

Officers:

Chairman:	Dr John C Radcliffe
Executive Officer:	Mr Bill Kingsley
Treasurer	Ms Carolyn Dean

Member Organisations as at 1 June 1990:

Australian Electric Transport Museum (South Australia) Inc.
Box 2012, GPO, Adelaide, South Australia 5001
(Museum: St Kilda Road, St Kilda, SA)

Ballarat Tramway Preservation Society
Box 632, Ballarat, Victoria 3353
(Museum: Wendouree Parade, Ballarat, Victoria)

Bendigo Trust,
80 Creek Street, Bendigo, Victoria 3550
(Museum: Hargreaves Street, Bendigo, Victoria)

Brisbane Tramway Museum Society
20 Tramway Street, Ferny Grove, Brisbane, Queensland 4055

Maitland Tramway Park and Museum Ltd,
Box 82, Jesmond, New South Wales 2299

Melbourne Tramcar Preservation Association Inc
Box 324, Prahan, Victoria 3181
(Museum: Haddon, Victoria)

Museum of Transport and Technology (Inc.)
Great North Road, Western Springs, Auckland 2, NZ

Perth Electric Tramway Society (Inc).
Box 257, Mt Lawley, Western Australia 6050
(Museum: Whiteman Park, Perth, WA)

South Pacific Electric Railway Co-operative Society Ltd
Box 103, GPO, Sydney, New South Wales 2001
(Museum: Princes Highway, Loftus, NSW)

Steam Tramway and Railway Preservation (Co-op) Society Ltd
Box 108, Kogarah, New South Wales 2217
(Museum: Parramatta Park, Parramatta NSW)

Tramway Historical Society Incorporated
Box 1126, Christchurch, New Zealand
(Museum: Ferrymead Historic Park, Christchurch, N.Z.)

Tramway Museum Society of Victoria Inc
Box 27, Malvern, Victoria 3144
(Museum: Union Lane, Bylands, Victoria

Tasmanian Transport Museum Society Incorporated
Box 867J, GPO, Hobart, Tasmania 7001
(Museum: Anfield Street, Glenorchy, Tas)

Wellington Tramway Museum Incorporated
Box 2612, Wellington, New Zealand
(Museum: Queen Elizabeth Park, Paekakariki, N.Z.)

Council Address:

51 Lenna Street, East Burwood, Victoria 3150

CHAIRMAN'S REPORT 1990

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

Previous Meeting

The previous meeting of the Council of Tramway Museums of Australasia was held in Sydney on 5 September 1988.

Membership

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

Office Bearers

At the last meeting of the Council, Mr Bill Kingsley was re-elected as Executive Officer. A new position of Spare Parts and Uniforms Officer was created in lieu of the previous position of Assistant Executive Officer, and Mr Keith Kings has capably filled that position over the past two years, facilitating the acquisition and transfer of spare parts to various museum groups. Mr Lindsay Richardson and Mr David Hinman were respectively elected as the Australian and New Zealand Executive Members and have participated in a number of policy discussions during that period. Ms Carolyn Dean was elected Treasurer and has reconstructed the Council's accounts during the past two years and brought them onto a more convenient format. Mr Robert Paroissien was once again re-elected as Auditor.

Communications

Seven memoranda were issued during 1988-90, one more than in the previous two year period. Whilst the primary function of the memoranda has continued to be to deal with the availability of surplus equipment from Metropolitan Transit Authority of Victoria, including the final disposal of the W2 class cars, the Executive Officer has also introduced a wider range of topics into memoranda including notes on movement of both museum and transit personnel and also news items regarding changes in various city systems and various

historical developments.

COTMA Office Bearers have continued to visit constituent museums in the past two years. Executive Officer, Bill Kingsley, has travelled widely throughout Australia and New Zealand and has visited most museums in that period. I have had the opportunity of visiting museums in Sydney, Bylands, Hobart, Perth and Adelaide. I have also been fortunate to inspect a number of overseas museums in that period including museums in Brussels, Amsterdam, Paris, Frankfurt, Britain (Crich), Minneapolis and Fort Collins. I must particularly pay tribute to the hospitality which I was afforded as a representative of the Australasian tramway museums at each of the overseas museums that I have visited. It has been a pleasure to reciprocate that hospitality when the opportunity has arisen.

The Executive Officer has had a number of meetings with staff of the Metropolitan Transit Authority of Victoria and with the new staff following its incorporation into the Public Transport Corporation. There have been many changes in personnel and responsibilities within the Melbourne transit system over the past twelve months, and many of the officers with whom we previously conducted business on behalf of the museums have moved to other appointments. However, Executive Officer, Bill Kingsley, has been quietly working to establish contacts among the new appointees to ensure the continuation of the effective communications at appropriate levels of the Melbourne system on behalf of all museum groups.

Equipment

Constituent museums have continued to share cars and equipment becoming available from the Melbourne tramway system. A number of minor items becoming available as a result of the refurbishment programme in Adelaide have also been made available to other museum groups. Over the past two years, Melbourne has continued to invite tenders for the disposal of withdrawn trams, but in general terms museums have not been disadvantaged by this process and have generally secured the cars which they have required. However, a number of disposals of trams have been without motors in order that the GE 247 motors which are used in the more modern W5 and later types can be retained. This has meant that on a number of occasions, museums have been faced with a possibility of securing cars which are no longer complete and in working order. Nevertheless, through negotiations with the authorities in Melbourne most vehicles have been supplied in working order. Some museums have also chosen to seek damaged vehicles as a source of spare parts.

The only significant problem which arose over the two year period was that concerning the provision of car 426 to the Perth Electric Tramway Society. This was received in Perth in a somewhat disappointing condition and the Executive Officer has been to very considerable trouble to resolve the

difficulties thus created and to provide additional equipment which would enable the car to be restored to an effective operation. Three final W2 class cars have recently been offered to COTMA museums, being cars 647, 568 and 646. These are anticipated to be the last release of cars of this type for museum purposes.

It has been necessary in recent years to store a considerable quantity of equipment on the premises of the Tramway Museum Society of Victoria at Bylands on behalf of COTMA. Spare Parts Officer Keith Kings has been gradually cataloguing and arranging for the disposal of this material and a number of consignments have now been forwarded to constituent museums, the largest of which was a full container load of assorted equipment to PETS in Perth.

At the 1986 Conference, museums were invited to lodge a deposit of $200 each to help with capitalising COTMA to allow spare parts acquisitions to be made at short notice. A number of museums subsequently arranged such contributions, and this made possible additional items to be obtained. However, the overall financial condition of the organisation remains under-capitalised.

Statement of Understanding

Delegates will recall that a draft "Statement of Understanding" was formally agreed between the Council and the then Metropolitan Transit Authority of Victoria following the 1986 Adelaide Conference. The principles embodied in this statement have generally continued to operate effectively over the past two years, but on several occasions, COTMA has been embarrassed by representatives of one or two museums seeking to conduct their business directly with Melbourne authorities. This is clearly in contravention of the wishes of those authorities and of the commitments given by the respective museums to COTMA itself. It does not reflect well on the credibility of the Council, nor on the constituent museums who have attempted to deal directly with the Melbourne authorities. I must also say that it has been quite disturbing to find in at least one occasion, negotiations were carried out in the name of a museum group without any formal knowledge of the Executive Committee of that body. I entreat all constituent museums to ensure that their administrative procedures are conducted in full compliance of the "Statement of Understanding".

Constitution

It will be recalled that incorporation was initiated at the 1986 Adelaide meeting. It is of considerable concern to both the Executive Officer and myself that our efforts to obtain a final draft of the Constitution are successful. I believe that it is most desirable that we press on with this development as soon as possible.

Transport Heritage Developments

Since the time of the last Conference, there have been a number of interesting developments in the field of transport heritage as represented by the COTMA affiliated museums.

The South Pacific Electric Railway Co-operative Society Ltd has introduced San Francisco PCC car number 1014 to regular traffic. Trolley bus 19 was returned from the Chullora Railway workshops to Loftus on 10 December 1988. The final tramcar transport from the old Royal National Park site to the new Loftus facility was completed on 13 May 1989, completing a process which has dominated the members of the Sydney Tramway Museum over the past five years. A heritage grant was received for the restoration of R1 class car 1971, and reconstruction of the railway square waiting shed is now well advanced.

The Ballarat Tramway Preservation Society covered new ground when it returned its former Melbourne W3 class car 661 to operate over Melbourne tracks again in April-May 1989. Restoration of its Stevenson horsecar is also advancing. The Kilmore Tramway of the Tramway Museum Society of Victoria was recommissioned with cable dummy operation from 18 December 1988, with the electrical operations into Bylands depot also being commissioned from the same date using W1 type car 427 which had been restored by the Metropolitan Transit Authority of Victoria.

Brisbane was able to continue its programme of restoration works in association with the Brisbane City Council, and FM class car 429 returned to the Ferny Grove Museum of the Brisbane Tramway Museum Society on 1 November 1988 where final fitting out was to be undertaken.

The Bendigo Trust introduced the operation of W2 class cars when Victoria's sesquicentenary decorated car number 441 was introduced into traffic from 29 November 1988. It commissioned 441, 470 and 275 as "Talking Trams" and has 421 and 450 stored awaiting attention. The Bendigo Trust has also continued to assemble an interesting collection of older Bendigo vehicles including number 7 of the original Bendigo electric fleet, and steam tram trailer no 2 (ex battery tram no. 3).

The Australian Electric Transport Museum at St Kilda, South Australia, had its new display building formally opened by the Premier of South Australia, the Honourable John Bannon, on 12 March 1989, three days beyond the 80th anniversary of the formal opening of Adelaide's electric tramway system. At the same time, C type car 186 was also inaugurated on the St Kilda line. AEC motorbus number 623 of the type which replaced the trams, had also been restored by apprentices at the STA Regency Park Workshops and transferred to St Kilda. In addition, the title to F1 type car 264, which had been restored in a joint project with the State Transport Authority as a Jubilee 150 project in 1986,

was formally transferred to the AETM in 1990, thereby completing a proposal which had its origins in the second COTMA Conference held in Sydney in 1976.

The Perth Electric Tramway Society has continued to upgrade its tracks at Whiteman Park and has now completed a new storage shed to provide effective conservation for a number of cars awaiting future restoration. Limited tram passenger carrying has commenced at Rutherford by the Maitland Tramway and Museum.

In New Zealand, the Wellington Tramway Museum opened a long sought extension to the beach at Paekakariki on 10 December 1988. The Tramway Historical Society in Christchurch has recently completed a depot expansion to house additional vehicles, and completed the formal opening of its electrical substation which is an impressive display facility but also a very necessary functional adjunct to its operations. The New Zealand Electrical Institute provided major support to this project. In addition, the title to motor buses 290 and 452, horse tram 43 and Kitson steam tram 7 were transferred to the Tramway Historical Society. The Museum of Transport and Technology in Auckland has continued with a substantial programme to maintain the vehicles which it operates on its external museum line and has also been planning extensions beyond the Auckland Zoo.

There have been a number of additional tramway heritage developments. The creation of Australasia's first operating museum trolley bus route at Foxton in New Zealand has been accomplished by the Ian Little Trust. A collection of five tramway stamps has been issued by Australia Post with advice drawn from museum representatives in Brisbane, Sydney, Melbourne, Hobart and Adelaide and featuring examples of cars represented in those respective museums. In Canberra, the Canberra Tradesman's Union Club built a number of additional cars into its premises including two Sydney R class cars (1819 and 1806), and a Sydney C class car (37) and an Adelaide H type car (356) bringing to a total of at least ten trams now contributing to the ambience of the club.

The proposals for an electric tramway as part of the Museum of Australia in Canberra have been deferred for the time being as the construction of the project has been put on hold until the year 2000. However, the museum itself continues to function and has developed a modest collection of various artefacts, some of which have been loaned out to other museums. Proposals for down-town museum tramway operation have again surfaced, most recently in Sydney, Brisbane, Adelaide, Wellington and Christchurch.

Regular Tramway Museum operations have continued throughout the two years under review in Perth, Adelaide, Ballarat, Bendigo, Bylands, Sydney (Loftus and Paramatta Park), Brisbane, Auckland, Christchurch and Wellington. No significant traffic accidents were recorded on COTMA Museums in the two year

period, although a recent accident in Sydney with an historic steam locomotive-drawn tourist train is of concern to operators in the museum community.

Operating Urban Tramway Systems

The two remaining public tramway systems have maintained their positions in their respective cities. In Melbourne, planning for extensions of light rail lines over heavy suburban electric railway rights-of-way has continued. New articulated cars have been added to the fleet. However a major change to the operation of Melbourne's tramway system in late 1989 through the introduction of a new ticketing system and the introduction of one-man operated trams resulted in a major industrial dispute which led to some three hundred cars being parked for over one month in Melbourne streets with the suspension of all electrical services - a scenario which did little to improve the image of public transport to that city. In Adelaide, refurbishment of the sixty year old H type cars continues quite slowly, with one additional car being completed during the two year period (357). The first of these refurbished cars is now stopped. Three additional cars are now at Regency Park Workshops undergoing refurbishment (369, 378 and 364). One of these cars is currently destined to become a restaurant tram. Tracks have been removed from outside the former city depot and in a bizarre development, the running sheds are to be converted into a series of temporary court rooms with the Victoria Square facade building serving as a public waiting area while some adjacent colonial court buildings are completely reconstructed. The ultimate redevelopment of the site has been deferred for the time being.

Passing of Early Supporters

It is my melancholy duty to note the passing of a number of individuals who supported the early developments of tramway preservation in Australia and New Zealand. Mr J F Fardell, former General Manager of the Christchurch Transport Board and who lent encouragement to the formation of the Tramway Historical Society at Ferrymead, Mr Saul Goldsmith, who was active in Wellington civic affairs and for five years President of the Wellington Tramway Museum, and Mr F Dudley Snell, formerly Chairman of the Melbourne and Metropolitan Tramway Board and a supporter of museum developments in Victoria, have all passed on during the two years since our last conference. We owe each of them recognition and gratitude for their encouragement in their respective cities.

Future

Most of our museums have now been operating for a considerable time. The

Sydney Tramway Museum will, within a matter of a couple of weeks be celebrating the fortieth anniversary of the acquisition of L/P class type car 154 which denoted the commencement of tramway preservation in Australasia. Many other groups have passed their silver jubilee. It is noteworthy that although these enterprises now receive widespread public recognition, they still depend to a considerable degree on the initiative and management of their founders. Transfer of responsibility to a new generation will become increasingly important as the years go by.

Acknowledgements

Ms Carolyn Dean has served as Honorary Treasurer over the past two years and Mr R G Paroissien has continued as Honorary Auditor. Bill Kingsley and Keith Kings have continued to provide strong commitment and skill to their respective roles, which they have severally and together performed since the establishment of the Council in 1975. I express on your behalf our appreciation to them for carrying out the major part of the work involved in running this organisation.

I would once again like to acknowledge the help received from officers of the various urban transit authorities in Australia and New Zealand - in many cases being provided at a time of considerable change within their respective organisations.

Finally, we must again recognise the contribution which individual members of all of our constituent members make to the successful continued development and operation of our respective museums which now have responsibility for the conservation of 252 historic tramcars within Australasia.

John C Radcliffe OAM
CHAIRMAN

4 June 1990

EXECUTIVE OFFICER'S REPORT

It certainly does not feel like two years since we were sharing in Sydney. The time has gone so quickly. COTMA has achieved much but there is still much to do. The completion of one task is merely the opportunity to start another.

A great joy in this work is to be part of a team which stretches beyond museum, state and national boundaries. To work with John Radcliffe (AETM), David Hinman (THS) and Lindsay Richardson (PETS) as the Executive is to be part of a smooth, efficient operation. Then there is that bigger team out there, those who pitch in and help whenever I need them. To Richard Gilbert, Warran Doubleday, Peter Winspur, Gavin Young, Rolf Jinks, Allan Bradley, Dave McCartney (all from BTPS), Andy Hall and Tony Sell from TMSV, Les Stewart and his Conference team (WTM), Mick Hearn (BT), Craig Tooke (MTPA), Dick Jones, David Rawlings, Bob Merchant (all SPER), Hugh Waldron (AETA), Warren Burt (AETM), Peter Hyde (BTMS) and those I may have missed, a very eager thank you for your real and appreciated involvement.

There is yet another team since the last Conference and one of which I am very proud. When we elected Carolyn Dean to be our new Treasurer, we won the service of more than just a Treasurer, for Carolyn is a most effective financial manager and controller. Keith Kings has slipped easily into his new role as Spare Parts and Uniforms Officer and has renewed some of the good work that he was previously doing as Executive Officer. The marvellous thing is that Carolyn (BTPS), Keith (TMSV) and I (BT) live within very easy access of each other. This has enabled many meetings (formal and informal) to take place and the outstanding results of this can be seen both in our Financial Report and in the stocks of parts now arriving in many museums. Robert Paroissien assists us as Auditor and also continues to be a great help to us.

But much of this would be useless without the great co-operation of our friends at the MET in Melbourne. During these two years there have been many management changes at the MET. Kevin Shea and Keith Allender have moved to other fields and Allan Nolan has been relocated. To these three folk especially go our greatest thanks for their tremendous help to us. Mark Edwards has remained where we need him and Neville Woolnough is our new contact at Workshops. At this time I am enjoying new negotiations within the MET towards a completely revamped system for the acquisition of obsolete trams. When this system is officially authorised I will have great joy in sharing with you the identities of our new supporters within the MET.

Let me also thank the TMSV for our continued use of their facilities by Bylands for storage.

Without doubt, the greatest joy of being Executive Officer is to visit the museums, meet the people and experience the operations. I have been moved by your sincere welcomes and tremendous hospitality. These two years I travelled wider than usual, to the lateral extremes of our COTMA world. To Lindsay Richardson (PETS), Dave Hinman (THS), Les Stewart (WTM) and Ian Stewart (MOTAT), and to all my new friends at your museums, can I say thanks for your trust and confidence, for some unforgettable and wonderful experiences, and for allowing me to be part of your team for the brevity of my visit.

However, this work is not without its dark side. The most regrettable task of these two years was to try and find the truth behind the substituted trucks under PETS' SW2 426 and to know that the whole unfortunate saga was due to false information provided at the very first instance at our Sydney Conference. The other regrettable task is to chase up museums who have promised but not delivered precious parts to other museums. As museums, why can't we all co-operate better with each other?

As I move about the museums, one aspect that worries me greatly is the ageing of our work force versus the increasing task being generated by expanded facilities and operations. There is very little young talent coming on. Our minds and bodies will not always be sufficiently nimble to support our enthusiasm. Without young people to take over from us the future is frightening. There is a crunch time coming. I know that Chairman John shares this concern. We need to give it some urgent attention now. Our future is not working beside us.

I guess that the hardest aspect of being your Executive Officer is to find time to do everything. In 1988 I took long service leave from Footscray TAFE on half pay so that I could spend three weeks continuously at my COTMA desk. Although effective, this proved to be financially undesirable personally. So in 1990 I decided to have my long overdue operation on my left knee just so that I could catch up with COTMA desk work during the recuperation period at home - full pay. This was a much better trick. I think the other knee must need an operation about now! In 1991 I look forward to the best trick of all. It is known as retirement. Although I am coping (just) with the current demands of COTMA, I have this vision for better procedures, for further work which can be developed, for new horizons, all for the betterment of COTMA museums. My retirement from teaching will enable me to give to COTMA the real attention

that it truly deserves. Not only that, but one needs a real focus in retirement, and for me I hope that COTMA can be it. So my wish is that you will see fit to keep me in this role so that I can at last give to it the full justice that you deserve.

Bill Kingsley
Executive Officer

27 May 1990

ADDENDUM

Tasks Completed 1988 - 1990

B Van delivered to Bylands (with Andy Hall)
W2 and SW2 trams successfully tendered from the MET to MTP&M, BT and TMSV
Tramcar beading from MET to MTPA
Lifeguards and linebreakers for C 186 to AETM (from Tony Smith)
Liaise with John Shanks re TMSV parts to THS and WTM
Advise BTMS re availability of mercury arc rectifiers
Move truck frames, trestles, parts galore from MET to Bylands (organised by KSK)
Correct and confirm Minutes of 8th General Meeting from Dick Jones
KSK represented COTMA at Ken Hesse's Civic Reception
Visit New Zealand, THS, WTM and MOTAT
Follow up on Keith Allender's promotion
Solve problem with IATM fees (they had misfiled our 1987 contribution)
Memorandums 53 - 57 plus other notices
Co-ordinate tenders for W5 trams from MET (bodies)
Follow up on SPER members pleas for W2 456
Prepare list of societies, groups, publications etc
Assist Bendigo in planning, advertising W2/SW2 tour day
Liaise Andy Hall/MET/Jim Johnson re trucks to PETS
Advice to BT re windscreen wipers

Overhead frogs from MET to PETS (with Gavin Young)
Investigate and report on reported switch of trucks under SW2's 426 and 432.
Collect destination boxes from MET (with Hugh Waldron) and transfer to Bylands
Collect more parts from MET (Joe Gauchi, Kew Depot) and transfer to KSK
Initiate purchase of telephone boxes from MET for MTPA
Develop prototype COTMA membership card
Prepare list of Australasia's oldest trams for BT
Convene Membership Fee Working Party (with Carolyn Dean and Richard Gilbert)
Convene Conference Tour Meeting (same folk) and type Richard's brochure
Liaise with MET re pole collars for MTPA
Organise Bendigo T-shirts for resale at THS
Share timetable suggestions from WTM with BT
Discuss Conference with WTM
Establish new contacts with MET
Hobart bus colour info to Allan Chambers via THS (from Don Lange TTMS)
VR rail deck bridge plans to David Hinman and THS
Investigate the dyeing of uniforms for THS
Advise MTPA re articles in 'Sparks'
Organise pit details from Warren Doubleday (BTPS) to WTM
Warren Doubleday also contributed to Victorian Legal and Constitutional Committee enquiry on our behalf
Organise advice from Rolf Jinks (BTPS) - earthquake bridge damage for MTP&M
Provide advice to MTP&M - development matters at Rutherford
Represent COTMA at various functions
Information for PETS on points and turnouts
Try to encourage movement of parts from SPER to MTPA and from TMSV to several museums
Liaise on problems caused by the application by a museum member direct to MET for a tram
Investigation solutions to problems of different wheel sizes at PETS
Visit most Australian museums
Assistance towards driver training for PETS and PTP&M (Peter Winspur MTPS)
Etc.

Tasks in Hand

Conference Proceedings from SPER
Tramcar fleet update
Update museums and contact information
Electrical rules
Needs for wheels, axles, trucks, especially 21E type

Tower wagon for BT
Patterns (Allan Bradley BTPS)
Sale of spare parts and uniforms (KSK)
Sundry tasks for PETS from MET - includes more frogs, drawings, parts etc
Need for cable tram dollies
Listing of manuals etc.
Co-ordinating applications for obsolete trams being offered by MET
W2 mirrors for MOTAT
Reciprocal visits between museums
Incorporation and the new Constitution (with Tony Sell TMSV)
Bundy clocks still awaiting distribution (from Tony Smith)
Negotiations with MET towards new system for procuring obsolete trams
Cloth badge information to PETS
Traction series light bulbs
Safety valves for BTPS
Etc.

Continuing Tasks

Liaison with MET
Items for Trolley Wire
Liaison with IATM
Co-ordinating the ever increasing COTMA team
Co-ordinating the acquisition of obsolete trams from the MET
Etc.

TREASURER'S REPORT

It is with extreme pleasure that I can inform you that the COTMA accounts have recorded a profit for the first time since March 1987.

The sizeable profit is due mainly to the sale of spare parts and uniforms and the catching up with Memberships falling due in their current year plus late renewals.

The year 1988-89 saw the beginning of the sale of uniforms and the catching up on memberships.

1989-90 was a much better year where the sale of spare parts and uniforms increased quite dramatically due to a superb effort by Keith Kings, COTMA Spare Parts and Uniforms Officer.

Membership fees were increased slightly and procedures were updated in the Treasurer's department. Some museums had still not renewed at 31/3/90. It is disappointing to note that some museums leave it late to renew.

It is still hoped that in the near future we can commence repaying the member's loan and the contributors to the Acquisition Fund.

I would like to thank Bill Kingsley and Keith Kings for all their help during the last two years.

Carolyn Dean
Treasurer

5 June 1990

COUNCIL OF TRAMWAY MUSEUMS OF AUSTRALASIA

ANNUAL ACCOUNTS FOR YEAR ENDED 31 MARCH 1989

AUDITOR'S REPORT

In my opinion the accompanying Balance Sheet as at 31st March, 1989 and the Income and Expenditure Statement for the year ended 31st March, 1989 are properly drawn up to give a true and fair view of the affairs of the Council of Tramway Museums of Australasia.

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

30th June 1989

BALANCE SHEET
AS AT 31ST MARCH 1989

1988 $				
	COUNCIL FUNDS			
736	Accumulated Fund			562
1200	Acquisition Fund			1200
$1936				$1762
	THESE FUNDS ARE REPRESENTED BY:-			
	Current Assets			
387	Australia & New Zealand Banking Group Ltd.		627	
640	Members Subscriptions in Arrears		-	
1909	Stock on Hand (at cost)		1458	
2936				2085
	Less Current Liabilities			
-	Creditors		676	
1000	Members Loans (at call)		1000	
1000				1676
1936	Working Capital			409
	Plus Non Current Assets			
1800	Electrical Former (at cost)	1800		
(1800)	Less Government Grant	1800	-	
-	Storage Van (at cost)	1408		
-	Less Provision for Depreciation	55	1353	
-				1353
$1936				$1762

COUNCIL FUNDS

FOR YEAR ENDED 31ST MARCH, 1989

1988 $		
	ACCUMULATED FUND	
745	Balance brought forward 1st April 1988	736
(9)	Less (Deficit) for Year	(174)
$ 736	Balance carried forward 31st March 1989	$ 562
	ACQUISITION FUND	
800	Balance brought forward 1st April 1988	1200
400	Plus Members Deposits	-
$1200	Balance carried forward 31st March 1989	$1200

INCOME & EXPENDITURE ACCOUNT
FOR YEAR ENDED 31ST MARCH 1989

1988 $			
	Income		
640	Members Subscriptions	517	
55	Interest Received	27	
150	Sale of Equipment	461	
-	Tram Tour	411	
845			1416
	Less Expenses		
38	Affiliated Memberships	43	
2	Bank Charges Duties	5	
-	Depreciation	55	
361	Postage & Telephone	162	
152	Printing & Stationery	300	
150	Purchase of Equipment	461	
-	Tram Tour	412	
151	Travelling Expenses	152	
854			1590
($9)	(Deficit) for Year		($174)

COUNCIL OF TRAMWAY MUSEUMS OF AUSTRALASIA

ANNUAL ACCOUNTS FOR YEAR ENDED 31 MARCH 1990

AUDITOR'S REPORT

In my opinion the accompanying Balance Sheet as at 31st March, 1990 and the Income and Expenditure Statement for the year ended 31st March, 1990 are properly drawn up to give a true and fair view of the affairs of the Council of Tramway Museums of Australasia.

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

15th May 1990

BALANCE SHEET

AS AT 31ST MARCH 1990

1989 $				
	COUNCIL FUNDS			
562	Accumulated Fund			3442
1200	Acquisition Fund			1200
$1762				$4642
	THESE FUNDS ARE REPRESENTED BY:-			
	Current Assets			
627	Australia & New Zealand Banking Group Ltd.		1526	
-	Debtors		234	
-	Members Subscriptions in Arrears		315	
1458	Stock on Hand (at cost)		2372	
2085				4447
	Less Current Liabilities			
676	Creditors		297	
1000	Members Loans (at call)		1000	
1676				1297
409	Working Capital			3150
	Plus Non Current Assets			
1800	Electrical Former (at cost)	1800		
1800	Less Government Grant	1800	-	
1408	Storage Van (at cost)	1688		
(55)	Less Provision for Depreciation	196	1492	
1353				1492
$1762				$4642

COUNCIL FUNDS

FOR YEAR ENDED 31ST MARCH, 1990

1989 $		
	ACCUMULATED FUND	
736	Balance brought forward 1st April 1989	562
-	Plus Surplus for Year	2880
(174)	Less (Deficit) for Year	-
$ 562	Balance carried forward 31st March 1990	$3442
	ACQUISITION FUND	
1200	Balance brought forward 1st April 1989	1200
-	Plus Members Deposits	-
$1200	Balance carried forward 31st March 1990	$1200

INCOME & EXPENDITURE ACCOUNT

FOR YEAR ENDED 31ST MARCH 1990

1989 $			
	Income		
517	Members Subscriptions	1425	
27	Interest Received	10	
461	Sale of Equipment	2930	
411	Tram Tour	-	
1416			4365
	Less Expenses		
43	Affiliated Memberships	140	
5	Bank Charges Duties	6	
55	Depreciation	141	
162	Postage & Telephone	644	
300	Printing & Stationery	182	
461	Purchase of Equipment	372	
412	Tram Tour	-	
152	Travelling Expenses	-	
1590			1485
($174)	Surplus/(Deficit) for Year)		$2880

COTMA UNIFORMS AND SPARE PARTS OFFICER'S REPORT

The sale of items in these two groups commenced nearly two years ago. The main results have been achieved in the uniforms section and virtually all sales have been to Adelaide and Melbourne. Spares parts sales have started and are gathering momentum. Orders placed by several Societies over the years are being assembled and two have been completed, with two more in hand. The request at the last conference for all Societies to lodge their Carrier/Agent/ Customs Agents names and addresses with the writer has had the attention of only one Society.

A total of 1,403 items were received from the Melbourne Tramways in the "Brown Uniforms" category and 298 items have been sold to 31/3/90, for $2,233.00, thus well covering the purchase price of $1,000.00. Some items will never be sold, particularly very large or small sizes, or those with excessive quantities. The whole of the tramways left-over stock was offered to us on an "all or none" basis. The obvious chance was too good to miss. Even at our modest prices the potential value is considerable, even though it will never be achieved. The cost of spare parts to date is $2,425.69, with sales at $1,290.00. All will never be sold, but it is expected that the cost will be covered in the next few months. Thus the profits from Uniforms and Parts are now providing us with "working capital" on hand to be a reserve against future events.

Keith Kings
COTMA Uniforms and Spare Parts Officer

5 June 1990

TROLLEY WIRE REPORT

Publisher: *South Pacific Electric Railway Co-operative Society Ltd.,*
Box 103,
GPO, Sydney,
New South Wales 2001,
Australia.

The production of Trolley Wire over the last 21 months has been far from smooth, with a number of problems arising for the production team to solve. A brief outline of its production may be in order here.

The text is photoset from a computer disc prepared and supplied by the editor. The computer on which it is produced was purchased from our printer, Meulen Graphics, at a very reasonable price and, although not IBM compatible, is adequate for the purpose at present. It was, in fact, used by John Meulen to transfer the previously-supplied typewritten text to disc.

The supplied text and the photographs to be used are laid out in page order and the completed sheets and photos returned to John Meulen. John then completed the final layout incorporating any corrections or additional text required, had the colour separations and plates made, and printed, collated and stapled the magazine.

In January 1988, John retired from printing but continued to provide text and layout work for selected clients, including Trolley Wire. The actual platemaking and printing were sub-contracted out.

In November 1989 the printing of the magazine was taken over by a firm which had handled Meulen Graphics' overflow work some years previously. This firm, we shall call it Henry's, handled the reproduction of the colour and black and white photos supplied with excellent results. The price was very competitive and enabled us to hold our prices at the current level. A change of paper to that used by Henry was made in February 1989 and contributed to the favourable price. We later discovered that Henry specialised in magazines which are not available over the counter or sold to those under 18 years of age! It did, however, explain to some extent the excellent reproduction of our photographs, particularly the colour prints reproduced in black and white.

In February 1989 issue of Trolley Wire was the first in which colour was used on the inside pages. In this instance the cost of this additional colour work was donated by a SPER member.

About mid-year John Meulen moved to Canberra but offered to continue to prepare Trolley Wire for us if required.

Henry, however, offered to do the whole job for us at a price slightly less than the combined Meulen Graphics/Henry price. The August 1989 issue was to be his first but after delivering our disc to him we heard no more. He became totally uncontactable, despite phone messages being left and visits to his office. His office girl, the only staff on the premises, was very helpful but did not, at that time, know how to contact him. His home phone was not answered and a visit there disclosed that he had moved residence.

An emergency call to John Meulen in Canberra brought results and John produced text and completed layout in a short time. The editor worked until the early hours of the morning to complete the layout and prepare photos. John's son, David, who runs a printing business in Sydney's far western suburbs, printed the magazine for us. A surprise for us was the colour photo on page 45 of that issue. It had been provided at no cost to us - a gift from our printer.

David Meulen offered to print Trolley Wire for a cost matching Henry's, an offer which we accepted. There has been a loss of clarity and some muddiness in the reproduction of the photos and this problem has been discussed with David. We hope some improvement will result from this.

Colour was again used inside the magazine in the November 1989 issue. This included a full page map which, we were told, did create some problems with colour registration. We will, however, continue with colour inside the magazine whenever possible.

At the 1988 Conference, I reported that no articles from Ken McCarthy were on hand. Ken has since rectified this with no less than five articles. These will complete his long-running Manly and Newcastle steam series, among other things. It is pleasing to report that a number of smaller articles from readers are also on hand. It is a situation the editor hopes will continue!

Thanks are also expressed to Bill Scott who has provided the editor with articles which have appeared in six of the seven issues. It should be mentioned here that the coverage given to last October's tramway stamp issue delighted Australia Post and copies were sent to most of their regional offices.

Special mention must be made of the museum correspondents who continue to provide news and photographs of their museum's work and special events. Their efforts are very much appreciated.

As this report was being completed, a phone call was received from John Meulen saying that the layout for the May 1990 issue had just arrived. It had taken just eleven days to go from Sydney to Canberra. Needless to say we are now looking for a more reliable, but not too expensive, way to send our work to John instead of using the postal service. And there goes our chance to have the May issue in your hands before the end of May.

Oh, well, we can but try .....

R I Merchant
Editor, Trolley Wire

5th June 1990

TRAMWAY TOPICS REPORT

Publisher: *Wellington Tramway Museum Inc.,*
P.O. Box 2612,
Wellington,
New Zealand.

Tramway Topics has continued to be published at two monthly intervals, although production problems have led to a few issues being published later than was desirable.

As mentioned in the 1988 report, having one printer complete the entire job from making plates etc to stapling and trimming has resulted in much neater and tidier publication.

However, since writing those words costs have risen considerably especially in printing, postage (concession rates for publications disappeared in September 1989) and Goods and Services Tax (GST) rose from 10% to 12.5%. With all these extra costs mounting up we are looking at various options for producing the magazine at a lower unit cost but at the same time maintaining a similar standard, but inevitably there may have to be an increase in the subscription rate. The result of this is issue No. 1 1990 which has been produced using a new photocopying process, excluding the cover. Provided the photographs used are of a good clear sharp quality there is no reason why we should not continue with this method.

We have not been successful with seeking advertisers for the magazine, probably due to having a circulation of approximately 450 copies per issue. If delegates know of potential advertisers we would be pleased to provide rates etc.

Bruce Maffey continued to edit the magazine along with Richard Cannemeyer assisting up until May 1989 when Bruce left on an overseas trip for about a year. Richard then continued to edit the magazine assisted by Bradley Knewstubb for a few months and Bradley has been editing the last few issues. A special commemorative issue has been produced for the conference with a copy for each delegate. This issue was edited by Keith McGavin. We are pleased Alan Smith (a previous editor) will be assuming the position of editor from June and we look forward to the benefits of his knowledge and expertise.

As for the future we must increase the circulation to help produce a lower unit cost and the possibility is being looked at of desk-top publishing which will produce a better quality print and more evenly spaced margins.

Finally a word of thanks to the editors in Christchurch who have done a tremendous job in editing the magazine. It is not an easy job to gather material and put out a publication on a regular basis. Also thanks to the group of Wellington people who turn up to envelope and dispatch the magazine to subscribers. To everyone associated with Tramway Topics thanks as without your assistance there would be no magazine.

Richard Gray
Tramway Topics Co-ordinator

5 June 1990

MINUTES OF THE NINTH GENERAL MEETING OF THE COUNCIL OF TRAMWAY MUSEUMS OF AUSTRALASIA

Place: The Royal New Zealand Police College, Porirua, New Zealand

Date: Tuesday 5th June 1990

The meeting was declared open by the Chairman, Dr John Radcliffe, at 8.45 a.m.

Present:

Officers - John Radcliffe (Chairman), Bill Kingsley (Executive Officer), Carolyn Dean (Treasurer).
Delegates - Chris Andrews (AETM), Richard Gilbert (BTPS), Peter Hyde (BTMS), Keith Kings (BT), Craig Tooke (MTPA), Ian Stewart (MOTAT), Jack Nyman (MTP&M), Lindsay Richardson (PETS), Richard Jones (SPER), David Hinman (THS), Len Millar (TMSV), Les Stewart (WTM)

Apologies:

Apologies were received from the Steam Tram and Railway Preservation Society, Tasmanian Transport Museum Society, Rockhampton Purrey Steam Tram Group.

Observers:

A motion for the admission of the observers present from the various affiliated societies was moved by Len Millar and seconded by Richard Jones.

Carried

MINUTES OF THE PREVIOUS GENERAL MEETING

It was moved, C. Tooke (MTPA) and seconded L. Richardson (PETS),

> "that the minutes of the eighth General Meeting (Sydney, 1988) be accepted and confirmed as a true and accurate record of that meeting."

Carried

MATTERS ARISING

Proceedings

Les Stewart indicated that he hoped to have the proceedings of this Conference published before Christmas 1990.

Minutes

It is intended to forward minutes of this meeting as soon as possible.

Controllers

There was a discussion on Controllers with THS wanting a K10 and four K6's. It was agreed that the Executive Officer would publish details of controllers required if details are forwarded to him.

Statement of Purposes and Rules

The Executive Officer presented COTMA's proposed "Statement of Purposes and Rules" as drawn up by Tony Sells for discussion and amendment. It was agreed that "Tram or Trackless Tram (commonly known as a Trolley Bus)" be included in the Interpretations.

Debate then took place on various aspects of the Rules and the following amendments were proposed:

1. Clause 4(4) new clause

It was moved, C. Tooke (MTPA) and seconded R. Gilbert (BTPS),

> "that no one individual may represent more than one Member at any Meeting of the Council".

Motion lost 4:8

2. Clause 4(4) new clause

It was moved, C. Tooke (MTPA) and seconded R. Gilbert (BTPS),

"that no member of the Executive Committee be allowed to represent a Member at a Meeting".

Motion lost 2:10

3. Clause 5(1)

It was moved, R Gilbert (BTPS) and seconded C. Andrews (AETM),

"that in Clause 5(1) third line, word "Treasurer" be inserted after "Executive Officer" and,

"that in Clause 5(5), second line, the word "Office" be changed to "Officer" and,

"that in clause 6(1) a new subsection (c) be added, reading "(c) Treasurer" and that the existing subsection "(c)" be renumbered "(d)"".

Motion carried 10:2

4. Clause 9(1)

It was moved, P. Hyde (BTMS) and seconded L. Stewart (WTM),

"that at the end of the second line after words "Bank or Banks" there be inserted the words "or financial institutions registered with the Central Bank of Australia or New Zealand".

Motion carried 11:1

5. Clause 9(7)

It was moved, L. Miller (TMSV) and seconded C. Tooke (MTPA),

"that the words "Executive Officer" in the first and last lines be deleted and replaced by the word "Treasurer"".

Motion carried 12:0

6. Clause 14

It was moved, J. Nyman (MTP&M) and seconded L. Richardson (PETS),

> "that the Executive Committee be empowered in consultation with its solicitor and upon the advice of other Government Agencies to review clause 14 to meet all the requirements of The Associations Incorporation Act (Victoria) the Income Tax Assessment Act and any other relevant statutes, and that the revised clause as recommended by the Executive Committee, be circulated out of session for approval by 2/3 of Members, responses to be received within 60 days of the recommendation being forwarded by airmail or facsimile transmission".

Motion carried 12:0

7. Clause 15

It was moved, L. Richardson (PETS) and second L Stewart (WTM),

> "that the insertion of "Treasurer" means the person elected to pursuant to rule 6 (1) to be Treasurer of the Council".

Motion carried 12:0

8. Act:

It was moved, J. Nyman (MTP&M) and seconded L. Stewart (WTM),

> "that one copy of the Associations Incorporation Act (Victoria) be forwarded to each Member".

Motion carried 12:0

9. Incorporation

It was moved, L. Miller (TMSV) and seconded D. Hinman (THS),

> "that the Council proceed to incorporation under the Associations Incorporation Act (Victoria) subject to the various amendments".

Motion carried 12:0

10. Mr W. Kingsley was nominated as the person to secure incorporation.

Patterns

Allan Bradley (BTPS) has had no response from Museums in 4 years as to what patterns each member holds. It was suggested that if a Member has a requirement for a pattern to let the Executive Officer know.

It was agreed that all societies will advise the Executive Officer urgently of a nominated person, who will draw up an inventory of patterns held and advise the Executive Officer.

Tramcar Questionnaire

Each member was requested to supply an updated list of all exhibits held every two years and the information will be printed in Tramway Topics and Trolley Wire.

Rockhampton

Details were given regarding the new system. It is to operate in the new Botanical Gardens in conjunction with a new Transport Museum. Details were noted by the meeting.

Electrical Safety Rules

Moved C. Tooke (MTPA), seconded J. Nyman (MTP&M). " That COTMA formulate a set of safety rules in conjunction with the four Victorian Museums and with Noel Blackmore of PETS, the rules to be circulated to all members before Christmas 1990 and Members to vote on them at the next Council meeting in 12 months time. The rules should be basic but subject to local Electrical Authorities.
Carried 12:0

Brill 21E Trucks

Tim Borchers (BT) reported from the workshop held yesterday that there was a demand for 6-8 trucks. However, he could only be vague on estimated costs $10-20,000 each.

B Van at TMSV

Keith Kings reported the total cost in acquiring the B Van was $1688. It has been cleaned out and shelves are being installed. Richard Gilbert asked whether a fixed shed would have been cheaper but Keith mentioned that there were problems with fixed buildings.

SW2 426 at PETS and SW2 432 at MTP&M

Bill Kingsley reported that this matter was now resolved satisfactorily. Investigations had been long and thorough, problems arising due to much false information given to him. 432 is at MTP&M on its own trucks, while the trucks from 426 were retained by the MET. There was no interchange of trucks between the two trams and no MTP&M member or MET employee was involved in any such interchange.

Reciprocal Visits and Travel

Discussion centred on free admission to other museums. Various suggestions were made, such as having a questionnaire for Members to complete explaining what entry requirements are needed for entry to their site and what visitors should expect. Another suggestion was letter of introduction, or telephone call from the Member's Secretary to the COTMA Representative of the museum to be visited, indicating that the visitor is an active member.

Resolved that Executive Officer will write to each museum to ascertain their requirements and what visitors should expect.

The Chairman adjourned the meeting for lunch. The meeting re-convened after lunch

Instruction Manuals

The Executive Officer reminded delegates that he was continuing to collect from member organisations details of any instruction manuals etc that they held. These could for example either be original makers manuals, instructions prepared by the previous owner of the material (City Council, SEC etc) or prepared by the museum itself.

A reminder would be included in the next COTMA newsletter, and results reported to the next Conference General Meeting.

Sale or Disposal of Members Trams

Ballarat advised delegates that it has 2 tram bodies available, Nos 121 and 32.

Roslyn Tramway No. 1

THS reported on the continued concerns over the storage of this tram and efforts are continuing to secure the future of this tram.

Kaiwharrawharra Trackless Tram

WTM advised no further change had occurred but the status of this vehicle is being monitored.

Affiliation

After discussion it was moved L. Richardson (PETS), seconded R. Jones (SPER), that steps be taken to affiliate with the National Federation of Rail Societies of New Zealand.

Carried 11:0 with 1 abstention

REPORTS

Chairman's Report

The Chairman spoke to his report, it having been previously distributed to delegates.

Executive Officer's Report

The Executive Officer spoke to his report, it having been previously distributed to delegates.

Spare Parts and Uniforms Officer's Report

The Spare Parts and Uniforms Officer presented his report, it having been previously distributed to delegates.

Lindsay Richardson asked whether there had been a review of the uniforms and spare parts pricing policy and it was moved L. Millar (TMSV) and seconded L. Richardson (PETS),

> "that the incoming Executive Officer, Treasurer and Spare Parts and Uniforms Officer review pricing policy in line with current values".

Carried

Treasurer's Report

The Treasurer presented her report, it having been previously distributed to delegates. The Treasurer reported that the subscriptions of two organisations (neither represented at conference) were still outstanding.

Adoption of Formal Reports

It was moved R. Gilbert BTPS) and seconded R. Jones (SPER),

"that the four formal reports be received and adopted."

Carried

"Trolley Wire" and "Tramway Topics"

Reports from the publishers, SPER ("Trolley Wire") and WTM ("Tramway Topics"), of the above two magazines had been circulated to delegates.

The Chairman expressed appreciation to the two organisations for their great efforts in producing the magazines.

COTMA FEES

After discussion it was moved R. Gilbert (BTPS) and seconded L. Richardson (PETS),

"that COTMA adopt a two-tiered subscription rate system based on a flat charge per museum but with a concessional charge for small museums."

Carried 12:0

It was moved D. Hinman (THS) and seconded L. Millar (TMSV),

"that the following organisations be treated as "small" for the next 2 years.

Maitland Tramway Park & Museum Ltd
Melbourne Tramcar Preservation Association
Parramatta Steam Tram & Railway Preservation Soc.
Tasmanian Transport Museum."

Carried

It was moved C. Tooke (MTPA) and seconded P.Hyde (BTPS),

"that for 1990/91 the subscription rate be set at AUD$100 for "large" museums and AUD$70 for "small" museums."

Carried

In discussion on the adequacy of the subscription rate the question of the cost of

toll/STD/ISD telephone charges incurred during the course of negotiating tram spares ex Melbourne was raised. It was moved L. Richardson (PETS) and seconded D. Hinman (THS),

> "that toll charges of over $20 be charged to the recipient organisation, at the discretion of the Executive Officer."

Carried

GENERAL BUSINESS

International Association of Transport Museums (IATM)

COTMA is a member and the Chairman and Executive Officer receive material from this organisation.

Following discussion, it was moved L. Millar (TMSV) and seconded I. Stewart (MOTAT),

> "that relevant material be summarised and included by the Executive Officer in COTMA bulletins, and that it also be provided to the editors of "Trolley Wire"and "Tramway Topics"."

Carried

Acquisition of Obsolete Tramcars from MET

The Executive Officer outlined the present state of his recent discussions with MET officials and was optimistic that beneficial arrangements would soon be completed.

Details would be advised to COTMA members as soon as available.

Liaison with TMS (UK)

It was noted that Mr C Tooke had been appointed as the Tramway Museum Society's (UK) liaison officer.

Co-ordinating Diary

The meeting authorised the Executive Officer to run a co-ordinating diary of planned Tramway museum events.

Bundy (Cincinnatti) Clocks/Keys

The meeting authorised Keith Kings to determine what keys are required.

Mercury Arc Bulbs

Adelaide informed the meeting of a number of mercury arc bulbs which were available from the STA if urgent action were taken. Craig Tooke advised that electrical sub-station equipment should also be available from Melbourne this year.

COTMA-wide Pass

The concept of having a Pass produced which would provide free entry to all Member museums was discussed. There were practical difficulties. Instead it was agreed that Members at their own discretion would provide passes for their own organisation to the Executive officer for issue at his own discretion.

Trolley Buses

The question as to whether the Motor Coach Museum Trust, also known as the Foxton Trolley Bus Museum be invited to join COTMA was raised.

It was agreed that the Executive Officer follow-up with WTM (L. Stewart) to see whether appropriate arrangements can be made for this, or for assistance to members with parts.

Sales Tax Exemptions

Lindsay Richardson (PETS) advised that his organisation had had some success in gaining sales tax exemptions on sundry items, e.g. hand rails. They would be pleased to pass on details to any members interested.

ELECTION OF OFFICERS

The Chairman vacated the Chair and Les Stewart (WTM) took the chair for the elections.

Chairman.

Nominations were invited for the position of Chairman.

It was moved L. Richardson (PETS) and seconded I. Stewart (MOTAT),

"that Dr John Radcliffe be nominated."

In the absence of any further nominations Dr John Radcliffe was declared elected with acclamation.

Executive Officer

Nominations were invited for the position of Executive Officer

It was moved R. Jones (SPER) and seconded L. Millar (TMSV),

"that Mr Bill Kingsley be nominated."

In the absence of any further nominations Mr Bill Kingsley was declared elected with acclamation.

Australian Executive Member

Nominations were invited for the position of Australian Executive Member.

It was moved R. Jones (SPER) and seconded P. Hyde (BTMS),

"that Mr Lindsay Richardson be nominated."

In the absence of any further nominations, Mr Lindsay Richardson was declared elected with acclamation.

New Zealand Executive Member

Nominations were invited for the position of New Zealand Executive Member.

It was moved I. Stewart (MOTAT) and seconded K. Kings (BT),

"that Mr David Hinman be nominated."

In the absence of any further nominations, Mr David Hinman was declared elected with acclamation.

Treasurer

Nominations were called for the position of Treasurer.

It was moved C. Tooke (MTPS) and seconded R. Jones (SPER),

"that Ms Carolyn Dean be nominated."

In the absence of any further nominations, Ms Carolyn Dean declared elected acclamation.

Auditor

Nominations were called for the position of auditor.

It was moved R. Gilbert (BTPS) and seconded L. Millar (TMSV),

"that Mr Robert Paroissien be appointed."

In the absence of any further Mr Robert Paroissien was declared elected with acclamation.

Person to seek Incorporation

It was moved P. Hyde (BTMS) and seconded D. Hinman (THS),

"that Mr Bill Kingsley be recommended to the Executive as the person to organise the seeking of COTMA's incorporation."

Carried with acclamation.

Dr John Radcliffe resumed the Chair.

NEXT CONFERENCES

1992 Conference

It was moved R. Jones (SPER) and seconded C. Tooke (MTPA),

"that Perth be confirmed as the venue for the 1992 Conference to be held over the third weekend in May.

Carried

1994 Conference

On behalf of the Bendigo Trust Representative (who was absent) Mr Kings issued an invitation for the 1994 Conference to be held in Bendigo.

It was moved D. Hinman (THS) and seconded L. Millar (TMSV),

"that Bendigo's invitation to host the 1994 conference be accepted."

Carried

1996 Conference

The Tramway Historical Society of Christchurch gave notice that it would be pleased to host the 1996 COTMA Conference, possibly in association with an NFRS Conference.

THANKS TO HOST

On behalf of representatives and of all others present, the Chairman, Dr John Radcliffe, expressed appreciation to the Wellington Tramway Museum for its work in organising the Conference and in particular to Mr Les Stewart, Chairman of the Wellington Tramway Museum Conference Organising Committee.

The meeting responded with acclamation

Mr Keith Kings, on behalf of the Bendigo Trust, presented to the Wellington Tramway Museum (represented by Mr Les Stewart) a small plaque of tramway rail cross-section, as a mark of thanks for the Conference.

The meeting responded with acclamation

The Chairman declared the meeting closed at 3.00 p.m.

NEW ZEALAND

SECTION 5

NATIONAL FEDERATION OF RAIL SOCIETIES INCORPORATED

ANNUAL GENERAL MEETING

NATIONAL FEDERATION OF RAIL SOCIETIES INCORPORATED

ANNUAL GENERAL MEETING

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NATIONAL FEDERATION OF RAIL SOCIETIES INCORPORATED

DIRECTORY

Executive:

President:	Mr Paul Dillicar
Secretary:	Mr Ken Henderson
Treasurer:	Mr Les Stewart
Fourth Executive Member:	Mr Bruce Shalders (resigned 31/3/90) Mr Russell Paul (appointed 1/4/90)

Convenors:

A. & G. Price Locomotive Restoration Award	Mr Bob Mann
Boilers	Mr Ted Pointon
Health and Safety	Dr David Black
Mainline Crewing	Mr Paul Heighton
Publicity	Mr Brian Blanchard
Tramways	Mr Dave Hinman

Member Organisations as at 1 June 1990:

Ashburton Railway and Preservation Society Inc.
P.O. Box 5051, Tinwald, Ashburton
(Museum: The Plains Railway, Tinwald Domain)

Bush Tramway Club Inc.
P.O. Box C10, Pukemiro, R.D. Huntly
(Operating Society: Pukemiro Junction)

Canterbury Branch, N.Z.R. & L.S. (Ferrymead Railway)
P.O. Box 13-039, Armagh, Christchurch
(Museum: Ferrymead Historic Park, Christchurch)

Canterbury Steam Preservation Society Inc.
P.O. Box 6172, Upper Riccarton, Christchurch
(Operating Site: McLeans Island, Harewood, Christchurch)

Ferrymead Trust
269 Bridle Path Road, Heathcote, Christchurch
(Museum: Ferrymead Historic Park, Christchurch)

Fiordland Vintage Machinery Club Inc.
P.O. Box 188, Te Anau

Friends of the Fell Inc.
P.O. Box 71, Featherston
(Museum: State Highway 2, Featherston)

Gisborne City Vintage Railway Inc.
P.O. Box 801, Gisborne

Glenbrook Vintage Railway Trust
P.O. Box 2429, Auckland, 1
(Operating Site: Waiuku Road, Glenbrook. Off Highway 22)

Goldfields Steam Train Society Inc.
P.O. Box 16, Waihi
(Museum: Wrigley Street, Waihi)

New Zealand Railway and Locomotive Society Inc.
P.O. Box 5134, Wellington

Oamaru Steam and Railway Restoration Society Inc.
c/- 20 Derwent Street, Oamaru

Otago Early Settlers Museum Association Inc.
220 Cumberland Street, Dunedin
(Museum: 220 Cumberland Street, Dunedin)

Otago Excursion Train Trust
P.O. Box 140, Dunedin
(Operating Site: Dunedin Railway Station)

Otago Railway and Locomotive Society Inc. (Ocean Beach Railway)
P.O. Box 1297, Dunedin
(Operating Site: Adjacent to Kettle Park, St. Kilda, Dunedin)

Pigeon Valley Steam Museum Inc.
51 Norwich Street, Nelson

Pleasant Point Railway and Historical Society Inc.
Railway Station Museum, Pleasant Point, South Canterbury
(Museum: Railway Station, Pleasant Point)

Railway Enthusiasts Society Inc.
P.O. Box 2429, Auckland, 1
(Club Rooms: 38 Alfred Street, Onehunga, Auckland)

Silver Stream Railway
P.O. Box 30-786, Lower Hutt
(Museum: Silverstream, Lower Hutt)

Steam Incorporated
P.O. Box 44-181, V.I.C., Lower Hutt
(Workshops: State Highway 1, Paekakariki)

Tauranga District Museum and Historic Village
P.O. Box 597, Tauranga

Tramway Historical Society Inc.
P.O. Box 1126, Christchurch
(Museum: Ferrymead Historic Park, Christchurch)

Waikato Branch, N.Z.R. & L.S.
c/- 236 Raeburn Street, Te Awamutu

Weka Pass Railway Inc.
P.O. Box 22-622, Christchurch
(Operating Site: Waipara, North Canterbury)

Wellington Tramway Museum Inc.
P.O. Box 2612, Wellington
(Museum: Queen Elizabeth Park, Paekakariki)

West Coast Mechanical and Historical Society Inc.
c/- Post Office, Shanty Town, Greymouth
(Museum: Shanty Town, Greymouth)

Western Springs Railway
P.O. Box 44-144, Pt. Chevalier, Auckland, 2
(Museum: MOTAT, Great North Road, Pt Chevalier, Auckland)

Western Springs Tramway
P.O. Box 44-144, Pt. Chevalier, Auckland, 2
(Museum: MOTAT, Great North Road, Pt Chevalier, Auckland)

Affiliated Organisation:

N.Z. Model Railway Guild Inc.
Christchurch

Federation Address:

P.O. Box 13-771, Onehunga, Auckland, 1006

1990 ANNUAL REPORT

General

The year recently ended has been busier than any with the possible exception of our formative years. The pace of legislative and regulative change as the Government moves the country further along the economic path of "Rogernomics", has produced a plethora of work at Government Department and SOE level. On the positive side, we have at last gained recognition from the Government as being a responsible and useful consultative body and this is encouraging for the future.

Executive

The Executive was sorry to receive the resignation of its 4th member, Bruce Shalders, at year end. Due to pressure of other commitments, Bruce had to conclude a most helpful and constructive contribution to the Federation and we take this opportunity to record our thanks. The Executive have appointed Russell Paul to the vacant position and we welcome him to your team. The Executive met in Auckland in March to discuss a number of important issues and to seal an Agreement with Weka Pass Railway regarding mainline operation of their carriages.

Convenors

No formal quarterly reports were received from Convenors during the year and although this has become a regular pattern it is nevertheless in breach of our Rules. It says something about how busy we all are. We take this opportunity to thank those who worked to advance the position of their portfolios during the year and to keep us informed informally, although the Health and Safety Convenor made no contact at all during the year. We record, with much sadness, the death in October 1989 of former Convenor, Robert J. Meyer.

Membership

We have maintained membership numbers at 29 organisations and the 1990 AGM is expected to confirm the membership of Opua-Kawakawa Railway. It would assist the Treasurer a great deal if member groups would pay our subscription accounts promptly - two organisations came close to forfeiting membership through payment being received over 9 months late.

Newsletter

We smartened the appearance of the Newsletter during the year and it is now more widely read. The Executive are surprised that many of the issues raised do not appear to have been discussed at Committee/Board level within some member organisations and since we rely enormously on feedback to guide us in our dealings with Government and other agencies, it is imperative you record your point of view in response to the matters raised.

Financial

The Federation is in good heart financially but faces increasing expenditure in attending meetings with central Government to confer on new regulations and legislation. It is imperative that ample funds continue to be available for this purpose if we are to have any chance of either defending a position (as in the case of the proposed Boiler Regulations) or maintaining an input into new legislation (as proposed for Operating Codes and Practice). We again thank the operators of mainline excursion trains for their very substantial input into the Federation funds from levies. It appears some groups may not have made these contributions although amendments were approved last year and perhaps we should clarify this position as every cent helps and funds from the Hillary Commission have dried up. After several calls for applications for assistance from the Machinery Fund, none have been forthcoming and the Executive will recommend to the 1990 AGM that the fund be wound up.

Executive Visits

Your Executive have individually paid visits to the sites of at least 20 of our 29 member organisations in the last 12 months and it is intended to widen this programme next year as it helps both parties to understand and question many of the matters under discussion in more detail. We have also considered the possibilities of regional meetings mid-year and would welcome debate on this topic at the AGM. The cost of getting to some of the more "remote" sites makes it impractical for us to visit all our member groups in any one year but all members of the Executive are happy to respond to individual requests for specific information.

1989 Conference

This Annual Report thanks the Weka Pass Railway Inc. for superbly hosting the 1989 Annual Conference and AGM. We are delighted to find that there is no shortage of groups offering to host Conference in future years. Costs are increasing but we urge those groups who do not attend regularly to at least

attend the Conference when it is in your region. It is a fact that the value of Conference cannot be measured in monetary terms alone.

Milestones

As mentioned above, the NFRS was involved in intense negotiations during the year on a number of Governmental legislative and regulative measures. The value of the Federation was never more amply demonstrated than by successful defence of our position on the proposed changes to the boiler inspection regime. As delegates will learn at Conference 1990, we have also been heavily involved in proposed new operating legislation and we believe the role of the Federation in this area will increase as the next year unfolds. It is not lost on your Executive that a number of other organisations and individuals outside the Federation also benefit from our work without contributing to our costs. We believe the time has come to widen the current membership to include such bodies where compliance with our membership Rules can be confirmed and we look forward to the debate on this topic at the 1990 AGM.

TREASURER'S REPORT

I am pleased to report that, in the year ended 31 March 1990, the Federation recorded a very satisfactory surplus income of $2,898.32. However, this surplus must be viewed against commitments in the very near future.

We will be faced with a substantial increase in spending for travel while negotiations are underway in respect to operating legislation and the Mainline Operating Agreement. The cost of holding one Executive meeting in Auckland to review legislative proposals was in excess of the reserve fund ($530.54) established for the review of the tramway legislation. Also, a new portable electronic typewriter is to be purchased shortly at a cost of around $600.00 after writing off our old manual typewriter because it no longer met the Federation's needs.

Notwithstanding these commitments, I do not believe there is any need to adjust fees and levies, either up or down. We should be in a position to meet commitments from reserves and future income. I therefore recommend to the A.G.M. that fees and levies remain at current levels.

Once again, despite repeated notices in the newsletter, no member group has taken advantage of the Machinery Fund. With a basic lack of demand for this facility I question the need for us to maintain such a fund and accordingly recommend to the A.G.M. that the fund be wound up with the funds being distributed back to member groups in proportion to their original contribution. This will mean that groups will receive approximately 1.8 times their original contribution and in particular will release approximately $3,600 to the Federation's general reserves as the Federation contributed $2,000 itself.

The winding up of the Machinery Fund should not affect the Federation's ability to save or acquire essential plant and machinery in the future. The Federation now has sufficient reserves and, if need be, could seek special contributions to either assist groups with purchases or purchase items in its own right.

I am also pleased to report that the Federation was able to either hold or reduce insurance premiums for mainline operators. The premiums for carriage and locomotive insurance remain unchanged while the premium for public liability insurance was reduced by 25%. This is indicative of two things, firstly that the Federation and its member groups are perceived as less risky than before and, secondly, the collective buying power of the Federation.

Furthermore, our brokers believe that our insurance premiums are still too high and can be negotiated down. In this respect and using the Federation's

collective buying power, the information collected last year about member groups insurance requirements will be useful over the next couple of months in building an insurance package to meet the needs of all member groups.

In closing, 1989/90 has been a very busy year for me, particularly in projects I have been involved with in my own Museum and, at times I have felt that I have not been able to give the Federation's business my fullest attention. I trust that this has not caused member groups too much inconvenience.

I.L. Stewart.
Hon Treasurer.

21 May 1990.

NATIONAL FEDERATION OF RAIL SOCIETIES INCORPORATED

ANNUAL ACCOUNTS
FOR YEAR ENDED 31 MARCH 1990

AUDITOR'S REPORT

I have examined the books and accounts of the National Federation of Rail Societies Incorporated for the year ended 31 March 1990 in accordance with accepted auditing standards and have obtained all the information and explanations required.

In my opinion according to the best of the information given and as shown by the Federation's records, the Balance Sheet and accompanying Statements and Notes to the Accounts have been properly drawn up so as to present a true and fair view of the financial position of the Federation as of that date and for the year ended 31 March 1990.

M. Flinn BCA ACA.
Hon. Auditor

21 May 1990.

INCOME & EXPENDITURE ACCOUNT

FOR YEAR ENDED 31ST MARCH 1990

Last Year $		This Year $	This Year $
	INCOME		
8,303	Insurance	5,427.95	
1,160	Membership Subscriptions	1,500.00	
0	Capitation Fees	508.50	
1,140	Trip Levies	2,680.00	
635	Interest	587.87	
2,100	Hillary Commission	0.00	
18	Other	88.89	
13,356	**Total Income**		10,803.21
	EXPENDITURE		
8,303	Insurance	5,427.95	
1,881	Conference	545.45	
932	Travel	697.80	
1,402	Administration	973.63	
424	Other	40.06	
12,942	**Total Expenditure**		7,684.89
415	**Surplus Income Over Expenditure**		3,118.32
234	Less Prior Period Adjustment		0.00
0	Write Off Typewriter (Note 1)		220.00
181	**Surplus Transferred to Accumulated Funds**		2,898.32

MACHINERY FUND

INCOME & EXPENDITURE ACCOUNT

FOR YEAR ENDED 31ST MARCH 1990

Last Year $		This Year $	This Year $
	INCOME		
595	Interest	493.50	
595	**Total Income**		493.50
0	EXPENDITURE		0.00
595	**Surplus Income Over Expenditure**		493.50
234	Plus Prior Period Adjustment		0.00
829	**Total Surplus Income Over Expenditure**		493.50
5,123	Plus Balance at Start of Year		5,952.60
5,952	**Balance at End of Year**		6,446.10

BALANCE SHEET

AS AT 31ST MARCH 1990

Last Year $		$	This Year $
	ASSETS		
	General Funds		
8,867	Accumulated Fund	6,858.70	
3,624	Acquisition Fund	3,901.78	
12,491			10,760.48
	Machinery Fund		
2,590	Bank	3,396.78	
3,000	Investments	3,000.00	
5,590			6,396.78
37	Debtors (Note 2)		1,864.66
	Fixed Assets		
1,754	Locomotive Df 1301	1,754.38	
0	Rail Car RM56	0.00	
727	KP Wagon	727.27	
220	Typewriter & Suitcase (Note 1)	0.00	
2701			2,481.65
20,820	TOTAL ASSETS		21,503.57
	LESS LIABILITIES		
6,347	Creditors (Note 2)		4,169.48
	Monies Held in Trust		
5,953	Machinery Fund	6,446.10	
531	Tramways Act Reserve (Note 3)	0.00	
6,484			6,446.10
7,990	TOTAL NET ASSETS		10,887.99
	NET ASSETS WERE FUNDED BY		
	Accumulated Funds:		
7,809	Balance at Start of Year		7,989.67
181	Plus Surplus Income		2,898.32
7,990	Total Accumulated Funds		10,887.99

STATEMENT OF ACCOUNTING POLICIES

These accounts are prepared in accordance with generally accepted accounting principles using the historic cost convention.

Particular accounting policies are as follows:

1. Fixed assets are valued at cost less any donations contributed towards their purchase.

2. Depreciation is not charged against any item.

NOTES TO THE ACCOUNTS

1. The Federation's typewriter has been written off.

2. All debtors and creditors have been received and paid since balance date.

3. The Tramways Act Reserve was used to meet some of the costs in holding an Executive meeting to discuss legislation issues.

I.L. Stewart.
Hon. Treasurer.

21 May 1990.

BROADENING THE MEMBERSHIP BASE OF THE FEDERATION

Traditionally, historic railways and tramways and those organisations catering specifically for the needs of the railway and tramway enthusiast have been started, developed and run by voluntary organisations most commonly in the form of Incorporated Societies or Charitable Trusts. By their nature, such organisations have been "non-profit" in terms of their legal and, in some cases, their taxation status.

The term "non-profit", as it applies to such groups, is a misnomer. They all exist to make a profit from their railway or tramway business, for without a profit none of the groups would be able to develop and enhance their museums, rolling stock, charter business, publishing activities etc. They would simply stagnate or go out of existence.

It must be clearly understood that "non-profit" relates to the legal status of the organisation. In a legal sense "non-profit" means that the particular organisation does not distribute its profits to its members. In other words, individual members of an organisation do not benefit financially from the success of any activity and conversely they do not have any liability in the event of financial failure.

The Federation, having been formed during a time when all the participants in our industry were "non-profit" has had an unwritten rule that its member groups should also meet the "non-profit" criteria. It is a status that has been jealously protected and defended by a number of member groups over the years. However, in more recent years, a small number of private operators have entered the industry, who because of their profit making objectives have not had the ability to join the Federation. What is of considerable annoyance to your executive and a number of our member groups is that these operators benefit from the work of the Federation without contributing a cent to its costs. This is even more annoying when the Federation is increasingly accepted as the representative for our industry in discussions with government departments and agencies.

We must realise that there is no way to stop new entrants to our industry, whether they be individuals, companies or other entities out to make a profit (from the legal point of view) and we cannot prevent them from benefiting from our work. Rather than worrying about these new participants, we should perhaps be inviting them to join us and thus contribute towards the cost of maintaining an active and healthy industry. Accordingly, the Executive believe

the time has come for the Federation to re-consider its attitude to those participants in our industry which are formed for profit.

The Federation's Constitution and Rules allows any body corporate whether it be "profit making" or "non-profit" to be a member. Other member groups voting on whether to admit a new group simply have to be of the mind to accept them. Rule 4 (a) states:

> *"Membership shall be restricted to corporate bodies having objects altogether or in part similar to those of the Federation. Applications for membership must be approved by not less than three quarters of the member groups present and entitled to vote and voting at a General Meeting to which member groups were given notice of such membership application in the Notice of Meeting"*

It should be noted in this connection that the objects of the Federation contain no statement as to financial objects.

Recommendation

In order that the Federation remains truly representative of our industry, The Federation Executive recommend that an invitation to join the Federation be extended to all operators in the railway and tramway industry which are corporate bodies regardless of their legal status as to "profit".

Paul Dillicar,
President.

Ken Henderson,
Secretary.

Les Stewart,
Treasurer.

Russell Paul,
Executive Member.

30 April 1990.

TRAMWAYS CONVENOR'S REPORT

Operating Legislation

The tramway groups are pleased to hear that, at last, action is underway on the legislative review.. Together with Ian Stewart (MOTAT), I was pleased to be able to join with the NFRS Executive in early discussions with Roger Toleman and have some input at the early stages. We certainly wish to remain involved as the matter proceeds.

Roslyn No. 1

Largely because of oversight and misunderstanding on my part there were considerable delays in writing to the Dunedin Museum of Transport following last year's (continuing!) discussion on this matter. This was, at last, achieved earlier this year, but I understand that there has been no response. (Ken or Paul may wish to comment further).

Light Rail Proposals

If the changing content of recent issues of *Rails* magazine is anything to go by, the world-wide come back of trams may be about to hit N.Z.! Should all or any of the light railway/tramway proposals being mooted for Auckland, Wellington and Christchurch eventuate this will mean a new era in railed transport in N.Z. New attitudes and relationships will develop and this will impact upon both the tramway and railway members of the Federation. Who knows if a wider membership policy may see some new light rail operators increase the tramway presence at the table!

C.O.T.M.A.

It has been a real delight to me personally that this weekend's conference has brought the N.F.R.S. and C.O.T.M.A. together so well, a great advance from the much more limited contact when both groups met in Auckland in 1984 (a visit and a BBQ at MOTAT). While often difficult choices have to be made about which sessions to attend (including today!), I know that there have been real benefits to both groups being together. Despite the "rivalries" of the Saturday night debate, there have been excellent contacts made and friendships

established between members of both groups, with common interests now clearly established. Most tramway people are "closet" railway enthusiasts and I've seen a fair bit of evidence that the converse also applies. It is quite likely that Christchurch (THS) will be invited to host the 1996 C.O.T.M.A. Conference and, if that eventuates, I invite Federation members to consider the prospect of a second combined event that year. This matter will be raised at tomorrow's C.O.T.M.A. A.G.M.

Dave Hinman.
Tramways Convenor.

4 June 1990.

BOILER CONVENOR'S REPORT

This year I have been very busy with little time to write a long report on boiler convenor's activities throughout the year. The Federation newsletter has already reported our meetings with the Marine Transport Division of the M.O.T. and the outcome of the new boiler inspection requirements they helped to bring into use. The drilling of stays has been dropped. The other problem is what code new loco boilers can be built to. Gisborne City Vintage Railway cannot get an answer as to which code is agreeable to the Marine Transport Division. I myself feel that the old 1975 boiler code or the 1969 British Standards metric code is all that is required for our type of boiler building requirements. The 1969 B.S. code is not in use but I think the M.O.T. should let us use these codes for loco boilers as we do not want to build super boilers, but only loco boilers built to more modern ways of manufacture using boiler quality steel and welding. The 1969 B.S. code is a metric version of the N.Z. 1975 boiler code. We will have to discuss these codes with the M.O.T. and get something sorted out soon.

E.J. Pointon.
Boiler Convenor.

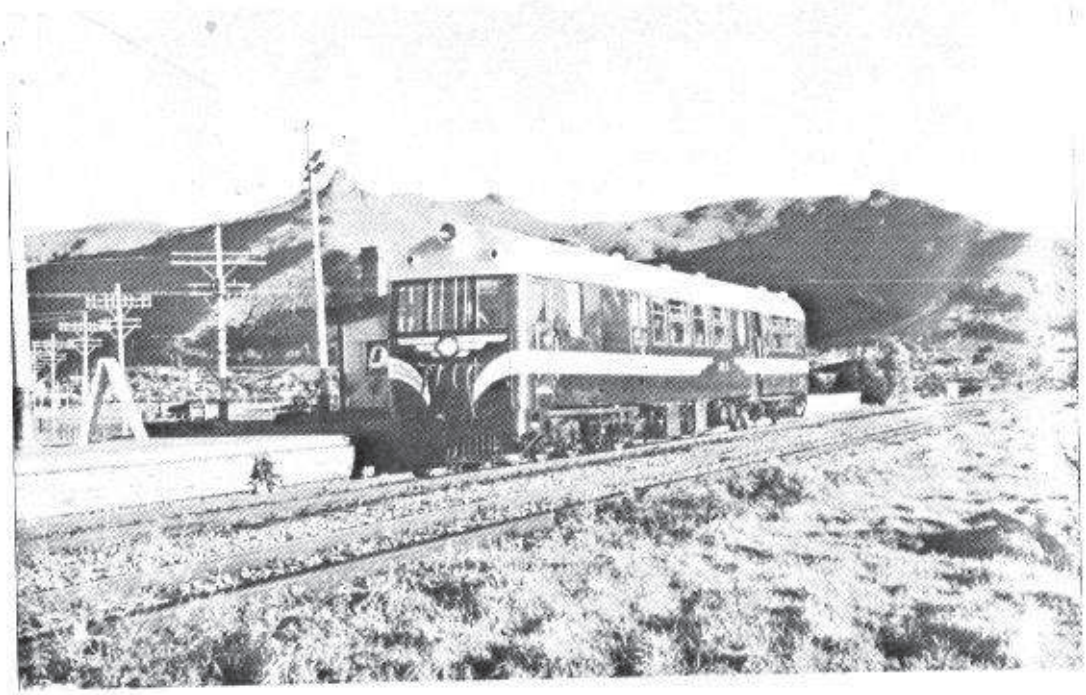
4 June 1990.

REPORT ON RM 56

Normal maintenance was carried out over six week periods. Apart from this the replacement of all brake blocks was also done. The deadman's control at no. 2 end was also replaced. The bushes in the Layrob drive coupling were replaced over a period between 21 - 24 May at Linwood Loco Depot. The outside of the car body was also waxed twice.

G.K. Jory.
General Manager,
Ferrymead Railway.

28 May 1990.



The Federation's railcar RM 56 on the Ferrymead Railway, June 1989.
Photograph: Les Stewart.

MINUTES OF THE ANNUAL GENERAL MEETING

Place: The Royal New Zealand Police College, Porirua, New Zealand

Date: Monday 4th June 1990

Present:

Executive:
Messrs. P Dillicar (Chairman), K. Henderson, L. Stewart, R. Paul.

Representatives of the following members groups:
Opua & Kawakawa Railway Preservation Society, Western Springs Railway, Glenbrook Vintage Railway, Railway Enthusiasts Society, Bush Tramway Club, NZR & LS Waikato Branch, Goldfields Steam Train Society, Gisborne City Vintage Railway, Friends of the Fell, N.Z. Railway and Locomotive Society, Steam Incorporated, Silver Stream Railway, Weka Pass Railway, Canterbury Railway Society, Tramway Historical Society, West Coast Mechanical & Historical Society, Otago Excursion Train Trust.

Apologies:

It was resolved that the following apologies be sustained:
Pleasant Point Railway & Historical Society, Canterbury Steam Preservation Society, Oamaru Steam & Railway Restoration Society, Whangarei Steam and Model Railway Society, Wellington Tramway Museum, Western Springs Tramway.

Taylor/Symonds

MINUTES OF PREVIOUS ANNUAL MEETING

It was resolved that "the minutes of the 1989 Annual General Meeting be taken as read".

Hinman/Porter

It was resolved that "the minutes of the 1989 Annual General Meeting be taken as a true and correct record".

Hinman/Porter

CONSIDERATION OF ANNUAL REPORT

Mr Dillicar outlined the work of the Executive over the year. He commented on an approach to a commercial organisation by S. Porter to get sponsorship for a Diesel Traction Award which will be pursued. R. Mann recommended that for the Loco Award submissions of up to 3000 words should be allowed. The Executive had decided to delay purchase of the Ultra Sonic testing equipment due to proposed changes in legislation and difficulties that may be experienced with unskilled use. The benefits of bulk insurance cover were emphasised and delegates were referred to the Treasurer's recent correspondence. Changes of General Manager and/or Inspecting Engineer must be registered with the M.O.T. If operating groups do not have an inspecting engineer when the new legislation is enacted they could be closed down. A Mainline Running Agreement has been executed with the Weka Pass Railway.

It was resolved that "the Annual Report be taken as read".

Stichbury/Summers

Discussion: Mr Dillicar suggested that a half year regional conference could be worthwhile if there were important issues to discuss.

It was resolved that "the Annual Report be adopted".

Allen/Rockliff

ANNUAL ACCOUNTS

The accounts for the year ended 31 March 1990 were presented by the Treasurer who reported that a satisfactory surplus of income of $2,898 had resulted from the years operations but that this had to be viewed against commitments in the near future.

It was resolved that "the Annual Accounts be received"

Heighton/Simmonds

Levies: Mainline Levies apply to all trips including those using NZR cars. It includes shuttle type services and any use of members cars.

The Treasurer spoke to his precirculated report in which he recommended that the Machinery Fund be wound up on the basis that no use was being made of it. It was moved Porter/Rockliff that "the Machinery Fund be wound up in the

terms recommended in the Treasurer's Report".

Discussion: General Opinion that there may be an occasion such as a NZR auction of stores when funds may be required in a hurry.

Motion Lost.

It was resolved that "the Machinery Fund be converted to a projects fund which may be used in an emergency with the approval of the Executive under the same terms and conditions as currently exist".

Stichbury/Campbell

It was resolved that "the Annual Accounts be adopted and that the Treasurer be thanked for the work carried out through the year".

Stichbury/McCallum

It was resolved that "the fees, levies and subscriptions for the 1990/91 year remain the same".

Rockliff/Savage

MEMBERSHIP

It was resolved that "the Opua and Kawakawa Railway Preservation Society be accepted to full membership of the Federation".

Taylor/Allen

Mr Cranston gave a short report on the recent progress of the railway.

The chairman spoke to the precirculated paper on broadening the base of the membership of the Federation. Most delegates spoke in favour of the proposal and concerns raised by Steam Incorporated were satisfied when it was confirmed that there was no intention to change the rules of the Federation.

It was resolved that "the principles outlined in the paper "Broadening the Base of Membership of the Federation" prepared by the executive be endorsed".

Hinman/Stichbury

It was suggested that we encourage groups such as traction engine clubs to form federations like ours.

CONVENORS' REPORTS

Tramways

Mr Hinman reported that tramway groups were happy with the progress being made with the legislation review. He felt that the new light rail proposals could enhance interest in tramway projects. He was sorry to report that no progress had been made with Roslyn No. 1 however, the meeting agreed that the matter would be followed up.

T.H.S. is to host C.O.T.M.A. in 1996 and it may be possible to combine again with the Federation.

Health & Safety:

It is understood that Dr Black is preparing a video on health and safety which concentrates on longer term effects on health such as ear damage due to using noisy tools without earmuffs or eye injuries due to no protection being worn. Dr Black has made some informal visits to groups and noted that lack of ear and eye protection was common. He was also concerned at the use of unlabelled containers for storing paints and chemicals and that this extended to recycled food containers. He is happy to be approached by any group seeking help.

Boilers

Mr Pointon reported a very busy year's activities. The M.O.T. have recently advised the Gisborne group that any work should be done to British Standard code 270,1969 but it should be noted that there is no B.S. code for railway boilers.

The new operating legislation requiring safety audits will affect choice of boiler design. There is a need to influence legislators of our needs.

It was resolved that "the Boiler Convenor attempt to find favour with the M.O.T. for a Federation produced/endorsed design code for boiler design".

Campbell/Scott

Mainline Crewing

Mr Heighton reported that he and Mr Dillicar had met with the L.E.A. and presented a discussion paper on training for steam and diesel drivers. The L.E.A. were happy with the approach and agreed to discuss with N.Z.R. with a view to having the proposals implemented. No further developments to report. It is probable that the Federation may have to fund such training but would not wish to pay for any than successful trainees.

Publicity

Mr Blanchard sent details of costs for a reprint of the Federation handout detailing each group's operation, but at a cost of 7 cents each there was little enthusiasm. It was suggested that some sponsorship should be sought to pay for some or all of the cost.

It was reported that work is still progressing on the Museums Book by Mr Turner but that one of the problems was lack of response from some societies.

ELECTION OF OFFICERS AND CONVENORS

President

P. Dillicar vacated the chair and the Secretary called for nominations for President.

Mr P. Dillicar was nominated. Turner/Allen

It was moved that nominations be closed. Simmonds/Rockliff

Mr P. Dillicar was declared elected.

Secretary

There being only one nomination, Mr K. Henderson was declared elected.
Stichbury/McCallum

Treasurer

There being only one nomination, Mr L. Stewart was declared elected.
Hinman/Porter

Fourth Member

There being only one nomination, Mr R. Paul was declared elected.
Porter/Mann

Auditor

There being only one nomination, Mr M. Flinn was declared elected.
Rockliff/Campbell

Convenors

Health and Occupational Safety:	Dr D. Black	Porter/Stichbury
Boilers:	Mr E. Pointon	Taylor/Savage
Tramways:	Mr D. Hinman	Richardson/Pointon
Publications:	Mr B. Blanchard	Stichbury/Meek
Mainline Operations:	Mr P. Heighton	Simmonds/Summers

Mr Heighton suggested that thought should be given to creating a position of Immediate Past President. In the event of the whole Executive being changed at least continuity of knowledge would be guaranteed. There was general support for the idea and that a rule change should be considered.

GENERAL BUSINESS

RM 56

A report was received from the General Manager of Ferrymead of Ferrymead Railway on the maintenance carried out on RM56.

The proposed operation agreement between the Federation and the Canterbury Railway Society for the use of RM56 was discussed at length clause by clause. The C.R.S. had on the advice of their solicitor objected to much of the wording in the Federation's document.

The C.R.S. delegates conceded that many of the points raised by their solicitor were minor but felt that the price of 45 cents per km had not been properly negotiated with the Federation.

It was resolved that "the fee of 45 cents per km remain"

Taylor/Rockliff

The C.R.S. delegates apologised on behalf of their committee that the Railcar sub-committee had not sought permission from the O.E.T.T. to run on the Central Otago line.

Df 1301

Mr Austin reported that the condition of Df 1301 was good.

Legislation and Regulations

Mr Dillicar outlined briefly the changes proposed for the operation of railways. He recommended that groups should purchase a copy of the M.O.T. Maritime Transport Division Review - "Quality and Safety Systems"

Groups were asked to submit the names of suitable persons who could be submitted to the M.O.T. to act as independent auditors. Groups were requested to advise the Federation by 30 June 1990 of persons suitably qualified in Boilers, Mechanical, Civil, Electrical and Management who could be considered if available.

Taxation Changes

There was nothing further to report on taxation changes but delegates were advised to be aware of measures which may be introduced which could affect their operations.

Antiquities Act

It was reported that the Antiquities Act covers items 25 years old and over and that permission has to be sought to export such items.

Resource Management Act

Mr Dillicar noted that we had missed out on making a submission to the Resource Management Bill currently going through Parliament. The emission of smoke, for example, can be classed as air pollution and as it reads one would need planning permission to use steam engines.

Railways Restructuring Bill

No submissions were made on the Railways Restructuring Bill on the basis that it was known that further legislation was being drawn up by the M.O.T.

1991 Conference

The 1991 Conference will be held at Shanty Town. Transport to the venue could prove difficult to some delegates. Thought had been given to running RM 56 or a bus over on the Friday providing it was economically viable. Delegates were asked to make a commitment to attend by the end of the year.

Track Fittings

Mr Hinman raised the issue of an apparent shortage of track fittings from N.Z.R. It was suggested that groups approach the scrap dealers at the N.Z.R. scrap collection depots.

Conference Presentations

It was suggested that each group be encouraged to make a short presentation of slides or a video depicting work carried out over the year preceding the

conference to be shown at conference.

Marketing Video

It was suggested that the Federation could look into the possibility of producing a video depicting each group's operation for marketing purposes.

Communication

Mr Dillicar reminded delegates of the need to communicate with their own memberships on the activities of the Federation.

Vote of Thanks

Mr Heighton proposed, seconded by Mr Campbell that "a vote of thanks be accorded to the Executive for the work carried out through the year".

The meeting closed at 3.45pm