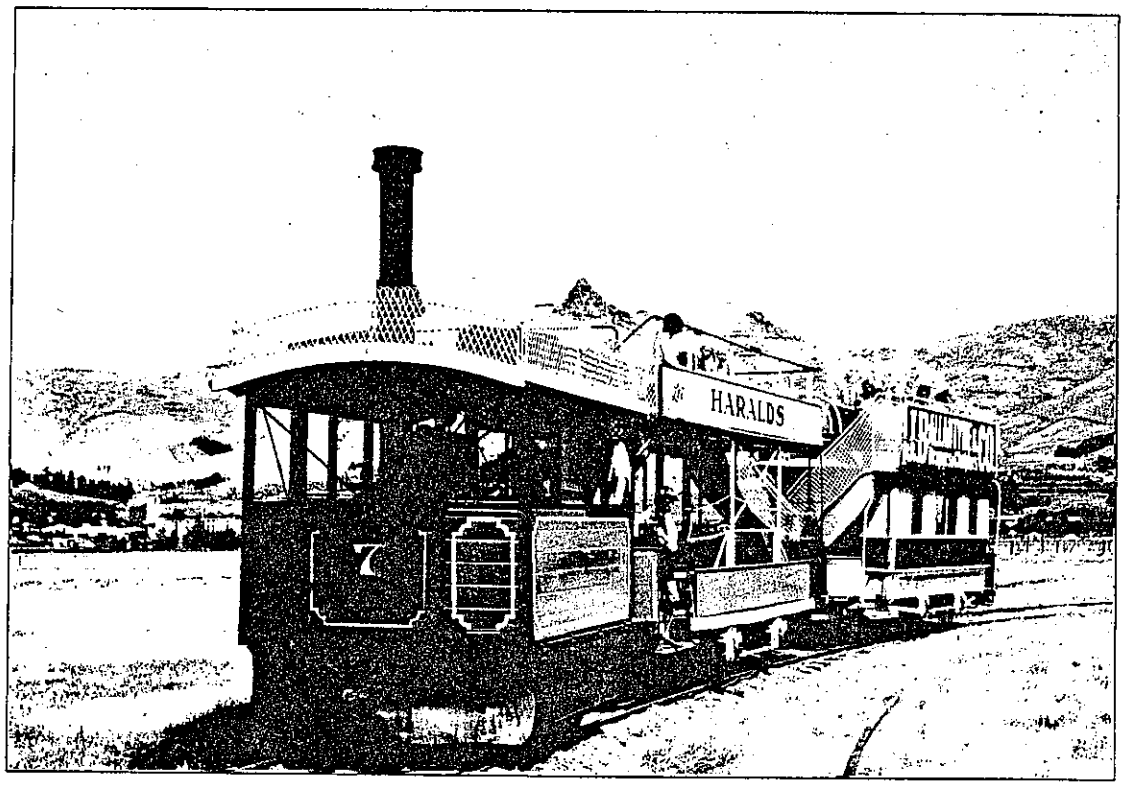

PROCEEDINGS OF THE FOURTH CONFERENCE OF AUSTRALASIAN TRAMWAY MUSEUMS

Christchurch, New Zealand. April 22-25, 1978

Edited by John Shanks

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Member organisations of the Council are listed on page 128.

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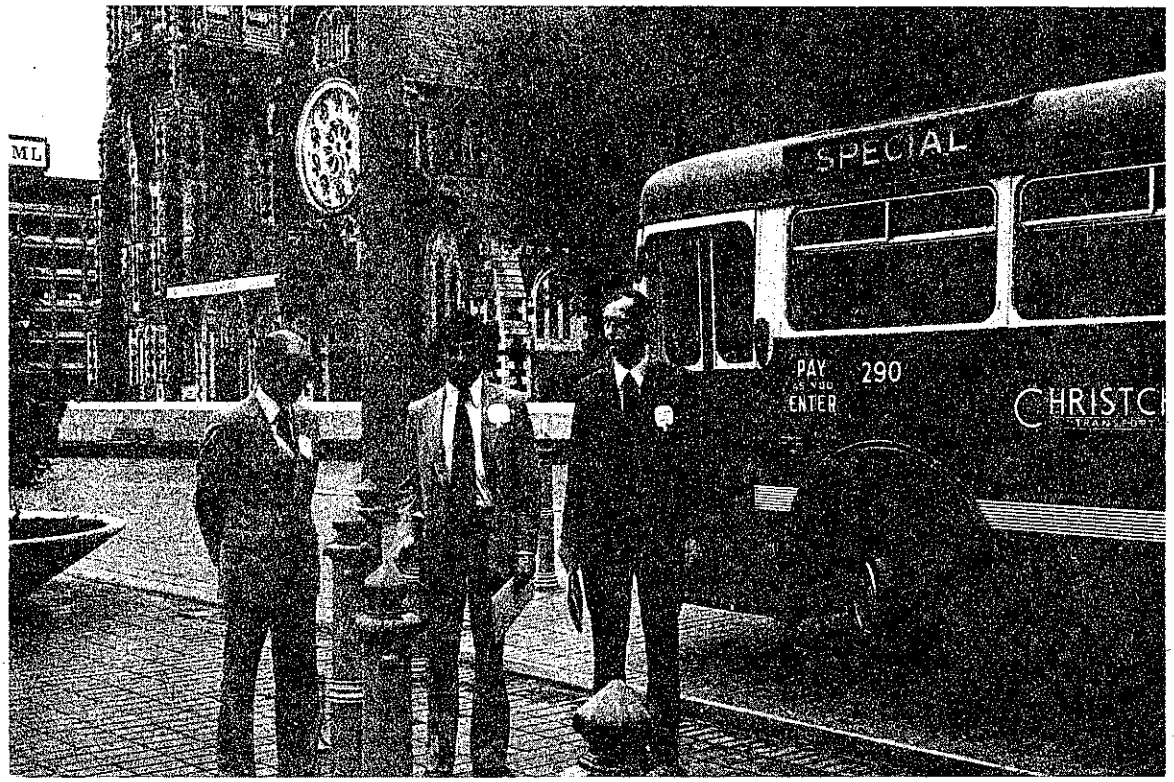

Plate 1: Mr M.O. Holdsworth, Chairman of the Christchurch Transport Board, formally hands 290 over to Mr D.D. Hinman, Chairman of the Tramway Historical Society. Dr J.C. Radcliffe, Chairman of COTMA looks on (right). 22 April 1978

Plate 2: 1978 COTMA Conference delegates with friends and "supporters" at the entrance to Ferrymead.

PROGRAMME

FRIDAY, 21 APRIL 1978

1.00 p.m. Registration Commences - Picture Gallery, 1st Floor, United Service Hotel.

6.00 p.m. Dinner - Own arrangements.

8.00 p.m. Social Gathering - Picture Gallery.

SATURDAY, 22 APRIL 1978

9.00 a.m. Registration.

10.35 a.m. Assemble outside United Service Hotel for handing over of C.T.B. Bus 290 and official opening of Conference (M. Holdsworth (Chairman), M. Taylor (General Manager), Christchurch Transport Board).

11.00 a.m. "Tramway Historic" Central City Tour in Bus 290.

12.00 noon Commencement Luncheon.

Session Chairman: John Radcliffe.

1.00 p.m. Opening Paper: D.D. Hinman (President, T.H.S.) Historical Flashback - Trams in the Streets - How Far Can Museums Go in Recreating History.

1.50 p.m. Domestic Announcements.

2.00 p.m. Paper: Keynote Address - G. Claydon (U.K.) - "The Crich Experience - Analysis of a Successful Museum".

3.00 p.m. Afternoon Tea.

3.15 p.m. Workshop 1:

(a) Progress in archival storage, and recovery and display of tramway era relics (R. Green).
(b) Lessons of Crich for COTMA members (J. Moore).
(c) New Projects - recent experience in designing, funding and implementation (P. Kahn).

4.15 p.m. Workshops Reports.

4.30 p.m. Executive Meeting.

6.00 p.m. Dinner - Own arrangements.

7.30 p.m. Individual Presentations :
- Progress of the Museums over the last 12 months (15 minutes each).

SUNDAY, 23 APRIL 1978

Session Chairman: John Radcliffe

9.00 a.m. Paper: S.H. Wood (Chairman, Ferrymead Trust) "Why a Composite Museum".

10.00 a.m. Workshop 2:

(a) Can you involve other Groups on your site? What are suitable and how to go about it (I. Mison).
(b) Site planning and co-ordination if various groups are involved (B. Efford).
(c) Funding - Who gets what, and why - sharing of the Cake (P. Hyde).

11.00 a.m. Morning Tea.

11.15 a.m. Workshop Reports

11.30 a.m. to 12.30 p.m. Reports and Questions - Spare Parts Panel, Auckland Trolley Bus Spares, Museum Safety Panel, Trolley Wire and Tramway Topics, Other?

12.30 p.m. Lunch.

1.30 p.m. Board double decker bus - trip to Ferrymead (via Sumner).

Afternoon at Ferrymead.

7.00 p.m. Depart for Ferrymead Tavern for Dinner and Social Evening with other Ferrymead Society members.

MONDAY, 24 APRIL 1978

Session Chairman: David Rawlings

9.00 a.m. Paper: Guest Speaker - R. Scott (Martonair Division, MacEwans Machinery Ltd.) - "Design and Maintenance of Compressed Air Systems".

9.45 a.m. Workshop 3:

(a) Museum compressed air use - standards, parts availability, maintenance etc. (L. Day).
(b) Progress in upgrading Museum Society Programmes (G. Jordan).
(c) Track Work Engineering - comparison of techniques and skills being developed by museums (M. Boyton).

10.45 a.m. Morning Tea.

11.00 a.m. Workshop Reports

MONDAY, 24 APRIL 1978 Cont'd

11.15 a.m.	Open Forum: Observations at Ferrymead - a critical analysis. Areas for discussion, e.g. site and track layout, operations, restoration, maintenance, use of buildings, relationship with other groups, etc. (Chairman: J. Radcliffe).
12.30 p.m. to 1.30 p.m.	Lunch.
1.30 p.m.	Paper: P.N. Rendall - The "New" Museum and the "Tourist".
2.15 p.m.	Workshop 4: (a) Enticing people to your Museum - the Public (R. Merchant). (b) Enticing people to your Museum - Work Parties (R. Cowing). (c) To be decided.
3.15 p.m.	Afternoon Tea.
3.30 p.m.	Workshop Reports.
3.45 p.m.	Panel Discussion: "Volunteers v. Paid Staff - preserving and promoting Harmony and Productivity: - G. Claydon (Crich), D. Muir (Manager, Ferrymead Trust), I. Mison (MOTAT), M. Skinner (A.E.T.M.), M. Sanders (T.H.S.), (Panel Chairman: Rev. M.H. Kerr).
4.45 p.m.	Workshop 5: Get-together of various sectional interests for discussion. (a) Financial - subs, systems, sales and fund-raising. (b) Operation - fares and other charges, ticketing, safety rostering, training. (c) Restoration - methods, parts, liaison, etc. (d) Trackwork and overhead. (e) Archives and libraries. (f) Other??
6.00 p.m.	Evening free. Dinner: Own arrangements.

TUESDAY, 25 APRIL 1978

9.30 a.m.	Proposed arrangements for next Conference. Domestic announcements - Transport arrangements etc.
10.00 a.m.	Annual General Meeting - COTMA.
12.00 noon	Close.
1.00 p.m.	Formal Luncheon.
Afternoon	Tram rides available at Ferrymead.

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OFFICIAL OPENING OF THE FOURTH CONFERENCE OF THE TRAMWAY MUSEUMS OF AUSTRALASIA

CATHEDRAL SQUARE, CHRISTCHURCH, NEW ZEALAND

SATURDAY, 22 APRIL 1978, AT 10.40 A.M.

Conference delegates, wives and friends found Christchurch Transport Board Bus No. 290 drawn up on the terracotta tiles of Cathedral Square outside the elegant structure of the United Service Hotel on the opening morning of the Conference, Saturday, 22 April 1978.

The occasion was the official opening ceremony and the handing over of Bus No. 290 to the Tramway Historical Society Inc., on permanent loan.

Mr. M.O. Holdsworth, the Chairman of the Christchurch Transport Board, declared the Fourth Conference open and expressed appreciation, on behalf of the public, of the work being done by member museums present.

Dr. J.C. Radcliffe, the Chairman of the Council of Tramway Museums of Australasia, thanked Mr. Holdsworth for his words of welcome and acknowledged the generous help now being given by all the transport authorities of Australia and New Zealand to their local museum organisations.

HANDING OVER OF 290

Mr. Holdsworth replied, commenting that this year was the 75th Anniversary of the setting up of the Christchurch Tramway Board (now known as the Christchurch Transport Board) and to commemorate this Anniversary, he formally presented the Board's Class Leader bus, AEC Regal Mark IV Bus No. 290 on permanent loan to the THS. In doing so, he commented that it was a tribute to the Board's workshops that this bus was still in such excellent condition, although it was 25 years old, had run 1,196,000 km and had carried 3.13 million passengers.

Mr D.D. Hinman, the President of the Tramway Historical Society Inc., thanked Mr. Holdsworth and the Board for this very generous gesture and undertook that his Society would look after 290 for posterity, observing that this loan arrangement was parallel to the present arrangements which the Society has with the Board for the care of the Kitson steam tram and the Stephenson horse tram.

Mr. Hinman also paid tribute to the efficiency of the Board's workshops and asked Mr. Holdsworth to convey the Society's appreciation to members of his Board.

This bus was then officially "opened" by the General Manager of the Christchurch Transport Board, Mr. M.G. Taylor, who turned the front air door control and thus opened this door.

Mr. Taylor then acted as driver for a tour of inspection of the tramway sites of Christchurch.

Papers

OPENING CONFERENCE SESSION

UNITED SERVICE HOTEL

SATURDAY, 22 APRIL 1978 AT 1 P.M.

INTRODUCTION

Dr. Radcliffe introduced the first session of the Conference and the first speaker, Mr. D.D. Hinman, inviting him to present his paper "Historical Flashback - Trams in the Streets - How Far Can Museums Go in Recreating History", in place of Mr. G.C. Stewart who was unable to attend and was originally to present this paper.

It was explained that Mr.Hinman was, at short notice, presenting his interpretation of this topic and that Mr. Stewart still hoped to present his interpretation of this subject to a COTMA Conference at a future date.

HISTORICAL FLASHBACK - TRAMS IN THE STREETS - HOW FAR CAN OUR MUSEUMS GO IN RE-CREATING HISTORY?

Presented by D.D. Hinman

FOREWORD

Our speaker today was to have been Mr. G.C. Stewart, who is generally acknowledged as New Zealand's foremost tramway historian. His book *"The End of the Penny Section"* is a must for all students of New Zealand urban transport history and is based on 30 years of superb photography, personal experience and painstaking research both during and since the latter days of tramway operation in New Zealand.

Unfortunately, because of the serious illness and subsequent passing of Mrs. Stewart, Graham is not with us today and I would like to read to you a letter received a couple of weeks ago.

"I would first like to thank you for asking me to deliver the opening paper at the first ever conference of COTMA to be held in New Zealand.

I can truly say that I felt very honoured to have been asked to deliver this paper and my dear wife had insisted that I travel south to Christchurch on Anzac weekend to be present at this conference as she realises how dear to my heart the subject has been for so many years.

I regret to have to inform you and your members that Dawn's life is fading very fast and it may be a matter of weeks or now may be only days. This has been a rather shattering turn of events for myself and my two dear daughters and you will understand that owing to this family sadness I will no longer be available to deliver this address.

Nevertheless, I would be deeply grateful if you would extend my warmest best wishes to all conference delegates and I trust that this conference is a great success and paves the way for future co-operation and understanding between the Museums specialising in urban transport-ation in this part of the world.

Perhaps at some future date it will be possible for me to be given the opportunity to address COTMA members on the subject I had planned to speak about as it is one very dear to my heart and having carried out a lot of initial research on the subject I would like in time to have this paper recorded.

I was fortunate late last year to visit a large majority of the museums in Australia with my wife and was overwhelmed with the hospitality and warmth we received from all the museum Societies.

In closing would you please pass on my regards to all the delegates for a successful conference in New Zealand.

Sincerely,

GRAHAM."

In Graham's absence, it has fallen to me to attempt my own interpretation of this topic, but this will not, I hope, pre-empt Graham's offer for a future occasion. Having picked up this topic at a relatively late stage I must freely admit to having drawn heavily on *"The End of the Penny Section"* for inspiration rather than a great deal of my own research.

While I have a reasonable understanding of Christchurch tramway history, my knowledge of other New Zealand tramways is sketchy indeed and because of this you may well detect a slight local bias, for which I make no apology! I hope our Australian guests will bear with me if on this occasion the emphasis is on New Zealand alone rather than Australasia.

INTRODUCTION

This paper will aim to do the following things: 1. Briefly summarise some of the milestones in New Zealand tramway history and in so doing endeavour to bring back to life a little of the period of which we are speaking. 2. Discuss the extent to which museum projects can or should attempt to recreate past history and to consider some of the problems likely to be encountered in such endeavours.

HISTORICAL FLASHBACK

When we think of the tramway era in New Zealand we tend to consider that it began with horse and steam services in a few towns in the 1880s (and cable cars in Dunedin) expanding into an electric tram heyday in the early years of the 20th century. Almost forgotten are the earliest passenger tramways of New Zealand - the Dun Mountain Railway of Nelson and the vintage "inter-urbans" of the West Coast and Thames goldfields, all of which pre-dated their more well known city counterparts and a few of which were still running when the first of the "jazzy electrics" were treating their citizens to speedy mass transit. Time permits me to refer in detail only to the Dun Mountain line which, with its opening in May 1862, had the honour of being New Zealand's first street tramway. The line was but one mile in length, being the city section of a 13½ mile tramway built by a mining company to transport horse drawn wagons carrying chrome ore from mines in the Dun Mountain region to ships at the Port of Nelson. In return for allowing horse-trains from the mines to rumble through the town streets, the Town Council had insisted that the mining company provide a passenger service to the port. Sydney-built, to the same design as cars which had commenced running in Pitt Street the previous year, this primitive one-horse tram continued to run for 39 years, its length of service outlasting lines on many of the much better known municipal tramway systems of other centres. The remainder of the lines lasted only until 1872 but it took a Council road widening programme of 1901 to bring about the demise of the passenger tram - the first and certainly not the last time that roading improvements have been used as the excuse to get rid of trams!

It is perhaps ironical that of all the original planned colonial settlements in New Zealand, Nelson, having pioneered a tramway service, was the only town not to develop a comprehensive electric tramway system. The first City to adopt the street tramway, had become the first to dispense with it.

It occurs to me that those of our museums which are including horse trams in their projects could find that the tiny Nelson tramway with its short single route was rather more akin to museum style operation than the more sophisticated city systems we are probably trying to represent and emulate. It is therefore a pity that our knowledge and records of this fledging tramway are rather scant. Before moving forward to the mainstream of tramway development, I would like to quote a passage from *"The End of the Penny Section"* which I think vividly brings back to life some of the atmosphere of the period:

"In design the early horse trams were influenced by contemporary vehicles of the period, their appearance revealing a mixture of railway, tramway and stage coach origins. The word 'Bus' which was painted boldly on the side panels of the Nelson vehicle may explain why it was always known as the 'City Bus', or the 'Port Bus'. Very seldom was the true description, horse-tram, used by the patrons.

These were the years when one horse-power was represented by one horse and everything moved at a slow tempo, the horses plodding along at a walking pace. On arrival at its destination, the whole outfit would come to a jolting, swaying halt, with brake shoes screeching in protest as the passengers descended. With a seating capacity for 40 passengers, including a back-to-back seat along the pitch of the roof, there was no fear of the poor horse breaking the four-miles-an-hour speed limit. There was no spiral staircase for the roof-top riders, but steel footholds were provided for the more athletic patrons. As there was only a footboard open to the passing scene, for weary feet, the upstairs passage was strictly for men. Modesty boards to hide ladies' ankles did not come into vogue on double-deckers until the 1870s."[1]

Moving forward to the late 70s and early 80s we find the urban transport revolution has arrived and the major towns discovering the tramway as the means to move people en masse around the city relatively cheaply. Iron wheels on iron rails made for smoother and speedier travel than cartwheels on rutted roads. In a period spanning less than six years tramway services had commenced in Wellington (steam and horse), Dunedin (steam, horse and cable), Christchurch (steam and horse), Invercargill (horse), and Auckland (horse) and this development was going to have profound effect on the future growth of the towns. Until the advent of mass transit the spread of cities was generally limited by the distance that people were prepared to walk - between home and work, home and shops etc. and while there were small outlying settlements the bulk of the population lived within a mile or two of the centre of the town. The early tramways and their electric successors changed all this and the towns began to grow out along the tram routes in a "ribbon" form. Areas between the routes often remained undeveloped however, and had to await the coming of the motor car a little later into the 20th century. Some of the early tramway companies were themselves involved in the land development business, extending their tram lines to enable urbanisation of their land holdings and thus creating traffic for their tramways.

One of the features of early tramway operations, which in some instances followed through into the electric era was the deliberate effort to create attractions at the end of tram routes and then to run special excursions at weekends or evenings and thus create patronage. In Christchurch for example, there was intense competition for the traffic to the beaches (three different companies in the 90s were running to the local beaches of New Brighton and Sumner) and rival companies would advertise special excursions on their line with the promises of band concerts etc. on arrival as well as the usual beach attractions. Wattle Park in Melbourne would be a much later example of this technique. I would suggest that some of

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[1] G.C. Stewart *"The End of the Penny Section"*, pp 7-8

our museum operations, particularly where we are endeavouring to provide a "passenger service" rather than just a "there and back" joy ride would be rather more like the special excursion trip than the day to day commuting which was the bread and butter of the working tramway system. To give more historical accuracy and period atmosphere to our operations this could perhaps be emphasised - e.g. We could do this at Ferrymead when there are special functions at the Truscotts Road site - we even have the element of competition: the Ferrymead Railway running to the same place!

The tramway vehicles of those early days varied from town to town but in almost every case the pattern of development was the same. The original vehicles would be imported usually from either the United States of America (often John Stephenson - eg. Christchurch and Wellington) or England (e.g. Starbuck - Auckland) with later cars being closely copied replicas made by local coachbuilders. Later still local designs appeared, often very different from town to town. To use Christchurch as an example, the first 9 cars of the Canterbury Tramway Company were imported from John Stephenson, New York, in 1879-80 and as far as is known all subsequent double deckers of both this and the other Christchurch tramway companies were copies built by the local firms of Moor and Company, Boon and Stevens and Booth McDonald. While the tramway purist can usually identify a locally built car from a Stephenson, the copying was remarkably exact, even to the inclusion of "S" (for Stephenson) matchstrikers (for wax matches) and "JS" door handles. The double decker restored by the THS as New Brighton Tramway Company No. 10 and at present on display in the Hall of Wheels is a local car thought to have been built by Boon and Stevens, but it has these Stephenson "trade marks".

From the point of view of our museums, where the opportunity exists to preserve these early vehicles, and there is a choice, should we go for an imported original or a local copy? - the tramway purist would probably opt for the original every time but from the local history point of view perhaps local craftsmanship should be preserved for posterity. If the bulk of the fleet was locally built it would be more representative to preserve a local car.

In Christchurch we haven't needed to make this rather difficult decision as we have been able to preserve both local and imported cars, and the main argument has been about how many of the local coachbuilders we should try to represent - there are still sufficient early bodies around for a whole fleet of double deckers to be reconstructed, and some of our members would like to see this done! I could perhaps sidetrack a little here to explain that in Christchurch the majority of the early tramway vehicles survived well into the electric era, with the old double deckers still being pressed into service on special occasions such as race days right through to the final years. Unfortunately, when they were disposed of the running gear was always scrapped and only the bodies survived - but that is another story. I am not aware of any other tramway system which kept so many of its pre-electric vehicles through the electric era and this was probably because in Christchurch, unlike all other New Zealand centres except Auckland, there was no change in gauge at the time of electrification and thus the vehicles could continue to run without undue difficulty on the new system. Also Christchurch, with a flat terrain, was admirably suited to trailer operation.

The old cars (and there were more than 60 of them) readily converted to electric trailers - at a price rather less than that of building new vehicles. In fact, eventually, new trailers were built and some of the old cars scrapped, but a good many were retained for those special peak uses such as racing and trotting meetings that occurred only a few times each year when the "modern" fleet could not cope. Even in the early 1950s these were patronised by large numbers of people who either did not own or chose not to use their motor cars, and opted for public transport.

We were also particularly fortunate in that the steam trams survived so late in this city. The Tramway Board found them useful firstly until electrification was complete (e.g. the line to North Beach was operated by the Board as a steam tram service until 1914). They saw occasional peak service use until 1925; they were used as shunters for trailers in the Square and then, finally, a few were retained for ballasting and other service duties. Three of them (Nos. 6-8) were still usable in 1939 and they were reconditioned so as to be able to provide a skeleton service should there have been a power failure due to enemy action! Fortunately that never eventuated.

Before we leave those pioneer tramway days, I would like to refer to another aspect of early tramway operation that today we tend to overlook - and that was the tremendous backup service needed to keep the system going. This is still, of course, necessary today with a modern tramway system like the M&MTB, but those of us who aspire to be horse tram operators, for example, tend to think that all we will need is a tram or two and a horse or two and we will be able to run a horse tramway. It wasn't like that at all, as the following quotations from *"The End of the Penny Section"* will show:

> *"'Animal Power'*
>
> *The trams were served by robust animals which were changed three times a day. But the human material was held more durable, and the same driver had to stay on duty throughout the three horse shifts. In Auckland horses were required to walk eighteen miles a day, getting a quarter-hour spell between each trip. Hauling was a heavy task, particularly when the three-ton trams were overcrowded. An average of 200 horses were stabled at each depot ....*
>
> *Special departments at the depots prepared the food for the hungry horses. Most companies grew progressive crops to keep up a steady supply of maize, oats, and chaff from out-of-town farms. The daily ration for one horse consisted of 10 lb oats, 3 lb maize, 1 lb beans (weighed after crushing), 14 lb chaff, and 4 lb hay, 2 lb bran, or an equivalent of green food, carrots were also included.*
>
> *Harness was always a costly item, having originally been imported from America, but local harness-makers later fulfilled orders. Each groom had a team of horses, ranging from fifteen to twenty, under his care to feed and keep tidy with glossy coats and manes brushed. Grooms oiled the many sets of harness, made reins pliable, and kept collars and traces to a high standard. In the smiths' department stacks of iron shoes for the steeds and iron tyres for the buses reflected the glow from the forge fires. The health and general wellbeing of the animals were always foremost. A small horse hospital was part of a depot, and veterinary attention was considered as important as maintenance expenditure on the trams. Big money was invested in the horses, each car requiring between seven and eight animals to work the shifts."*[1]

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[1] ibid P.35

A point to be made here is that the tramways played a rather greater role in the community than just carrying passengers, important as that was. Along with other transport modes of the times their effect on local employment and the economy was considerable and perhaps in our present day preservation efforts, this should be acknowledged.

I have really only skimmed the surface of this fascinating topic of pre-electric tramways in New Zealand, but with time moving on must now turn to some of the highlights of the electric tramway era. As the majority of our exhibits are of early to mid 20th century vintage, this is no doubt where our greatest interest lies and in the time remaining I would like to discuss particular aspects of electric tramway days and relate these to our museum projects.

> *"At the startling speed of 20 mph, the first electric-powered line in New Zealand between Roslyn and Maori Hill at Dunedin, created something of a sensation when opened in October 1900. The first electric trams represented the height of enterprise and luxury, as such a swift form of travel had been unknown to city dwellers. They were described at the time as noiseless and graceful, with the comfort of a drawing room. People flocked to ride in these speedy wonders which glided with such ease along the hilltop ..."*[1]

The three 20 seater cars built by J.G. Brill Company, Philadelphia, were the smallest electric trams to be used in New Zealand and were a scaled down version (including their gauge -3 ft. 6in.) of the more numerous box cars, also Brill built, of the main Dunedin system. The bodies of two of the three cars are now preserved: No. 1, found in excellent condition a few years ago entombed inside a house, where it had been since the line closed in 1936, is held by the Dunedin Museum of Transport, and No. 3, which in latter years as No. 81 had been a works car on the main Dunedin system, can be seen in the tram barn at Ferrymead.

The first 5 years of the 20th century saw electric tram services established in the four main centres (Auckland, Wellington, Christchurch and Dunedin). Between 1908 and the first World War, electric traction reached the provincial cities of Wanganui, Invercargill, Napier and Gisborne. The final tramway system to be opened was that of New Plymouth (1916). At the time that Borough claimed it was the smallest municipality in the world to run an overhead trolley system. Gisborne was unique among New Zealand tramway systems in that it opted for the Edison-Beach storage battery system, using 4 cars, two imported from the United States of America, and two built by the Christchurch tramcar builders, Boon and Company. This company which, as Boon and Stevens, had been building horse trams since the 1880s, built the majority of the Christchurch Tramway Board fleet (all except 22 Stephenson cars imported for the opening of the system and the last 2 Brills which were built in CTB workshops), and also built cars for all of the provincial cities. The firm, less grand today, still survives, and as seen during the tramway historical tour earlier in the Conference programme, can be found in Ferry Road, building truck bodies in the same building in which many of the trams were constructed.

The heyday of the electric tram in New Zealand was in the 1920s with fleet additions, including trailers, totalling more than 200 for the decade and, in some cities, further route extensions being opened. The peak year for track mileage was 1929, when 170 route miles were open to traffic, and the

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[1] ibid P56-57

total patronage of 160,559,313 passengers for the year 1928-29 was only exceeded during World War II.

However, by the 1920s the effects of the motor car were already beginning to be felt and this, as well as the private bus competition which was rife until legislated against in 1926, created a need for transport operators to cut costs wherever possible. One-man trams were introduced in the smaller centres with the new American Birney cars in New Plymouth and Invercargill and existing cars were converted to one-man operation incorporating many of the features of safety car design both in these and in other towns. Of the main centres only Christchurch joined the "one-man" band, with the conversion of three trailers to a local version of the Birney safety car in 1927, and the operation of these on the St. Martins Line. With the need to economise still further in the depression of the 1930s, Christchurch converted its near-new double-bogie "Brill" cars to one-man operation. Our No. 178 is an example. In Wellington, the new prototype "Fiducia" car which appeared in 1933 was designed for one-man operation, but this was never proceeded with, presumably because of the narrow congested streets of that city and the delays that "pay as you enter" operation would have caused.

The onset of the depression also saw the beginnings of tramway closures. In Christchurch the first to go was the Northcote extension of the Papanui line (1930) more particularly because a road rebuilding programme about to be implemented by the local Councils would have cost the Tramway Board too much. (Shades of the Nelson horse "Bus".) Then in 1931 the line to North Beach, the last to be electrified and, because of the vast tracts of open country between the City and the Beach, never profitable, was replaced by Trolley Buses. The Richmond line underwent a similar conversion three years later. This was the first true trolley bus "system" in the country, although there had been a "trackless tram" running between the Wellington suburbs of Thorndon and Kaiwarra between 1924 and 1932. *"The venerable ancestor of all the trolley buses to follow, this archaic vehicle was described as 'a lumberer with built-in discomfort' and was said by some unkind types to be a hybrid to a piecart."*[1] With a top speed of 17 mph the bus, which would have been a tramway but for legislation preventing competition with the adjacent Government railway line, was not a great success and succumbed to motor bus competition in 1932. Meanwhile, the depression and other disasters were taking their toll in the provinces. The Gisborne battery trams had never been a roaring success and, despite track extensions as late as 1925 (never completed and opened), the trams ran for the last time in July 1929. Then on 3 February 1931, the Napier earthquake killed 256 citizens and the town's tramway system and, although the tram cars never ran again after that fateful day, the fleet remained intact in the depot for several years until formal closure proceedings were concluded.

By 1939 decisions were being made to scrap the trams in a number of centres but then came World War II. The trams of New Zealand were both the heroes and casualties of the War. With petrol rationing and tyre shortages restricting the mobility of private motor cars, the electric trams had to carry passengers as never before, as more and more motorists put their cars up on blocks and returned to public transport.

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[1] ibid P142

"Overcrowding, which in pre-war days was only expected at rush hours, now prevailed for a large part of each day, while at peak periods the trams and buses were unable, even when packed to their doorsteps to accept the numbers of passengers waiting... The 1943-44 figures for passengers reached the all-time high of 220,216,000."[1]

In both Christchurch and Dunedin, lines which had been closed in favour of petrol buses had to be re-opened as the petrol shortage worsened. The war also saw the introduction of conductresses on the trams of the four main centres as manpower became critical. As in other fields women in the war were able to undertake work always denied to them previously, and the first hesitant steps towards Women's Lib were thereby made! I would note, however, that women were never given the privilege of driving trams - that had to wait till the 1970s in Melbourne and in our museums. There are some persons who would maintain that because women never drove in service neither should they be permitted to drive our museum vehicles. I don't hold this point of view, although I suppose with my own wife being a licensed driver at Ferrymead, I guess I have a vested interest! I believe that there are times when we must make some compromise with history and, providing we acknowledge where we are deviating from the real thing, no harm is done.

After World War II, the heavy use of ageing equipment with minimal maintenance necessitated urgent decisions as to the future of public transport in New Zealand's cities, and following then current overseas trends, each city, often after a considerable amount of local soul-searching, opted to switch from rails to rubber. By early 1957 it was all over with the exception of Wellington, where new cars had been constructed as late as 1952, and the final battle to save the trams in that city was not lost until 2 May 1964 when 102 years almost to the day since that first tram had commenced running in Nelson, the last street tramway in New Zealand closed.

And now, following a still-controversial condemnation by the Ministry of Works, time has caught up with the last remaining line, the Kelburn Cable tramway, which has operated safely and continuously since 1902.

To conclude this rather rushed and not very adequate summary of the main aspects of New Zealand tramway history, I would like to quote once more from *"The End of the Penny Section"*:

> *"Seldom do public utilities and essential services endear themselves to their users and assume a personality of their own. The electric tram-car, however, was different. It had an individuality that reflected the city it served. To a visitor from Auckland, a Christchurch tram looked strange and exciting. A Wellingtonian found the Auckland cars bulbous, even huge, after the narrow-gutted cars he was accustomed to see inching their way through traffic in the confines of Cuba Street. Trams were unsurpassed in their ability to move great masses of people speedily at cheap rates, and to stand the day-in, day-out strain of dragging round corners and vibrating along streets. Often grossly overladen, they had to be built to stand abuse with the minimum of maintenance.*
>
> *They were built to last - and last they did. Many were to survive for fifty years, a credit to their designers, but detrimental to the*

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[1] ibid P169.

image of tramways in an age of technological advancement. People would have refused to ride in a 1915 motor bus even fifteen years later, but because the tramcar was like an old soldier, and old soldiers never die, municipalities and companies kept the faithful old vehicles, seemingly gifted with perpetual life, plodding on. Standardisation of design often resulted in new rolling stock being built to the same layout as the original cars and powered with equipment that dated back to the Ark."[1]

MUSEUMS, TRAMS AND HISTORY

Throughout this paper I have, from time to time, tried to relate tramway history to our museum operations and in this final section I would like to explore this aspect a little further, with particular reference to authenticity of presentation of our museum vehicles, lines and surroundings. Where necessary, I will use our experiences at Ferrymead to illustrate the points made.

How our museums develop will, of course, depend on the particular philosophy of each group and it seems to me that we can either be a "tramcar museum" or a "museum tramway" or perhaps somewhere in between. I would suggest a simple definition of a tramcar museum might be "a collection of tramway vehicles and ancillary equipment for the purpose of their preservation and public display, perhaps including operation for the education and enjoyment of the public and the museum members". On the other hand, a museum tramway I would see as being rather more than this: specifically, it is an operating tramway using vintage vehicles and is, or should be, endeavouring to illustrate a period of our history when the tramcar was a prime mode of public transport, rather than just displaying and concentrating on the cars themselves. Some of us are beginning to move towards this "museum tramway" philosophy and I believe that it is in our interest, and in the public interest, to do so.

There are problems, however, in working towards this goal, including the real and practical problems of creating the "vintage" atmosphere required. By using local examples, I would like to share some thoughts on one aspect only: the restoration and presentation of our trams in a museum tramway situation. The first point I would make is that the "tramway era", which in our various ways we are trying to re-create, was not just a single epoch. In most cases electric trams were with us from 40 to 60 years and their horse and steam tram predecessors for 20 years or more before that. A great many changes occurred during that time, not only to the vehicles themselves, but to the surroundings in which they operated. Most of us have obtained tramway vehicles spanning a wide period of the "tramway era" and even those museums, such as Wellington and Ballarat, which obtained operable cars with the intention of running them as they were in their final days, have since expanded their horizons to include earlier periods.

As long as we simply have a line, one or two lineside accessories and the trams, it probably doesn't matter a great deal whether we concentrate on a particular period or present our cars at various stages of their active "life". But as our ambitions grow and we look towards creating a townscape or bringing in other transport and historical aspects, the

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[1] ibid P.111

need to concentrate on a particular period becomes apparent. If our fleets were large enough we probably should present some cars at different periods to illustrate tramcar development (i.e. the "tramcar museum" goal) but with the majority of the fleet conforming to the period selected for the overall project. Because many tramcars lasted so long, some quite significant body alterations as well as livery changes often occurred, but we should be careful to assess just how significant these changes were before endeavouring to represent every one of them. Part of this significance would be the length of time a particular feature or style was used - we should not allow ourselves to fall into the trap of assuming that every little alteration must be faithfully resurrected somewhere unless it was in vogue for a reasonable period or was introduced because of some important safety requirement or has some other historical significance.

Likewise we should not allow ourselves to be unduly influenced by our own memories of the trams. While in the initial stages of museum development one of the prime motives of many of us in getting involved was to preserve and operate the trams as we remembered them, as time passes this aspect must become less important. The time will come when our active museum restorers and operators will have never seen their town's trams in street service and this is already occurring in many of our museums. In the THS, for example, I would estimate that more than half of our current active membership is too young to recall the Christchurch tramway system. Likewise, while we may argue that the general public would prefer to see the trams running as it remembered them, a large and always growing proportion of the public doesn't remember trams at all.

One of the dangers of giving too much emphasis to the trams as we remember them is that our memory in most cases is of their latter years when, in many cities, the cars were old and run down, and often in an austerity livery. Do we really wish to preserve that sort of image of tramways?

The anti-tram lobbyists were very good at it, but I would suggest that this is one aspect which we don't need to preserve too emphatically! My own memory of the trams is that of a young primary schoolboy riding to Cranford Street on the Brills in their final years and along with the rest of our restoration team which worked on restoring 178 between 1968 and 1970, I was very pleased that we were doing the car as I remembered it. Fortunately, the Brills were probably less run down than the rest of the fleet, being much newer cars, but when one realises that that particular livery was in vogue for only 7 years (1946-1953), (i.e. the same number of years that 178 has been running on the Ferrymead tramway!) then the argument for "going back to the original" or to the livery and body style which pertained for the bulk of the working life of the vehicle, becomes very strong.

The decision to do 178 as a single-ended One-Man-Tram instead of the original double-ended multiple unit two-man form was, I am sure, the right one, because two-thirds of the working life of the tram was in this form and because it represents a particular development unique in this country.

Christchurch in later years became known for carrying prams on the front of trams ("pram hooks" were added during World War II to reduce congestion caused by prams inside the cars) and the Brill is probably the only car that will illustrate this!

This leads me to the next point, which is to raise the question of how far do we go to represent the range of car types and minor variations within car types in our museums. This is undoubtedly influenced by whether we tend towards the "tramcar museum" or "museum tramway" philosophy. If, for a moment, I can compare Ferrymead with the Wellington Tramway Museum, then the latter with its "fleet" of two basic car types generally representing latter day operation, is in some respects more of a "living museum" than ours with every car different and a restored fleet covering the period 1880-1950. However, unlike other cities, Christchurch never did standardise on one or two car types and I'm sure the range of vehicles selected for preservation can be fully justified!

On the question of whether to try to preserve a particular tram (because that vehicle was first of a class or opened a particular line or whatever) or just a class representative I would say that unless a particular vehicle has a real historic significance then the car in best condition is the one to go for. Sometimes, however, one doesn't realise the significance of a particular car until it is too late. In our own case, I would mention "Boon" tram No. 36 which, until a few years ago, was restorable, although not quite as good as our No. 152, the car we were able to obtain. Only comparatively recently did we realise that No. 36 was the first of the "double saloon" and "drop centre" type of tram which later became standard in many Australasian cities and that its appearance as early as 1906 pre-dated by many years the adoption of the design in such places as Dunedin, Wellington, Melbourne, Adelaide, Brisbane and Sydney. No. 152, the car we are about to commence restoration on, is a "third" series Boon (built 1910). If we had been making our selection now I am sure we would have given greater consideration to obtaining either No. 36 or at least one of the other 11 cars of the first series.

I might add that it is proposed to restore No. 152 to original style, one of the reasons being that this fits in with pre World War 1 era chosen for the Ferrymead Township. The body of the tram, as you will see it at Ferrymead at present, well illustrates the final run-down austerity style of latter day Christchurch tramways, and this impression, of course, has not been helped by a subsequent 18 years out in the weather. The infilling of the open centre portion which took place in the 1920s (as it did on other car classes both in Christchurch and other New Zealand towns) is of course, to be removed, but the other main body alteration which occurred just prior to the First World War may be less easy to reinstate. I am referring here to what we know as the "centre aisle regulation", and a requirement under the Tramways Amendment Act 1913 to provide a corridor throughout the length of the car so that Conductors would not have to proceed via outside steps. This effectively outlawed the cross bench or "toast rack" style of seating arrangement which had been common until that time and as the Tramways Act 1908 and the Tramway Carriage Regulations 1947 are still in force we (and any other New Zealand museum) would need to obtain Government exemption should we wish to operate a car with cross bench seating.

In view of the attitude of the Ministry of Works in recent years concerning the Kelburn cable car, I suspect that the time is not opportune to seek such an exemption.

I would conclude these remarks by observing that while the day of the street tramway as we have known it is well past in New Zealand, and most parts of Australia, our museums, along with such excellent publications as Graham Stewart's *"The End of the Penny Section"* are playing a vital role in ensuring that this fascinating era is not forgotten. The modern Melbourne tramway system will, particularly as its fleet replacement programme progresses, inevitably become less and less like the tramways of the past, and the good work that our museums have begun must never be allowed to stop. Nostalgia for the past has been the "in thing" for some years now, and we need to make the most of this and encourage the public interest in what we are doing to continue and grow. Trams, after all, were built to carry people and, as Bill Kingsley said at last year's conference, our task is *"to preserve the tramways of the people in museums for the people by volunteers from the people"*.

REFERENCES

Stewart, G.C. *"The End of the Penny Section"* (A.H. & A.W. Reed Ltd., Wellington, 1973).

Tramway Historical Society. *"All Fares Please"* (1967).

Kingsley, W.J. *"About People"* (Paper presented to 3rd Conference of Australasian Tramway Museums, Adelaide, 1977).

DISCUSSION ON MR. HINMAN'S PAPER:

Dr. Radcliffe stated that evidence, at least in Adelaide, was that John Stephenson and Company Limited did business through agents. In Adelaide this was Duncan and Fraser Limited, which marketed Stephenson products and later made them under licence and imported hardware for these vehicles from the principals, John Stephenson and Company Limited. This did not appear to be so in Christchurch.

Mr. A.G. Lightfoot, Chairman of the Canterbury Branch, New Zealand Railway and Locomotive Society Inc., pointed out that early Christchurch trams have survived, not only because of the lack of change of track gauge but also because of the relatively dry climate in Christchurch.

Mr. Hinman was thanked with applause.

THE CRICH EXPERIENCE - ANALYSIS OF A SUCCESSFUL MUSEUM

being the keynote address delivered by G.B. Claydon, Ll.B., M.Inst.T.A., Hon. Secretary of the Tramway Museum Society, of Crich, Derbyshire, United Kingdom.

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1. Introduction

It is both a privilege and a pleasure to have been invited to address the COTMA conference here in Christchurch. COTMA is a very valuable institution and I am glad to show it support.

I admit to a problem from the outset. I am conscious that the expectations aroused on the part of an audience which knows that the speaker has travelled halfway around the world to address them can never be fulfilled. All I can hope for is that you will not be too disappointed by what I have to say.

My address is entitled "The Crich Experience - Analysis of a Successful Museum" and I should like to make it clear immediately that this title was chosen by the conference organisers. To have come from me, such a title would have seemed immodest and presumptuous. I have already learned to be cautious in this respect since, when I last visited these parts, it was made plain to me at one museum that no "stuffed-shirt Pom" was going to tell them what to do! What I shall attempt in this address is diffidently to offer some observations drawn from the experiences of the museum which I represent in the belief that the pooling of this knowledge may help to provide guidance for those engaged in similar projects.

Finally on these preliminary matters, my credentials. I am Vice-Chairman and Hon. Secretary of the Tramway Museum Society, the body which owns and operates the Tramway Museum at Crich, in Derbyshire, England. I joined the organisation shortly after its establishment in 1955. I have been secretary for some 20 years, from before the museum was set up at Crich.

2. Areas over which we can exercise little or no control

2.1. Macro-geographic. We can have no say over such factors as the size of the country in which we are established and the proximity of centres of population and the state of communications within it. Yet these factors may materially affect our scope and chance of success. The substantial size of Australia and the barriers to easy communication in New Zealand have understandably led to the setting up of a fair number of local museums, whereas in the case of the United Kingdom, Crich has been able to establish itself as the only national tramway museum, with important consequences which I will touch on later.

2.2. Population. Likewise we can do little to alter the size and distribution of the population of our respective countries. A substantial population provides the basis for a potentially large workforce and visitor patronage. Obviously Crich, in the United Kingdom, has advantages in this respect compared with Australasian museums.

2.3. Climate. The relative dampness of the United Kingdom weather compared with that of Australia and New Zealand provides an advantage for the latter. Tramcar bodies, electrics and mechanics are all susceptible to quicker deterioration in a damp climate. This is also true of structures, such as steel cladding on a building, and track formations.

Apart from easing the task of maintenance, fine weather also encourages outdoor work and visitor patronage. Conversely, it may increase the risk of fire. Fortunately, of the museums which I have visited in Australasia, only Loftus appears to run any risk of bush fires.

2.4. State assistance. In the United Kingdom, finance from Government sources has been modest and belated in assisting private museums. My travels in Australasia have shown that a variety of such schemes have been in operation for several years and in general there seems a greater readiness to provide assistance than in the United Kingdom. This is equally true of help from local authorities and from industry.

Despite these differences, it is quite clear that there are far more topics which we have in common, so that I now proceed to consider these.

3. Location and layout of site

David Hinman covered much of the ground in the paper which he read at the Sydney Conference. In any case, many museums are beyond the point of no return on this matter. However, I believe that there are still some facets which it is of value to explore.

3.1. Security of tenure. There is the unhappy example of a certain trolley museum in the United States, which has limped along on a series of short leases, having to transfer its site (with an enormous amount of trackwork) on more than one occasion. At the earliest opportunity, it is important to try to obtain the freehold of your site or to effect some other arrangement offering comparable security. The necessary cash may not alway be available at the outset. Crich started with a three-monthly lease, but we bought the freehold in stages as soon as we could afford to do so. It may be that an offer to fund the acquisition is forthcoming from a particular individual. Such offers should be treated cautiously since it is risky to be dependent on the continuing goodwill of any one person. Even tie-ups with local councils can be hazardous, since they are prone to wax and wane in their support.

3.2. Attractiveness to public. It is essential to make the museum as attractive as possible to the public since from them we expect to receive much of our income. Bill Kingsley's paper to the Sydney Conference very wisely stressed this point. Particular factors include:

3.2.1. The provision of adequate car parking arrangements, surfaced walkways wherever possible and presentable toilet facilities. Refreshment facilities provide an additional attraction and are a further source of income.

3.2.2. The entrance should be reasonably accessible and the premises should look as attractive as possible from it to encourage persons to venture within.

3.2.3. In cases where the museum operates on private land, consideration should be given to enclosing the site. This aids security and permits an admission charge to be levied. Not everyone will wish to charge for admission, but the general experience seems to indicate that the advantages outweigh the disadvantages, and certainly this has been the experience at Crich.

3.2.4. The ride should have its far terminus out of sight (so as to arouse visitor interest) and if possible should be not simply a ride for its own sake but should serve as a means of transport to another point. Ferrymead provides an eminent example of this latter feature, and St. Kilda and Paekakariki provide, or will provide, interesting links with the sea.

3.2.5. We should diversify our exhibits as much as possible since, regrettably, public interest in trams is something less than white hot. In particular:

Our rolling stock should be as varied as possible from the visitor point of view. I shall return to this point.

Reliance simply on a car ride to attract visitors is not enough. They should be permitted to inspect as many aspects of the enterprise as practicable. The power house and workshops are cases in point. In the latter case, there is a fascination all of its own in watching others at work. Admittedly, for safety reasons visitors cannot be allowed to wander at will in these places, but consideration should be given, say, to incorporating viewing galleries. Crich is doing this with its new power house and I notice that Ballarat plans to do something similar in its new workshop building.

Thought should be given to introducing non-tramway items. At Crich we have a mining display provided by a local mining society. MOTAT and Ferrymead have done this on a grander scale, although the other items are not there under control of the tramway bodies.

Consideration should also be given to introducing a street environment. Bendigo and Ballarat already operate in the highway, but for those museums which do not, apart from the element of diversity which the concept provides, there is the educational point that future generations may not readily appreciate that trams ran in streets. All the New Zealand museums have a street setting in being or in prospect and Loftus also has plans to incorporate one in their new development.

While the operating tramway should provide the dominant feature, attention should be paid to housing and displaying small exhibits; tickets, uniforms, pieces of equipment and the like. These are needed to provide an understanding and record of tramways in the round. If some can be operated by visitors (e.g. a controller or a ticket punch), this feature besides heightening interest may also serve in the case of younger visitors to release some of the pent up exuberance otherwise reserved for disfiguring the cars. But such items need constant repair.

3.2.6. Whether as part of the street scene or otherwise, it is useful to incorporate a period cinema or a schoolroom (MOTAT already has one of the latter and Ferrymead has one in prospect). Either of these buildings can then be used for their original purpose so as to provide a place to demonstrate certain features of tramways, e.g. old films or slides can show the tramcar as it was in our towns and cities, the basic urban transport mode, another feature which younger generations may not otherwise appreciate. Additionally, films, slides or other visual aids can explain to visitors the workings of the tramcar.

4. The trams themselves

4.1. Selecting the collection. Every member has at least one pet tram which he wishes to see preserved. But it is wise to be discriminating, otherwise the museum might find itself overburdened with relics. Every car acquired eats into finite resources of cash, space and manpower. In particular, the burden of maintenance is increased, both of the trams themselves and of the buildings in which they are housed. At least one American museum has had its progress severely hindered by indiscriminate collection of tramcars. John Radcliffe uttered some useful thoughts on this topic at the Sydney Conference and I offer the following:

4.1.1. The museum should define its aims and try to select cars which fulfil them. The collection should tell a story with no missing chapters and no chapters repeated. In the case of Crich, we have twice set up committees to report on this important, but complex subject. The latest reported only a month ago.

4.1.2. Subject to the point just made, the fleet should be as diverse as possible since, as already pointed out, the public are not interested in subtleties: they tend to judge by shapes, sizes and colours. In this connection, it is interesting to note that Bendigo has gone in for painting its fleet in a variety of liveries.

4.1.3. Conversely, it is desirable to standardise on certain items so as to simplify maintenance and operation.

4.1.4. At Crich, the public generally prefer double deckers to single deckers. Indeed it has been stated that the ideal tram for there is one which has a large upper deck and no lower deck! This is hardly a problem for Australasian

museums, except perhaps when the acquisition of buses or trolleybuses is being considered.

4.1.5. Representatives of a production batch should be favoured, rather than prototypes. The former tell the more relevant story. This point was made by John Radcliffe in his address to which I have already referred.

4.1.6. There is sometimes a case for dividing cars into historic exhibits, which may generally be kept static, and an operating fleet, which can be composed of duplicates more readily to be subjected to the wear and tear of operation.

4.2. Ownership. I urge that you try to ensure that all trams in the collection are owned by the museum and not by individuals. In the latter case, there can be problems of control and liability. Particular problems could be posed in the event of an accident. Furthermore, if the cars are owned by the museum it can deal with adherents of particular cars much more firmly since the wider interests of the museum may cut across individual wishes. In this way, we may all learn to put the museum first and individual cars second. In fairness, it has to be admitted that at Crich this has produced problems when certain cars have been returned to their original localities for restoration. The tendency has been for those performing this work then to claim the cars as theirs. So if museum cars are boarded out in this manner, it is important to have a clear agreement as to the rights of the parties.

4.3. Sponsorship. Notwithstanding what I have said about ownership, there is nevertheless a need to encourage interest in particular cars. Crich achieved this by the device of sponsorship. Generally, as a condition of its acceptance, the museum required each car -

to be acquired and transported to the museum free of cost to the museum;

for a substantial contribution to be made towards housing the car;

for ownership of the car to pass to the museum on its arrival at the museum.

These severe terms could be imposed only by a body which dominated the tramway preservation scene. The Crich museum has exploited to the full the fact that it is the only national tramway museum in Great Britain.

5. Organisation

5.1. Incorporation. This provides for perpetual succession and simplifies the arrangements for owning land. I understand that all the constituent museums of COTMA have to be incorporated before they may be accepted as members, so I need say no more on this point.

5.2. Form of Incorporation. A capital structure, with shares, is best avoided since it may lead to takeovers and lessens the chances of receiving fiscal benefits, although it has its advantages as a means of raising money. Preferably the museum should be registered as a charity or some other type of non-profit-making concern so as to secure at least some exemption from taxes and rates. In the case of Crich and, I believe, some of the COTMA museums, this arrangement entails members of the governing body being prohibited from receiving payment for their services.

5.3. Components. The Crich museum is divided into the following organisational components:

5.3.1. The Board. Some museums have a governing body which consists of a group of passive trustees who are limited in their decision taking to matters of broad policy. This arrangement makes it virtually obligatory to appoint a full-time director or manager. Crich has preferred the alternative of a governing body (known as the Board of Management and hereafter referred to as "the Board") which makes all major (and many minor) decisions. In effect, the cabinet system has been adopted, with all members having particular responsibilities in the hope that no facet of museum activity is overlooked. Board members are subject to election at annual general meetings, generally for a three-year term, so that a third retire each year. This aids continuity. Whether members of the Board should be eligible for immediate re-election after the completion of their term is a debatable point. On the one hand, it seems nonsense that having found a valuable member, the museum should be obliged to dispense with his services. On the other hand, there is some truth in Lord Acton's dictum that all power corrupts so that people tend to grow complacent after years in office.

5.3.2. Committees. These can be standing or ad hoc. At Crich they are established by the Board and enable the latter to shed detailed responsibilities. Obvious candidates for treatment in this way are safety, tramcar restoration and publications. Membership is appointed by the Board but is not limited to Board members and so may be a useful means of grooming people for Board responsibilities. But to provide a link with Board thinking and as a channel of communication between the Board and committee, there is at least one Board member on every committee; generally he is the chairman of the committee.

5.3.3. Officers. As you may imagine, these are persons on whom certain specific functions are conferred. In general, offices are not elective but are Board appointments. Experience at Crich has shown that it is much better for the Board to assess the capabilities of candidates rather than rely on what chance may offer at an election. However, it follows that it is highly desirable for the majority of posts to be advertised in the first instance so that those interested may have a chance to register this fact. Pre-eminently a Board appointment is the post of chairman of the Board. Who better to assess a person's qualities for this office and who more inconvenienced by an ill-judged appointment than the other members of the Board? But at Crich there are certain conspicuous exceptions to the rule that all officers are appointed. The secretary and treasurer are subject to election by the general membership, presumably because these offices are assumed to be of particular significance. Another office is that of auditor. In this case it is peculiarly fitting that he should be elected by the members, and indeed this is a legal requirement.

It has been the policy of the Board to appoint a substantial number of officers. This does inspire the charge that there are "too many chiefs and too few indians", but appointments help to fix responsibility and they are also a useful way of conferring recognition for good work.

5.3.4. Ordinary members. The contribution of ordinary voluntary members is of immense significance to museums of our type and this aspect is considered in more detail later.

5.3.5. Paid employees. A nucleus of these is desirable if the museum can afford them. It is likely that only they can put in a sustained attendance during the ordinary working week, when so many deliveries have to be made, callers received and outside contract jobs supervised. Also security is increased by having people at the museum throughout the week, and capital assets such as the workshops can be more completely utilised. In particular, the tramway can be operated and revenues earned mid-week as well as at weekends. To ensure continuity, it is desirable for senior employees to be present for at least part of each weekend so as to keep in touch with voluntary members. Finally, in our experience, it has proved a sound policy to recruit employees from the ranks of the membership. In this way, any gulf between the paid and unpaid is kept to a minimum and the employees are likely to be more aware of and attuned to the general museum ethos. They are also less likely to be clock watchers.

5.4. Specialisation. Running a tramway is a complicated business. Many different skills are demanded and there is therefore advantage in specialisation. For example, it is desirable to move away from a system in which each person looks after "his" tram to one which places all maintenance in the hands of a particular experienced

group. In this way, skills are gradually built up and do not have to be developed afresh on each occasion. Moreover, special aptitudes are required for this type of work: enthusiasm of itself is not enough. In certain fields, for example, traction supply and legal work, it is highly desirable to appoint people who are qualified in the work concerned, since mistakes in these areas tend to be costly. Of course, it results in a "busman's holiday" for the members in question, but this can hardly be avoided.

6. Members

6.1. Ordinary volunteer members play a vital role since few, if any, tramway museums can hope to continue for long without their help. This can be imparted by way of knowledge, physical effort or donations in cash or kind. So it should be a fundamental aim to retain and increase the number of members.

6.2. It is important to appreciate that people have got to be attracted who may never have seen a "real" tramway in operation. As the years go by this proportion is likely to increase. So "messing about with trams" at a museum has to be an attraction in its own right.

6.3. Anyone to become attracted to a project such as ours is going to possess an above average IQ, so every member is likely to have many ideas of his own and to question many of those advanced by others. For a governing body in particular this can be very exhausting, but it should also be exhilarating. We should be encouraged by vigour and disturbed by apathy.

6.4. If members are to be encouraged to work at the museum, it is essential that they should be provided with facilities of various kinds. Washing and sanitary facilities are clearly essential, and for museums removed from the habitations of the workforce, overnight accommodation is also very important. The bunkhouse at Bungaree is a classic institution of this kind. At Crich, we also provide a free meals service for working members on winter Sundays.

6.5. Apart from physical facilities, it is also desirable to introduce social ones. Crich has an active Social Events Committee which has organised such varied activities as ice skating, treasure hunts, cricket matches and fancy dress parties. These occasions can do much to cement relationships which might otherwise disintegrate under the stress of working conditions.

6.6. To encourage membership, it is important to cater for all possible categories. So at Crich, after much debate, we have settled on: life membership, honorary membership (for those who have made an outstanding contribution to the museum), junior membership (for those under 18), senior membership (for those over 65) and family membership (which may cover a husband and wife and their children), besides ordinary full membership.

6.7. Subscriptions for membership are set fairly low since the museum has reached a stage where the physical and mental contribution of members far outweighs in significance the cash contribution provided by their subscriptions. Accordingly, the rate is set so as broadly to cover the costs of services to members (providing the Journal, official notices, meetings costs, meals, etc.) and not so as to provide a cash contribution for the museum as a whole. In this way, the cost of joining and of continuing as a member is kept as attractive as possible so as to encourage the physical and mental contributions referred to above. A group accident insurance scheme is also operated on behalf of members.

7. Management

The Crich set up being what it is, an enormous responsibility rests with the Board, so in this final section it is worthwhile examining the attributes and role of Board members.

7.1. Attributes. In early years, Board members were generally selected for their knowledge of tramways, but as the years progressed it became evident that this qualification, although useful, was not enough. No doubt the perfect Board member does not exist, but I attempt below to identify some of the more significant characteristics and requirements.

7.1.1. Specialised knowledge - engineering, accounting, legal - may be extremely useful in sharpening awareness of the issues, framing policies and devising solutions.

7.1.2. Some members at least should be closely associated with the normal workforce (preferably be part of it), but not all. It is also valuable to have some members who are less closely involved so as to contribute a wider and more detached view.

7.1.3. It is desirable to have a mix of practical men and men of vision (the two do not generally meet in the same person). Both types must be prepared to give a lot of their time and effort.

7.1.4. Ideally, there should be a spread of ages and backgrounds. The representation of lady members should not be overlooked. It is noteworthy that Ballarat has a lady treasurer.

7.1.5. Notwithstanding these diverse characteristics, all Board members should be capable of taking an overall intelligent interest in all facets of the museum and they should be capable of working as a team. Unless a united front is presented to the membership, authority and confidence may be seriously jeopardised.

7.2. Role

7.2.1. At the outset, it has to be borne in mind that apart perhaps in the case of paid personnel, the Board cannot impose its will on the membership. It has to gain and then

keep the confidence and goodwill of the membership and so secure acceptance of its decisions by their soundness.

7.2.2. The Board should never be remote from the membership. It should be receptive to their ideas and sensitive to their grievances. Communication is vital. There should be formal channels such as notices, journals, meetings, etc. Also, there should be less formal channels. Board members should make themselves available for discussion in more relaxed settings, such as the local pub.

7.2.3. The Board should give the membership leadership and a sense of direction. But objectives should not be set which are too remote of attainment, otherwise disillusionment may set in. There should always be some new project afoot to stimulate interest. In this game, you either go forward or backward - you can never stand still.

7.2.4. On occasions, the Board may be in advance of general thinking on a particular topic and in these circumstances it should work to persuade the membership of the rightness of its views. In all instances, it should be ready to justify its conduct and no major decision ought to be taken without securing the commitment of the membership in general.

7.2.5. The Board should also possess a good sense of organisation and maintain a check on all facets of museum operation. Topics may be considered systematically over a 12-month period. Regular or special reports may assist in this process.

7.2.6. The Board must remain in control of events. There may be a tendency for full-time employees or other key personnel to become dominating. This should be watched, otherwise the Board will be in the unhappy position of having all of the responsibility and none of the power: the role of the eunuch.

7.2.7. In particular, control must be kept over finance. A museum should progress to the stage where it is possible to estimate income and expenditure sufficiently accurately to introduce six-monthly budgetry periods and in the main their proposals should be adhered to. With more experience, these periods may be extended in key respects to permit longer-term planning.

7.2.8. The Board must be alive to commercial considerations, a factor which may not be readily appreciated by those always working in a voluntary capacity. It must be ready to seize opportunities when chance provides (e.g. financial assistance for unemployment relief projects) or engineer some of its own (the Grand Transport Extravaganza at Crich is an example).

7.2.9. It is also vital that the Board takes an interest in safety. Apart from the duty (both legal and moral) we owe the public and our own members, it is evident that one spectacular accident in any of our museums could have unfortunate consequences not only for that museum but also for the remainder. This problem has already occurred in the United States. The acid test is to visualise how things might look at an inquest. Have all reasonable precautions been taken to guard against an accident?

7.2.10. Finally, but by no means least important, the contributions of individual members should be kept under constant review. People's skills should be deployed to the best advantage. Their aptitudes (and weaknesses), likes and dislikes should be monitored both for present tasks and so as to ensure that if and when vacancies in office occur the work can go on under another's command with the minimum of fuss and delay.

8. Conclusions

The foregoing address is based on our experiences in Crich. Lest anyone should suppose the contrary, let me make it quite clear that my museum is not a perfect institution. We have gained our experiences the hard way and no doubt we have still a lot to learn. I have tried to identify some of the more significant features which go towards making a successful museum. Inevitably with so wide-ranging and elusive a subject my approach has been selective, doubtlessly reflecting to some extent a personal philosophy. Furthermore, it is obvious that not all of my comments can be relevant to all COTMA members, having regard to their differing circumstances. But I hope that some at least of my observations will have been of relevance to you all.

DISCUSSION ON MR. CLAYDON'S PAPER:

(a) Mr. B.J. Dale asked how large the membership of the Tramway Museum Society was.

Mr. Claydon advised that TMS had about 1,100 members, of whom about 150 were active members and some 200 were overseas members. Such a large membership, he considered, was one of the benefits of being a "National Museum", and that as such the TMS was also supported by a World-wide membership.

TMS was quite happy to accept "armchair members". It has also joined a Tramway Liaison Committee with the Tramway and Light Railway Society and the Light Railway Transport League, with the advantage that TMS members may now attend any meetings of these other Tramway Groups in the United Kingdom.

TMS encourages younger members to join, although they are not able to vote until they reach the age of 18 years. The Society considers that these younger members are members for the future. There are also family, senior (reduced rate) classes of membership, and life members.

(b) Mr. Claydon was asked about safety standards and their enforcement at Crich.

In reply, Mr. Claydon suggested applying what he termed "the inquest test", i.e. when operating visualise what case you would make out in Court in the event of a fatality. This test sets a standard which requires such details as the appointment of an outsider as a safety inspector and not a person of your own appointing, medical tests for tram drivers and other similar procedures which ensure the maintenance of safety standards.

Mr. Claydon suggested that in view of the lack of Government imposed standards in Australasia, that it may be possible for COTMA to draw up its own standards.

Dr. Radcliffe asked how he saw COTMA doing this. Mr. Claydon advised a pooling of ideas among member museums and indicated that he would be happy to advise on the procedures adopted by the TMS.

(c) Mr. Claydon was asked what was the effect of exotic trams at Crich.

Mr. Claydon considered that this was a difficult question which each Museum must work out for itself when considering its objectives. For example, he considered that one great lack at Crich was a P.C.C. car, one of the great tram cars of all time.

(d) Has the TMS obtained sponsorship from business houses?

Mr. Claydon advised that TMS has obtained such sponsorship, especially for bringing trams to the United Kingdom from abroad, e.g. Oporto and Vienna. However, in terms of general fund raising, the TMS considers that it has been less successful, despite assistance from the Wells organisation (which was very costly). TMS is not at present using such fund raising techniques because of the depressed state of the economy but has, instead, benefited greatly from the resultant Government Job Creation Scheme.

THE PROS AND CONS OF A COMPOSITE MUSEUM

Presented by Simon Wood, Chairman
of the Ferrymead Trust,
Christchurch, New Zealand.

Introduction

I am Chairman of a Composite Museum Structure known as the Ferrymead Trust. It is incorporated as a Charitable Trust, and administers an area of approximately 100 acres at Christchurch, New Zealand.

The land is well within the boundaries of Greater Christchurch, a City of some 300,000 people. The site has a clear historical significance, as the first railway in New Zealand operated from it, and its main entrance is on Bridle Path Road, which is itself formed along the walking track used by the pioneer settlers of this Province to reach the Canterbury Plains from the Port of Lyttelton. The name "Ferrymead" ("the meadow by the ferry") records that the adjacent Heathcote River was the first natural obstacle on the pilgrim path, and was therefore the site of the first ferry and of an early Inn catering for the thirsts of heavily laden people who had just climbed and descended from a steep hill of some 2,000 feet. The irregularity of the ferry ensured the success of the Inn, and made the Ferrymead area a natural early tourist trap. The whole area administered by the Trust and its Member Societies is low lying and subject to occasional flooding, and although this necessitates filling the ground some 3 feet deep before buildings can be erected, the compensating factor is that the Trust was able to acquire a large central site, which had remained undeveloped for over 100 years. It also permitted the purchase of some 65 acres ten years ago for only $200.00 per acre.

Next Saturday, April 29th, is the 10th Anniversary of the Incorporation of the Ferrymead Trust, and this Conference is therefore held at a very appropriate time for considering the advantages and disadvantages of the type of organisation that has been evolved. The opinions I will now express are my own, and should not necessarily be taken as those of the 22 Corporate Bodies whose representatives make up the Ferrymead Trust Board.

Before examining just how our system works, I think I should first state my opinion on administrative arrangements in a notional perfect museum. My opinion is based on ten years' experience as President of a Member Society, as Co-founder and fund raiser, as Deputy Chairman for five years and Chairman for another five.

The perfect museum administration has as its chief officer a benevolent, visionary, bachelor dictator, possessed of unlimited funds, with power of life and death over all who work under or with him. He should be exempt from all laws, and immune from prosecution. The leaders of all Political Parties and Local Bodies should owe him favours and large sums of money. He should have power of conscription over the local populace, and the right to seize and retain anything he considers to be an exhibit, and to require the owner to move it to his museum and erect it in running order at the owner's expense. He should have the right to run his own armed Police, and to drain on to neighbouring properties. He should be charming, handsome and wise, and the sole owner of the museum. He should hold office for life and on his death his successor should be appointed by that great ex-Australian, Prince Leonard Casley, Monarch of the Principality of Hutt in Western

Australia, who has apparently succeeded in proclaiming his farming museum near Geraldton a Sovereign State seceding from the Commonwealth of Australia, and now printing its own currency and postage stamps and operating its own Airforce and Navy, conferring titles, and insisting on visas for entry. Should he require an Advisory Committee, this should be made up of Messrs. Muldoon, Bjelke Petersen, and Enoch Powell.

Having expressed that view, you may wonder how I became Chairman of the Ferrymead Trust, which is essentially a democratic composite body. There are three reasons:

(1) I was there;

(2) The Trust needs a lawyer about once a week, and this was a cunning way of trapping a free one into the system; (The Ferrymead Trust never pays for anything unless there is absolutely no alternative.)

(3) No-one else wanted the job.

In a composite Organisation, everyone wants to do the "thing" that attracted him there in the first place, and the job of co-ordinating and fund raising is, by comparison, a tedious task, best left to someone else.

The Trust was originally formed with impetus from Jaycees, with the Heathcote County Council adopting the role of Kindly Uncle. It brought together on one site three existing organisations, the Tramway Historical Society, the New Zealand Railway and Locomotive Society and the Museum of Science and Industry. It was immediately joined by all the Christchurch Local Bodies, the Historic Places Trust, Local Pressure Groups and two other Clubs interested in vintage vehicles and aviation. Only Corporate Bodies can be members of the Trust, and each appoints a Trustee. The Board meets quarterly. Day to day administration is handled by an elected executive, and the grass roots of the whole Organisation is a large planning Committee, which, in effect, initiates all new ventures.

The Chief Executive is the full time Director, Don Muir, who is usually on site seven days a week, who has a staff varying in numbers between thirty and eighty, nearly all of whom are members of a Special Work Force and whose wages are refunded to the Trust by the State.

The finances of the Trust have always been precarious, and without annual Local Body grants which are currently about $30,000 per annum, the Organisation would have ceased to exist years ago. Although cash resources have always been slim, there has been a notable growth in capital assets in the form of land, buildings and exhibits. The Trust has borrowed to capacity, and currently owes about $70,000 on a mortgage and on debentures to Members, and although on paper it has a surplus of assets over liabilities, amounting to $168,000, its real worth (including the worth of Member Societies) is probably about $1,000,000. This has been achieved in ten years by a loosely-knit Federal Organisation, the Members of which have contributed something like 1½ million man hours of voluntary labour. It is the biggest Community project in Christchurch, and in the whole history of the City the only thing involving greater Community participation would be the organisation of the Commonwealth Games. Ferrymead is nevertheless just a big ugly construction site with a large County rubbish dump as its centre, but the Public do not seem to mind this, as it is currently enjoying paid public patronage (mainly at weekends) of approximately 50,000 people per annum.

Disadvantages of a Composite Museum Organisation

The disadvantages as I see them in the Ferrymead Organisation are:

(1) No-one can ever be told to do anything except the staff. Administration is by persuasion, and this is a very time consuming method. Instant decisions are seldom possible. Blinding flashes of inspiration are torn to shreds in a complicated committee structure. If, for example, someone in the Tramway Historical Society wants to build a shed for his pet project, he must first persuade the Society Committee. This will involve reports and assessments, as the proposer is always one-eyed and disregards conflicting claims for money, man-power and space. The proposal will then have to be put to the Township and Planning Committee of the Trust, whose twenty-two members will almost certainly want to put it in a different place, make it a different shape and colour, and put a lean-to on to it for another purpose. It will then have to be approved by the Executive, and get a building permit from the County. If funds are not available, and it costs more than $5,000, it will have to be referred to the full Trust Board. It will then be put on a deferred budget for action when funds permit. The proposer will then be morally obliged to take part in fund raising activities. If the money is then raised, the question of priorities for use of funds may then have changed. A year will have elapsed. His enthusiasm has waned, as he has by then thought up two more projects, and by then his former girl-friend is his wife, who keeps asking him why he is not digging the garden.

(2) There is a definite rivalry for scarce funds. Trams and trains earn fares. The Tramway Historical Society has always been very business-like, and makes little demand on joint funds. The Railway and Locomotive Society sees itself as a Hobbyist Group, in which money is only used for survival. Fire Engines and Aircraft make no money, but provide popular exhibits. Every Society thinks that its demands are not given proper weight. If it were not for the effects of large quantities of beer, drunk in two local pubs, serious rifts could have developed between groups.

(3) There are great problems in communication, because rank and file members of each Society can not be properly informed of decisions made at the top of the Committee tier system, and third hand verbal communication frequently results in the widespread dissemination of faulty news.

(4) The Committee System is designed for democratic ends. Efficient administration and democracy are quite incompatible. Everyone concerned in the decision making process is giving up his own spare time. Too much of this time is involved in Committees. It is normal for there to be twenty or more Committees and Sub-Committees operating simultaneously at Ferrymead. I have myself spent over 3,000 hours on Ferrymead Committees. I imagine that there are a number of long serving members who would easily beat that figure.

(5) Design and planning are not best achieved in a multiple Committee situation. No major work of art was ever created by a Committee.

(6) Because of ordinary democratic pressures, Ferrymead has always undertaken too many simultaneous projects, all simultaneously starved of labour and money. The time between starting and completing a building project at

Ferrymead can be up to five years, as different pressure groups proceed with their pet project in the face of general shortages of everything required. Without the democratic process, the entire resources could be much more easily concentrated, and Ferrymead would not have the appearance of an eternal construction site.

(7) The variety of projects causes confusion in the public mind, and is bad for public relations. There must be few firms in Christchurch that have not at some time been approached for a Ferrymead favour. Having made what it considers to be a generous donation of say building materials, the same firm may be approached two weeks later by another Ferrymead group, quite ignorant of past favours.

Advantages of a Composite Museum Organisation

The advantages as I see them are more numerous than the disadvantages, and most of these stem from sheer size. The very appropriate symbol of the ancient Roman empire was the *fasces*, a bundle of sticks tied together, each very weak, but when combined, able to support a large weapon. The main advantages are:

(1) The bigger a museum, the more likely it is that individual members of the public will find something of absorbing interest to them as individuals. Ferrymead is deliberately planned as a large sprawling complex connected by various forms of vintage transport. The purpose of transport is a journey to somewhere. There may be interest in the ride itself, but a journey to a place has to be more interesting than a merry-go-round. At Easter there were about 18,000 people at Ferrymead over a three day period. Nearly all of these had a ride on a tram. Could the trams alone have attracted such a crowd? I think not.

(2) One day there will be seven or eight major exhibition halls. These are deliberately sited about a mile from the main entrance, to give point to a tram or train ride. The first of these buildings is the Hall of Wheels. This building would cost at least $250,000 to duplicate. It was built by the Trust, because the Organisation which originally planned it was not big enough or sufficiently dedicated. It was built with borrowed money, under guarantees given by the various Member Societies. No individual Member Society could have handled such a big project, but the combined borrowing power of all Societies has produced a remarkable building, which has in turn created major cash flows for our Railway and our Tramway.

(3) All restorers of museum exhibits need buildings. The composite size of Ferrymead permitted the formation of the Ferrymead Construction Company Limited, a wholly owned subsidiary, designed to build buildings for the Trust and for Member Societies at cost. The Hall of Wheels would not be standing today had it been built on an ordinary building contract. The lowest tender price for the building some four years ago was $223,000. Approximately $100,000 was saved by using our own small construction gang. It stands today as a monument to them, and to what can be achieved by joint venture.

(4) Ferrymead has always been supported by Christchurch Local Bodies. From the outset a joint approach by a composite group gained public financial support, where smaller more specialised societies have consistently failed when making similar approaches.

(5) The Trust has been able to operate as a Merchant Banker, borrowing surplus funds from Member Societies, and lending them to others. Worthwhile projects have been accelerated by this method, and no money has ever been lost in the process.

(6) The first major building at Ferrymead, the Tram Barn, was built with the help of $16,000 raised in the first joint fund raising, a Queen Carnival. The joint organisation was able to get help from eight other service groups in Christchurch, to assist in the campaign, which also financed the purchase of land. At that time the Tramway Historical Society had no capital at all, and so profited immediately by entering a joint venture.

(7) The most precious asset of all is personal enthusiasm. In lengthy projects specialised enthusiasm should not be diverted for too long into fund raising. People do not like endless involvement in something they never intended to do. The friendly competition between our Railway and our Tramway has undoubtedly benefited both. Competition resparks flagging enthusiasm, and a lot of this is needed to keep voluntary work going out of doors in mid-winter Christchurch weather. Similarly, enthusiasm has been directed at higher and higher standards of quality under competitive influence. A horse drawn tram is now being re-restored, and no one will convince me that the quality of restoration of fire appliances in another Society has nothing to do with this thought process.

(8) The enthusiasm of a voluntary labour force is also kept up by contact with a larger group. Although small specialist groups have been the keynote, there is now a definite recognisable Ferrymead Fraternity, which has worked together, and drunk together on joint projects, particularly joint Festivals and Fairs. A Ferrymead volunteer may once have had to explain what he was doing. Now, an association with the project needs no explaining, and is something that has general community support. Without unity, the various groups would have remained, in public estimation, curious hobbyist cranks. There is now a considerable social life associated with the Ferrymead project, and there have been several joint expeditions and holidays.

(9) There are advantages in the pooling of information. Ferrymead members are between them familiar with hundreds of museum organisations outside New Zealand, and there is a continuous inter-change of information and help. For example, we have two notable exhibits from the United States, and even an offer of substantial help from a major museum in Moscow.

(10) Much help has been gained by individual groups from the process I call "levitation". Quite large pieces of plant periodically vanish, only to reappear six months later untouched by human hand in the shed of another member society a mile away. Sometimes levitated articles have even been thoughtfully painted in a new colour, but levitation saves duplication and purchase, and in the end nobody loses.

(11) Voluntary bodies really work effectively only at weekends. No public museum can operate on this basis. Continuity is essential. No Ferrymead Society has ever been able to afford a permanent staff, but the pooling of resources has provided an office and central administration for some years. The public at large will never take seriously an Organisation which is just not there for five days each week.

(12) Important specialised exhibits are sometimes offered to a specialist society, which does not want them for temporary and very good reasons. A Kb locomotive, once the pride of the New Zealand Railways, and two electric locomotives were acquired, although our own Locomotive Society did not want them at the time. In both cases this was done because of enthusiasm from individual members of the Tramway Society trespassing outside its normal field. In both cases the Locomotive Society changed its mind later, and is now delighted with the acquisitions. But for this, all three would have been scrapped, so that a composite organisation sometimes has unpredictable long term advantages.

(13) The joint venture has always engaged in joint fund raising with the result that no member society has ever had to pay a membership fee or levy. The Trust can therefore proudly claim that it has never cost a cent, when viewed from the angle of an individual group.

(14) Harder times for our Country have brought an unexpected bonus in the form of the Special Work Force which is part of the Government's Unemployment Relief Programme. This means that work now proceeds at Ferrymead seven days a week, and every Society has benefitted. This assistance came originally because the Trust made an approach to the Government to be declared a "Local Body" for the purposes of the scheme. As Christchurch Local Bodies were all partners with the founder societies, it was not difficult to persuade the Government. But for the existence of a central administration with an existing supervisory staff, it would not have been possible to obtain this major source of labour, which has since worked well in the joint interest. Indeed, the enthusiasm of these workers is such that at the Easter Festival twenty-three of them volunteered their services without charge for the whole weekend. This must demonstrate the ultimate continuing enthusiasm which a composite organisation can generate.

CONCLUSION

I hope that delegates to this Conference will learn something of our unusual methods, and particularly from our mistakes. I can only say in conclusion that a composite organisation has suited our strange history and circumstances and that, with the advantage of hindsight, I am still strongly of the opinion that any Tramway Museum is well advised to consider a composite operation.

DESIGN AND MAINTENANCE OF COMPRESSED AIR SYSTEMS

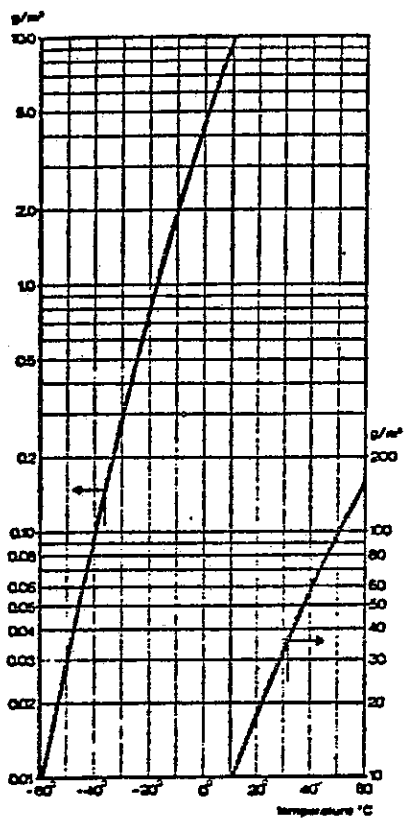
Presented by R.J. Scott,
Martonair Division,
MacEwans Machinery Ltd.
Christchurch.

This paper is a general one and the Rules and Practices mentioned can be applied to any application for compressed air.

The air we use is that in the atmosphere around us. It is found to contain 78% nitrogen, 21% oxygen, 1% inert gases etc. It also contains water vapour and dust. It is these last two which concern us.

Dust can be filtered out at the inlet of our compressor but water vapour is more difficult. Air can, for each condition of temperature and pressure, hold a certain amount of water before condensation takes place. When this condition is reached we say the air is "saturated". From the chart shown, Figure 1, we can see the number of grams of water held in each cubic metre of air if the air is saturated for a range of temperatures. The actual amount of water in the area can be measured using a hygrometer which expresses this amount as a percentage of the saturated value for the temperature at the time. This percentage is called the Relative Humidity.

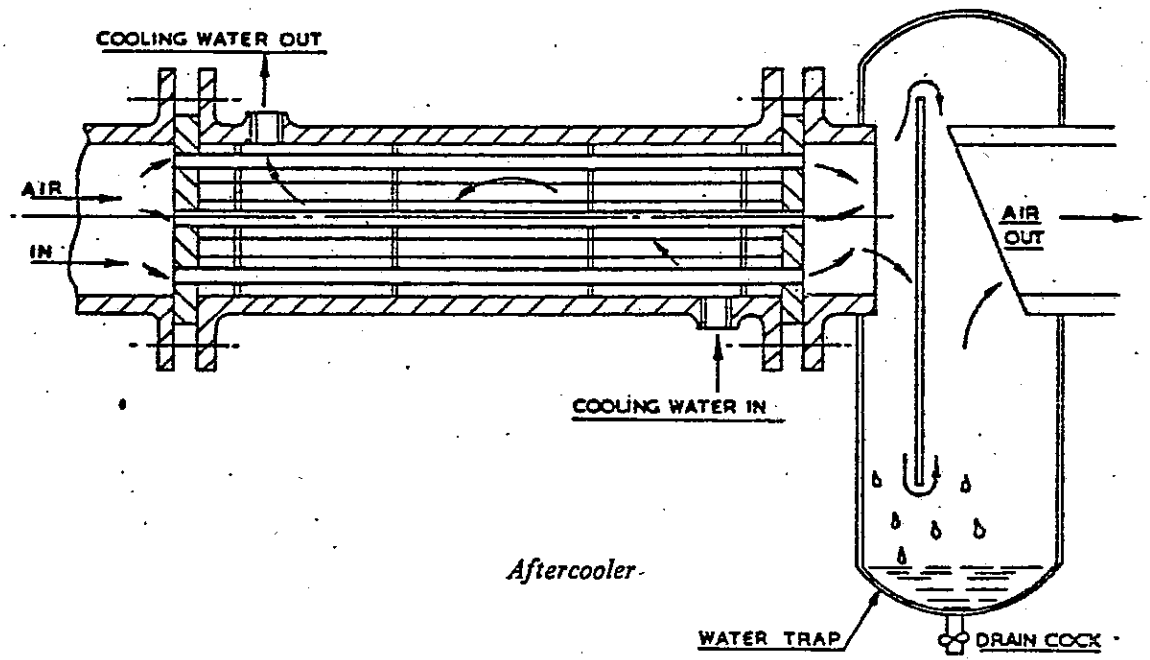
Figure 1:



The molecules in the air around us are travelling at a high speed (452 m/sec) and hitting on objects in the room. The striking force per unit area is called atmospheric pressure and at sea level and 15°C is found to be 14.7 pounds per square inch or 101.3 kilopascals (1 pascal = 1 newton/square metre). As we go up in altitude or as the temperature rises the air becomes less dense. Therefore the pressure is less as there are not as many molecules striking the specified area.

As the air is compressed in a mechanical device known as a compressor, heat is generated and so the temperature of the air rises. As before, the hotter the air the more water it can hold. The only way to reduce the water content is to cool the air down. We can help do this in several ways. The intake air must be the coldest we can find. This way it does not contain much water to start with. After compression we can cool the air in an after cooler. See Figure 2.

Figure 2:



Compressors have many forms but we shall consider only the piston compressor. It has a bore and stroke like a car engine. With this information we can find the swept volume for each stroke the compressor does. The compressor is driven by either an electric or petrol motor and knowing the speed we can find the number of strokes our compressor does per minute. We can then find the swept volume per minute or piston displacement. = A x S x N

where A = area of piston
S = stroke length
N = No strokes per minute

Piston compressors are not 100% efficient. There must be a clearance volume between the piston and the head of the compressor. When we compress air to say 100 psi we reduce its volume to 1/7th of its original volume. To get that air at 100 psi back to atmospheric pressure we must expand the air 7 times. Therefore if we have a small clearance volume, before the inlet valve on our compressor can open the piston must move through 7 times the clearance distance so this part of every stroke is wasted. Other losses are due to friction and heat generated in the compression process. The normal efficiency of this type of compressor is 55-75%. The actual amount of air our compressor will put out then is the swept volume multiplied by the efficiency.

The action of our compressor is that the piston moves down the bore from top dead centre and when it creates a slight vacuum the inlet valve opens letting air into the chamber. At bottom dead centre the piston reverses direction and once a small pressure is formed the inlet valve closes. The piston then compresses the air in the chamber until it reaches the outlet pressure required.

The outlet valve then opens and the air passes through an after-cooler to the receiver. The capacity of this receiver depends on the air demand from the plant. If it is reasonably constant, then the volume of the receiver should

$$= \frac{\text{compressor output x atmospheric pressure}}{\text{outlet pressure required.}}$$

If the demand is variable we should multiply the above valve by 3. This is the rule used by the British Compressed Air Society.

The receiver should be fitted with a safety valve big enough to discharge to atmosphere all the air the compressor can produce. The receiver should be a proper pressure vessel designed for this purpose. One should not use any old tank unless it has been hydraulically tested to 2½ times the normal working pressure. Too often we have seen old hot water cylinders and the like used as receivers. This can have disastrous consequences. If such a cylinder should fracture, it would explode as the air inside tried to expand back to atmospheric pressure. In one instance such an explosion lifted the roof off a building.

A compressor will keep pumping until a set pressure is reached then either it will stop by means of a pressure switch stopping the motor or it will run unloaded by the inlet valve being held open. When air is used the pressure drops to a pre-set minimum and the compressor will restart or the inlet valve will be allowed to function again in its normal way.

Maintenance of a compressor comprises oil changes, filter cleaning and checking valve operation.

Signs of trouble are:

(1) Compressor pumping too long i.e. it is taking too long to compress air and fill the receiver. Either it is losing efficiency or the demand is too great.

(2) Excessive heat.

(3) Compressor oil is getting past the rings and burning during compression. This forms a vapour which travels through the air lines coating them with a tar like substance. It will cause valves to stick, "o" rings to swell and oil in lubricators to turn milky.

Pipes from the receiver should be either black steam pipe or galvanised pipe to British Standard No. 1387. This is the locally used standard for pressure pipes. Some locally produced galvanised pipe does not come up to this standard and should not be used.

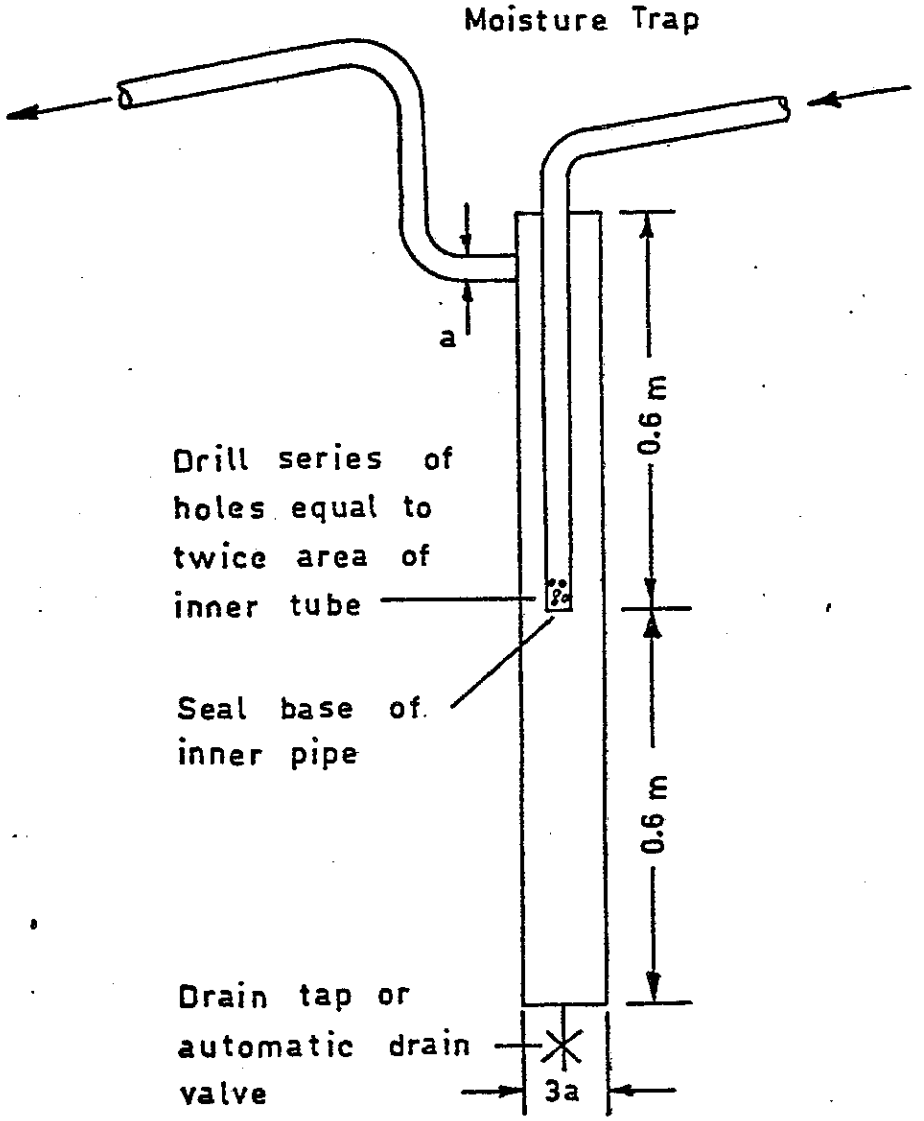
These pipes should be suitably sized to give a minimum pressure drop across the pipe line.

Important Points on Air Line Layout

(a) A fall away from the compressor receiver of between 1:40 and 1:80 where practical is necessary in assisting the flow of condensate to low points for collection.

(b) Moisture Traps and Automatic Drains should be utilised in dispersing condensate from main line collection points. This condensate is always present in air lines due to drops in temperature within the system. The exception being where the air has been pre-dried, i.e. below average dew point. An effective moisture trap of simple manufacture is shown in Figure 3.

Figure 3:



(c) The use of mac unions is recommended for the fitting and maintenance of Moisture Traps.

(d) Take-off points must always be from the top of main supply lines and a suitable drain leg extension fitted (as shown in the Layout Diagrams). Drain legs act as further moisture traps and are often fitted with Automatic Drain Valves.

(e) Pipes must be sized using peak consumption or flow figures and practical formulae or charts for pressure drop estimation as per examples.

At the takeoff points in the system, we put a filter, regulator, lubricator set to process the air.

The filter is used to trap all solids and any moisture which has condensed before the filter. It will not remove water vapour.

The regulator is used to stabilize the pressure in the system so fluctuation of pressure is removed and a constant pressure available. This means consistent results are achieved by the system.

The lubricator injects an oil vapour into the air as it passes through. This carries to the control valves and cylinders in the system keeping them well oiled.

After the filter all the air lines should be non ferrous to prevent rust forming and travelling into control valves and cylinders destroying their seals. We normally use copper, cylon or nylon armoured PVC hoses for this purpose. Leaks in the piping are to be avoided at all costs as a small hole will amount to a large air loss. For example, a 1/16" diameter hole, at 100 psi, will discharge 6.5 cu.ft. per min. to atmosphere. This is the equivalent of running a 2 HP motor just to cover air loss from the hole. After a year the cost of such a leak is approximately $325.

From the lubricator we pipe to the control valve or air tool. Control valves take many forms and on the Christchurch Brill tram No. 178 at Ferrymead there is the brake controller which also controls the doors and steps, the deadman control, windscreen wiper control, and the automatic accelerator. Care must be taken with the air exhausting from these valves. There must be no back pressure build up and if the exhaust is piped away the pipe must be large enough to let the air escape quickly.

The control valves normally control the movement of an air cyclinder. On the Brill there are several cylinders ranging from the small 1½" diameter wiper cylinder to the 10 inch diameter brake cylinder. The thrust put out by the brake cylinder when working at 80 psi is 6200 lbs. The bore of the cylinders must be smooth. If water is allowed to enter the system it can pit the lining of the cylinder and cause the failure of the seals. When a cylinder is installed it must be properly aligned so that there is a minimum side thrust on the piston rod. An excessive side load will cause the cylinder to stall or wear out the bearing and piston rod seals.

Safety is a very important part to consider when using compressed air and I conclude with the following 10 point code for the safe use of compressed air:

10 POINT CODE *FOR THE SAFE USE OF COMPRESSED AIR*

Eyes are particularly vulnerable to flying grit and air streams.

If air forces its way into the bloodstream through any part of the body, it can cause death by travelling to the brain and bursting blood vessels.

Air entering the nose, ear, scratches or other body openings can result in the appearance of very large swellings accompanied by severe injury and possible death.

Compressed air creating a draught near a fire or stove can produce a tremendous fire hazard.

1. Use only sound, strong hose with secure couplings and connections.
2. Be sure there are no sharp points on metal hose parts.
3. Close control valve in portable pneumatic tools before turning on air.
4. Before changing one pneumatic tool for another, turn off air at control valve. Never kink hose to stop air flow.
5. Wear suitable goggles, mask, protective clothing, or safety devices.
6. Never use compressed air for clearing away swarf or dust. Flying particles can be dangerous.
7. Never use air to blow dust or chips from the hair, body or clothing.
8. Never point the hose at anyone. Practical jokes with compressed air have caused many painful deaths.
9. When using compressed air, see that no nearby workers are in the way of the air flow.
10. Ensure that there are no naked flames which could be spread by a draught from an air line.

PAPER 5

THE "NEW" MUSEUMS AND THE TOURIST

Presented by Peter Rendall

INTRODUCTION

In this paper I hope to develop some ideas which I hope are not totally new to us. The following three papers at last year's Conference:

Derek Scrafton's "Transport Museums, A Professional's View",
Geoff Spiers' "The Future for the Specialist Museum" and
Bill Kingsley's "About People"

dealt partially with some of the ideas which I am going to put before you. The latter address, in particular, should be required reading (or, given Bill's own style of presentation, hearing) for everyone involved in the continuing operation of our museums.

I make no apology for the fact that in this paper I will be drawing examples from a wide range of other forms of operating Museums, Pioneer Villages and "Authentic Experiences". We are all very often lumped together in the public eye and basically we are in competition for public attendance. We must, I feel, be aware of our competition and, where possible, learn from it so that we are better able to compete for what is, in effect, a commodity in limited supply, the visiting public.

THE "NEW" MUSEUMS

A feature of the late sixties and the seventies is the rise of the "New" museums. These are often voluntary operations, often restricted to a particular local, or technical subject, and all dependent to a large degree on visitors paying for admission or for a ride for their future viability. Of more recent times has been the tendency for these Museums to go professional as a means of maintaining seven day a week operation and, in a number of cases, because the volunteer input has dropped away, the enthusiasm of the original participants has been diluted over the years. This trend has been furthered by the arrival of private commercial operations of a similar nature, many of which are being promoted because of the success of the voluntary museums. The most notable example of this in New Zealand is the development of a new attraction called "Goldtown" on the road leading to that well known and long established attraction, "Shantytown". There is also the commercially operated museum at Queenstown known as "Golden Terraces" which is a direct amalgam of "Shantytown" and "Sovereign Hill". There are varying degrees of success, however, and on a recent visit to "Shantytown", I noted that "Goldtown" seemed to have died, which is unfortunate from some points of view as the materials and artefacts which had been gathered for this display are now lying abandoned, and as we know only too well, once lost these artefacts are virtually impossible to replace.

THE MUSEUM VISITOR

We are all, private, commercial, voluntary and Government operations dependent upon the visiting public. We have, of course, the local population which is not to be ignored. A survey which I carried out at Ferrymead last year showed that some 72% of our Sunday visitors and 48% of our weekday visitors came from the Christchurch metropolitan area,

but the feature which is much more striking is the number of visitors from outside the City who came to visit our museum. The visitors are, I would suggest, the icing on the cake. These are the visitors to whom we have the most chance of selling our publications, our souvenirs and our refreshments. The local visitor may support us on more than one occasion, but is likely to bring a picnic lunch, not to require souvenirs, and to have "just brought the kids for a ride". They are not there to learn of our area of interest as a primary concern. They do learn, they are interested, but it is not these factors which have brought them along. The "New" museum is, for most of the local people, much more a place of entertainment, than one of education. For the tourist, the "New" museum provides the opportunity of experiencing to a larger or smaller degree the past of the community they are visiting. The museum provides a capsule of experience that the visitor would otherwise miss and because of this he is much more likely to take photographs, to buy publications, and to examine in detail the displays and static exhibits.

MUSEUM LOCATION

Although my research is not yet complete, my findings so far are similar to those reported in the Australian report, "A Study of Man-Made Tourist Attractions"[1] in that those museums located in or near to major centres of population are more likely to succeed than those in more remote places. I do, however, have a few other suggestions as to what could be termed "good" locations. From my own work I have found that it is possible for a museum to survive in a relatively remote location if it is on what could be termed a tourist flow route. A major New Zealand example of this is again "Shantytown", but its position is rivalled by a relatively new development in the North Island known as the Tauranga District Museum Historic Village. As you can see from the slides, this museum is indeed a success. In its first year of operation it was visited by some 54,000 people, mostly New Zealanders holidaying in the area and school parties from the surrounding district.

"Shantytown" has a major advantage over the majority of museums and is a little unusual in being located on a major tour coach route. About a third of the visitors are tour passengers. This is not to be ignored as in 1976 1,700 coaches brought in 46,000 passengers. As I observed earlier, these are the people who will be spending the money. They also have the advantage that they arrive as a discrete but large unit, stay for a limited time, and often come complete with their own guide, a feature which reduces the strain on the manpower resources of the museum.

PUBLICITY

It is sometimes possible for a museum to overcome a locational handicap through good, and I mean very good, publicity. Even those that are blessed with a good locational advantage need to tell the visitor that they exist before the visitor leaves his accommodation to go sightseeing, and even before he reaches his choice of holiday site. While enjoying myself riding the "Kingston Flyer" recently, I was appalled to find that a vast majority of the visitors who were on the train were there by chance. For us as enthusiasts this may sound strange, but it is true that the vast majority of people have no interest in trains, trams or even history; their holiday plans are more often made with regard to scenic attractions, sporting

[1]Study done for Commonwealth Department of Tourism, by the Economic Research Unit, Melbourne 1974.

facilities and "mob" instinct. These are the people that our publicity must be aimed at on their arrival in our host community. We must tell them of our existence, how to get to us, by public as well as private transport, when we are open, what facilities are available, and how much it is going to cost. This information, well presented, will bring in visitors. The quality of presentation is important - reasonable grade paper, illustrations, and a literate text. This is often our first contact with our public. Pamphlets distributed to local hotels, motels, camping grounds and youth hostels will acquaint the travelling public with our museums. A bright, well designed give-away sheet may well attract to your museum the visitor with an hour or two to kill, or the family staying in the area with a half day to give to a bout of nostalgia. Publicity through the media is always useful, but its impact is sometimes restricted to the local community. This is not always the case, however. The main publicity that had attracted Australian visitors to the "Kingston Flyer" was a television programme called "The Leyland Brothers", which visited this train last year, and showed the resultant film just before Christmas. This was, I suspect, worth quite a few dollars to the Railways. The re-inforcement of personal publicity material is also to be encouraged. Some ways of doing this are obvious, such as roadside hoardings on the nearest main traffic route if this is permitted by your local authority, or finger signs of a standard pattern if it is not. Small colour posters in local Public Relations and Visitors' Offices, supported by a supply of brochures, or just present as conversation starters are also useful. Any visitor to Lumsden who does not "hear" about the "Kingston Flyer" must be deaf indeed! Every shop has posters, the pubs have colour photographs, businesses are named after it, and every second person is employed by it. We cannot hope for penetration of our host communities in quite the same manner, but we can ensure that we are at least known.

FACILITIES

Our best publicity medium is, of course, our visitors. A survey that I carried out at Ferrymead last year produced the interesting fact that about 65% of our visitors came through the personal recommendation of someone else, either friend, family or service worker, such as moteliers, travel agents and Public Relations Offices. From this springs one very important fact: that we must satisfy our guests. We must make them feel welcome, we must give them value for money, we must give them the facilities they demand, and we must, and I emphasise this, give them the goods. If we advertise an operating museum we must give them that, we must provide life and activity, open doors and a welcome. We must supply what we say we offer for, if we don't, we may find ourselves in trouble in a very short while.

What does the tourist or for that matter almost any visitor want? An essential is adequate toilet facilities. They don't need to be of "Taj Mahal" quality but they do need to be clean, well lit and preferably supplied with some form of towel. They also need to be inspected periodically during the times that the public are present. Matters such as a shortage of toilet paper and other housekeeping details need to be dealt with more frequently than once a day.

The visitor will often want somewhere to sit down, to rest in the shade, or to consume a picnic lunch. Don't leave them standing, or they may leave you for good.

Some form of refreshment facility is usually a good investment. In the case of museums such as ours, the existing sales outlets deal reasonably adequately with this demand, but where visitor numbers become greater, it is often necessary to separate souvenir and book sales from the supply of foodstuffs and other refreshments. It is also sometimes helpful to divorce the eating side from the ride side of our operations, in the interests of our exhibits and our time - cleaning takes long enough without coming to grips with chewing gum and icecream sticks!

When our visitors are present we must remember to tell them what they are looking at. Having got them on the site we should not "clam up". The information flow that we started with our posters, signs and pamphlets must continue. It is essential to treat the visitor as being almost totally ignorant of our machines and their equipment. That does not mean that we need to be patronising, but means that we must start with fairly basic information, such as what a tram is (to alleviate the North American confusion) and what its function is, for many of our younger visitors, in New Zealand at least, have no idea of the role of a tram as a public transport vehicle.

This can be done through the usual range of cards and posters, it can be done by guides, and it can be done as an audio-visual presentation. The new Museum in Westport, known as "Coaltown", is designed round two such presentations. The exhibits, coal wagons, a simulated mine, and photo displays serve almost to occupy the visitor in between cycles of the presentation. But... it works!

The major reason people visit a museum such as ours is to catch a little of this feeling of history ... the sounds, the ride, even the dress of the crew, serves to bring back to people a feeling of nostalgia. If we can do this we will be achieving our purpose, and satisfying our customers so that they will become for us our best medium of attracting more visitors to be our guests.

The "New" museum depends on operation and person to person interaction to a much greater extent than the old form of museum. We cannot be like some of the more conventional museums which exist, full of crusty, unapproachable guards, emphasising silence and a studious look. We are alive, I hope, and enjoying ourselves. This is our hobby, and we are sharing it with the public. We depend on them and, to a degree, they depend on us. We are helping to preserve their heritage, to fill in their recreation time, and to educate their children. I know it is hard, when you are patiently explaining for the nth time why the tram does not have a steering wheel, to retain one's sense of humour and sense of perspective, but if one doesn't one runs the risk of sending away a less than satisfied customer. It's a funny world in which we live and the bad side always seems to be much larger than the good. It's the same with the public: one dis-satisfied customer is more likely to tell his friends than a satisfied one. I have no figures to support this contention, but it is an observation I have made from conversations with people while I have been surveying at man-made tourist attractions. Those who have been dis-satisfied have been much more vocal than those who have enjoyed their experience. We must, therefore, make an effort to have those of our members and staff who are in contact with the public well informed as to our aims and objectives, knowledgeable about our exhibits, and above all polite. It doesn't matter if our worker is wearing overalls or working clothes if these are applicable to the job the person is doing, but don't permit your staff to drive in public service in obviously inappropriate gear.

CHARGES

As someone commented during yesterday's proceedings, there seems to be less customer resistance if the visitor is made to pay an admission charge and thereafter everything is free, rather than if the visitor is allowed on site, and then charged to look at everything individually. This perhaps applies more to the combined operations such as MoTaT and Ferrymead, for purely tramway operations could permit free access to displays and facilities while extracting payment for rides, as a part of the former "atmosphere".

A valuable tool which seems to be a West Coast (New Zealand) development is the local residents' ticket. These are available to residents of the host communities of a number of Coast attractions and, though they vary slightly from attraction to attraction, the idea is that if a local person has visited once in a year he is issued with a certificate which gives him free entry and his guests 50% off normal admission charges.

This is, I suspect, a source of many visitors to the attractions. The local person's pride in a local achievement need not be matched by a continuous drain on his pocket. He will be much more inclined to taking his guests to visit when the cost is reduced than if he had to pay out the full cost every time.

COMPETING FOR THE VISITOR DOLLAR

We must realise that there are (1) limited numbers of people interested in historically based attractions and (2) that they have limited resources of time and money. We must be aware that the vintage car collection 25 miles away, or the historic old house down the road are in competition with our museums. This area of competition has been touched on by other speakers, but I would suggest that you take this factor into consideration when thinking about the future of your museum. Co-ordination, co-operation and combination are alternatives such as a composite museum, or a loose federation of regional groups with similar aims combining for promotional and other purposes. There are a wide range of attractions, some good and some not so good, and it is sad that sometimes the poorer ones reflect onto the better. We must think in terms of authenticity, value for money and the facilities provided. It could be to our advantage if we, as individual museums, or as the whole of COTMA, investigated the possibility of getting together with regional or national groups to discuss, and perhaps establish some code of ethics and minimum standards. This would enhance the status of our museums and would be to our long-term advantage.

The paper was followed by a series of slides showing features of other similar museums and illustrating some of the points discussed in the paper.

Workshops

PROGRESS IN ARCHIVAL STORAGE AND RECOVERY AND DISPLAY OF TRAMWAY ERA RELICS

WORKSHOP 1A

Chairman: Mr R. Green.

WORKSHOP MEMBERS: Miss E.G. Butland, MOTAT.
Messrs. J.M. Bettle, THS.
K.M. Stodden, TMSV.
A. Webster, THS.
D.D. Hinman, THS.
R. Thomson, BTMS.
G. Taylor, THS.
B. Marchant, THS.
T. Bettany, WTM.
M. Skinner, AETM.
M. Boyton, WTM.
A.G. Lightfoot, NZR&LS.
B.J. Dale, THS.
W. Denham, SPER.
M. McAulay, SPER.

This Workshop was conducted in three sections:

(1) Progress in archival storage.

(2) Recovery of Tramway era relics.

(3) Display of Tramway era relics.

EXISTING COLLECTIONS:

Mr. J.M. Bettle: Advised that the THS has a collection of tickets for every New Zealand Tramway system and tram postcards for every system. Although there is no ticket society in existence, Mr. Bettle reported that he had conducted ticket exchanges on a world-wide basis. He had also made a collection of railway postmarks as an individual effort for Ferrymead.

Mr. M. Skinner: Advised that he collected items as they became available and has also striven to obtain such relics as tickets, plans, photographs, parts etc. He commented that care has to be taken to pass on special items to the museum and not to keep them privately. One problem is that museums tend to have no suitable central storage area available and such relics are sometimes in fragile condition. One way to overcome such a problem is for museums to keep an accessions register and on this register to list articles which are being held in storage for individual members. It was felt that many persons will not donate relics until it is apparent that museums have some place of safekeeping for these items.

Mr. M. Boyton: Commented that the WTM appointed a librarian each year and that it is his duty to keep all museum property. There is no central museum area for storage and display of such items.

Mr. D.D. Hinman: Commented that the THS uses one car as a temporary storage area but that this has not proved satisfactory.

Mr. A. Webster: Tramway relics are from time to time turned away because museums have inadequate storage available.

Mr. A.G. Lightfoot: Advised that the Canterbury Branch of the New Zealand Railway and Locomotive Society accepts all material offered regardless whether this covers railways or not and commented that one member found slides and other similar photographic material in the rubbish dump. He further commented that newspaper publicity and publicity in various magazines had resulted in an influx of photographic and archival material and that his organisation is in touch with other museums throughout the country. His Society has received a bequest of approximately 1,000 railway books which has formed the basis of a library. The New Zealand Railways Department has given much material over the years as steam locomotives have been phased out.

The Society's present storage is in rented rooms over a service station. Members have access to this archival material and one member is responsible for cataloguing and supervision of the material.

Mr. R. Green: Advised members that the TMSV has obtained rooms in a tramway depot where all material available to the Society has now been collected. Despite this, the Society now advises that the large task of cataloguing all the available material is only beginning.

From the comments of the various museum representatives, it is apparent that most museums have appointed an archivist.

Mr. W. Denham: Advised that SPER has an archivist who collects material at his home. He has no training and the material is not catalogued. However, State Government money is available for bona fide museums to assist them in storage and documentation of archival material. The State Government also provides information on the appropriate documentation which should be carried out and on proper methods of storage for various materials.

Mr. M. Skinner: In South Australia all material goes to the State Archives first, and these archives select from the material any which they want. It was also noted that much material is lost through souveniring before the Society is able officially to obtain such material.

Old tram bodies are often lost to the museum because the owners are not able to be traced.

Mr. J.M. Bettle: Commented that the Christchurch Transport Board had sent much material to the Canterbury Museum and that much had been lost.

DISPLAY:

Mr. D.D. Hinman: Commented that the Hall of Wheels built at Ferrymead has an area which is to be used for a tramway display and there are some relics already there, although no attempt has yet been made to produce a co-ordinated display. However, THS members are hopeful of having more working exhibits of tram car parts in due course.

Miss E. Butland: At MOTAT there is a display of photographs, tram parts and uniforms etc. labelled but not really co-ordinated. This display has been popular with the public, although there is no working exhibition at present. Such an exhibition is being planned for the future. It is also proposed that an electrical substation be built for the public to see.

Mr. A.G. Lightfoot: Commented that displays should not be static and that the display material should be rotated from time to time. Co-operation with outside bodies will provide material for exhibitions at churches, schools etc. on appropriate occasions.

The Chairman: Commented at this point that feed-back and the acquisition of further relics is often a result of co-operation in the mounting of such exhibitions as Mr. Lightfoot referred to.

Mr. M. Boyton: Commented that WTM will be mounting a display at the Wellington Trade Fair to obtain publicity.

Mr. P. Rendall: Observed that there is a collection of folk-lore such as tales from old drivers, passengers etc. which is fast disappearing and which should be recorded.

Mr. W. Denham: Commented that such reminiscences should be treated with care and should be recorded as reminiscences and not accepted as being the whole truth, since truth is often stretched for effect and old memories can be blurred over a period of time.

Mr. J.M. Bettle: Commented that many photographs which are of great historical value are lying in private homes and the owners are unaware of their significance.

Miss E. Butland: Stated that museums must make it widely known that they are collecting photographs and other archival items.

Mr. T. Bettany: Emphasised the need to duplicate rare and important information and material so that more than one copy is available.

The Chairman: Commented, further, on the need to keep archival film material under supervision and to have such films copied before they deteriorate.

Mr. A.G. Lightfoot: Advised that some members have referred to archival material in their possession in their Wills.

Mr. M. McAulay: Advised that SPER archives have been microfilmed through a State Government grant.

Miss E. Butland: Advised that many people would allow their material to be copied even if they wished to retain possession of the original themselves.

RECOMMENDATIONS AND OBSERVATIONS:

(1) Present collections appear to be largely on an ad hoc basis in individual homes. It is desirable to obtain central storage.

(2) An accessions register is important.

(3) Such central storage needed to be fire, vermin and theft proof.

(4) It is necessary to train people in archival work in order to avoid mistreatment of archival material.

(5) Museums should plan for the public display of relics on a rotating basis.

(6) Such a display of relics should tell a story.

(7) Co-operation with outside bodies to mount appropriate exhibitions of material is essential.

(8) Folk-lore type recollections need to be recorded although the accuracy must be treated with caution.

(9) Rare material should be duplicated (SPER has obtained a Government grant to undertake this work).

(10) Museums need to publicise widely that they are seeking relics and archival material.

(11) Material can be bequeathed to museums in members' Wills in order to ensure that material is not thrown out after a person's death as valueless.

(12) Where people wish to retain ownership of relics, it is worth trying to obtain their permission for material to be copied.

LESSONS OF CRICH FOR COTMA MEMBERS

WORKSHOP 1B

Chairman: Mr. J. Moore.

WORKSHOP MEMBERS: Messrs. G.B. Claydon, TMS
L.G. Day, THS
A. Griffin, SPER
R. Jenkins, AETM
A.M. Law, THS
R. Merchant, SPER
B. Ollerenshaw, WTM
A.L. Roi, THS
M.C. Sanders, THS
J.S. Shanks, THS
B. Weedon, TMSV.

SAFETY:

Mr. J. Moore: Initiated the discussion by advising members of the accident reporting and safety procedures adopted by the THS which has a form to be filled out following an accident or incident.

Other museum organisations followed varying procedures for dealing with mishaps, e.g. SPER advised that it required the filling in of an accident report form following an accident while TMSV merely required a verbal report to its Board.

At this point it was observed that there is an essential difference between an accident which results in a minor mishap and some irregularity to the normal working procedures and a major accident in which an injury to some person results.

The Chairman outlined to those present at this workshop the provisions of the Accident Compensation Commission legislation which applied in New Zealand, namely, that a person injured in an accident is not able to take legal action for damages or to claim negligence against the person or organisation causing the accident. Instead, the injured receives financial compensation from the Accident Compensation Commission established by the Government.

Mr. L.G. Day: Commented on the above that it places New Zealand tramway operators in a very vulnerable situation. For example, in Wellington a cable car accident resulted in the Ministry of Works subjecting the cable tramway system to such detailed examination that the entire system was forced to close down for complete reconstruction.

Mr. R. Jenkins: Advised that his museum had set up a Safety Committee and that the Chairman of this Committee was the Operations Manager of the Tramway Museum. He reported that no injuries or damage to vehicles had recently occurred through mishaps on the tramway.

Mr B. Ollerenshaw: Commented that in New Zealand, under the Tramways Act 1908, each operating tramway was required to designate a person as "General Manager" and that this General Manager was responsible for all incidents which were required to be reported to the promoters of the tramway (or to the Board of the Museum), in writing. He stated that 99% of accidents, in the experience of WTM, are caused by the human element, e.g. the monotony of driving up and down the same bit of track.

Mr. G.B. Claydon: The Tramway Museum Society uses an accident report form for incidents which cause serious personal injury, damage to property or any serious risk to property or damage. This form, when filled in, is handed to the Secretary of the Society.

The procedure followed at Crich in the event of a mishap was as follows:

(a) Establish if there are any witnesses to the incident.

(b) Consider the legal implications relating to insurance etc.

(c) Refer the matter to the Heads of Departments who are involved, e.g. Permanent Way, Overhead, Traffic Department, etc. who then refer the matter to the Society's Safety Committee which analyses the situation and reports on the matter to the Society's Board.

(d) The matter is finally reported to the members only of the Society, setting out the action which has been taken after the accident to ensure that a further similar mishap does not occur.

Mr. B. Weedon: Referring to the situation at SPER, commented that this museum was not covered by any current Parliamentary Act or by any safety inspection or certification procedures as the Tramways Regulations of the NSW Government Railways did not cover museum operations. SPER, therefore, formulated its own safety policy.

Mr. G.B. Claydon: Commented that the Museums needed to take the initiative with their insurance companies and to check the fine print on their policies.

Mr. R. Jenkins: Referred to the Minutes of the 1977 COTMA Conference on matters of safety and emphasised the difficulty of COTMA enforcing any safety standards.

Mr. J. Moore: Observed that while New Zealand was covered by current regulations, the situation in Australia was very different.

Mr. A.M. Law: Commented that museum organisations must educate their new members in matters of safety so that members understand what they are doing and the importance of safety procedures.

Mr. J. Moore: The formulating of safety standards and regulations for use by museum societies would be an exercise of value to all museums.

Mr. L.G. Day: Commented on the implications of a tramway accident in a composite museum situation: Ferrymead is a complex of 13 organisations of which the Tramway Historical Society Inc. is one member and an independent body, responsible to its own members on matters of safety. However, the entire Ferrymead project would reap the repercussions of any accident involving the tramway.

Mr. G.B. Claydon: Observed that the THS accident report form which was under discussion referred to accidents involving tramcars but did not refer to workshop or other accidents.

EDUCATION AND MEMBERSHIP:

Mr. B. Weedon: Motivation is needed in museum organisations as well as education. This motivation must encourage active participation in facets of the museum line's operation, such as driving trams or operation of the power supply substation.

Mr. G.B. Claydon: Noted several aspects of the introduction of new members to the museum setting:

(a) New members are fascinated by what they see, i.e. trams running.

(b) Some are inspired to join the Society by relatives, friends, school teachers etc.

(c) Such new members require shepherding through the total project by older members to familiarise themselves with such aspects as the running of the trams, the building, the drains, restoration, books, mechanical aspects of operation, electrical aspects of operation, civil engineering aspects of operation, gardening and bookshop etc. Many skills are required by museum organisations.

The workshop helpers need to be either experienced or carefully supervised.

Mr. A. Griffin: Commented that the Branford Museum in the United States of America advertises for new members and then introduces them to active participation in its organisation through an introductory course which shows what happens in the total activity of the Society.

Mr. J. Moore: Observed that in the THS situation new members start as conductors, which leads them on to tram driving. Later when the novelty of traffic operations wears off, they learn to look at other facets of running the tramway.

Mr. R. Jenkins: Illustrated an alternative approach to the introduction of new members, as used by AETM, where two years regular attendance at work parties is required by new members before such members are permitted to train as tram drivers. Conductors, likewise, are required to spend this preliminary time before becoming drivers.

Mr. J. Moore: THS went in at the deep end in the basic restoration which had to be undertaken before operation could commence, required members to have the skills necessary to do this restoration, such as welding, wood turning etc.

Mr. A.L. Roi: Pointed out that the simple answer to these approaches is that some people prefer to operate and drive trams and that some people prefer to engage in engineering and restoration work.

Mr. G.B. Claydon: Supported this point of view, stating that if people have an interest in a particular area let them stay there. It is a waste of time and energy transferring people from one activity to another.

Mr. A.M. Law: The inbuilt big business approach of Crich developed from small beginnings and must have required organisation to make it work. The lesson for us all to be drawn from this is that it is necessary for museum organisations to think in commercial terms.

Mr.B.Ollerenshaw: Noted that WTM had personnally approached persons with specialist skills to assist with the museum and that this method had achieved some success.

Mr. B. Weedon: TMSV has used similar techniques - when legal advice was needed, it approached a lawyer to join the Board.

Mr. G.B. Claydon: Crich has been fortunate in having a wide variety of specialists who have gravitated to the Board and also in having persons with specialist skills available as heads of departments.

SPONSORSHIP:

Mr. G.B. Claydon: Commented on the situation at Crich as follows:

(1) That it is worth museum organisations participating in unemployment relief schemes for specific jobs or projects.

(2) The resultant publicity is good for the Society and helps to get the work done.

(3) In England, rather than request labourers under unemployment relief schemes such as in New Zealand, it is more usual to ask for skilled workers, coach builders, welders, etc.

NEW PROJECTS - RECENT EXPERIENCE IN DESIGNING, FUNDING AND IMPLEMENTATION

WORKSHOP 1C

Chairman: Mr. P. Kahn
Recorder: Mr. J. Proctor

WORKSHOP MEMBERS: Messrs. R. Clark, SPER
D. Rawlings, SPER
C. Perfect, WTM
G. Jordan, BTPS
I. Mison, MOTAT
E. Brockie, DMOT
C. Mottram, TMSV
B.L. Efford, THS
P. Hyde, BTMS
R. Cowing, SPER
Dr. J.C. Radcliffe, AETM.

FUND RAISING:

The Chairman invited museum representatives to briefly report on their fund raising activities over the previous 12 months. These reports were as follows:

AETM: In celebrating the Centenary of organised transport in Adelaide, the State Transport Authority has undertaken restoration of some vehicles. To assist this project, AETM have proposed that relief workers should assist in putting up a transport hall, storerooms, toilets etc. under the relief work scheme available in South Australia. Architects and engineers required to supervise and plan such works can be employed as project managers to oversee the job and do the worrying and the costs of engaging such professional assistance are reimbursed by the State.

SPER: A Government grant had been received to assist in microfilming archival material and in the provision of a microfilm reader.

THS: This Society had been working closely with the Ferrymead Trust, of which it is a constituent society. This Trust employs staff through the Labour Department's Temporary Employment Programme scheme of unemployment relief. Workers under this scheme are paid by the Ferrymead Trust which is, in turn, reimbursed the total labour costs by the Labour Department. Provision is also made for overheads involved in the administration of this scheme to be reimbursed. These workers assist in tramway projects such as track laying, week day tram driving for which one person is employed and similar projects. It appeared likely that this scheme could become a long-term one.

MOTAT: This museum undertakes similar projects on a basis similar to that used at Ferrymead.

WTM: This museum reported that it had had reasonable contact with the Queen Elizabeth II Park Board which is the controlling authority for the Park in which the tramway is located and that the Park Board had made a grant to the museum over the past year. The track is being extended from the present terminus to the beach, with assistance from the Army which had indicated that it was willing to assist with planning and actual construction of the track.

BTPS: This Society reported that the State Government had given a grant of $50,000 on a 2:1 basis for extensions to the tram barn.

DMOTT: This museum had just been granted a lease of its site but no further work had been undertaken at the time of reporting as the museum was not permitted at the present time to alter the existing buildings so that they could be used for the storage of trams.

TMSV: This Society had received a grant of $1,000 for advertising on the tops of trams. It was also investigating ways of obtaining assistance from the Victorian Ministry of Tourism.

BTMS: No unemployment relief schemes at present operate in Queensland and State grants were not available to the Society. However, the Brisbane City Council has assisted the museum in various ways such as the provision of water mains.

Footnote: During this discussion, it was noted that the present unemployment relief schemes will eventually disappear and that museums should, therefore, use these schemes to the fullest possible extent while they are available. Some problems with delays in reimbursement of moneys expended by the museums from Government sources was also reported.

APPLICATIONS FOR FINANCIAL ASSISTANCE:

During this discussion, museums were urged to make any applications or submissions to Government authorities for financial assistance in as professional a manner as possible. Such applications or submissions should be typed and the purpose of the application should be set out on the front page of any supporting submissions. The following was a suggested format for a submission for financial assistance to a Government authority:

First page: Summary of project.

Second page: Explanation of the funds sought in the application.

Third page: Supporting letters (from persons interested in the project).

Two further pages: Setting out a summary of the Museum's history.

Two/three further pages: Setting out the reasons why the Museum seeks this money and the purpose for which such funds will be devoted to if granted.

Such submissions should be followed by any set application forms which have been supplied and by drawings of the project proposed.

SUMMARY OF THE MAIN POINTS OF THIS DISCUSSION:

(1) Unemployment relief schemes are available in most areas and should be used to the fullest possible extent.

(2) Assistance may well be available from the Army.

(3) Advertising on trams can be a valuable source of income.

(4) In many cases, financial assistance or grants are available from State authorities.

(5) In some cases, there may be financial assistance from State authorities for historical purposes. It was agreed that COTMA would assist with the further investigation of this possibility.

"CAN YOU INVOLVE OTHER GROUPS ON YOUR SITE?"

"WHAT ARE SUITABLE AND HOW TO GO ABOUT IT?"

WORKSHOP 2A

Chairman: Mr. I. Mison.

WORKSHOP MEMBERS: Messrs. P. Rendall, THS
G. Taylor, THS
R. Thomson, BTMS
J.S. Shanks, THS
A.M. Law, THS
W. Denham, SPER
M. Boyton, WTM
M. McAulay, SPER
D.L. Hansen, THS
G.R. Jordan, BTPS
P.C. Kahn, SPER
S.H. Wood, Ferrymead Trust
C. Mottram, TMSV
E. Brockie, DMOTT
Rev. M.H. Kerr, THS
Dr. J.C. Radcliffe, AETM.

INTRODUCTION:

The Chairman briefly summarised the difference between the unitary organisation of a composite museum such as MOTAT and the more loosely-knit federal type organisation such as Ferrymead where each constituent member society, although a member of the central organisation, retains its own independence and individuality.

After some general discussion on the advantages and disadvantages in terms of constitutional arrangements and voting power of these two forms of organisation, there was discussion as follows on some specific details.

Mr. E. Brockie: Commented that his museum had had to take over the assets of a fire engine society which had collapsed as a result of its members being firemen and running out of enthusiasm through their work and their hobby following the same lines.

Dr.J.C.Radcliffe: Expressed his concern for what he observed as a growing trend, the substitution of a hobby for employment where some members, in his view, were laying their livelihood on the line for the benefit of the museum. He further felt that the rapid growth of a museum organisation could create a "monster" and that only members are capable of supervising this creation.

Mr P. Rendall: Defended the trend for members to find paid employment within the museum organisation and considered that such employment can be enjoyable. He emphasised the need for museums to grow and to involve other groups because there is only a limited market for the museum product and proliferation of small groups only dilutes the income available. Therefore, co-operation and integration is essential. Mr. Rendall cited what he foresaw as a serious problem in Wellington where three transport museum organisations exist within a 14-mile radius.

Dr.J.C.Radcliffe: Observed that democracy allows people to do their "own thing" in this way and that the composite museum must attract others to its complex in self-defence. However, because the existing management of the composite museum is too involved and busy with its own problems to attract others, the result may be the creation of a "tiger" that the museum members will lose control of.

Dr. Radcliffe further alluded to projects which have taken over other ailing groups in order to obtain and preserve their exhibits and expressed doubt over the likelihood of the museum taking such exhibits over being able to raise sufficient enthusiasm amongst its members to ensure the survival and adequate restoration of such exhibits. He felt, once exhibits have deteriorated badly, that if the original organisation were still in existence, members may remember how the exhibits once were and thus be provided with the incentive to return these exhibits to their former glory.

Other speakers felt that the better established groups, such as tramway and railway museums with considerable outlay in plant for permanent installations, will be sufficiently established to be able to cope with such extra responsibilities which will become additional attractions in due course and will increase the number of visitors to the museum.

Mr. G.R. Jordan: Cited the attraction of the public gardens at Ballarat. Although the tramway is an independent organisation, it advertises its existence on the adjacent paddle steamer and considers that, although these attractions are not on each other's door step, visitors are drawn to travel from one attraction to another.

Mr. Jordan further cited the passing highway trade at SPER and the role of THS in transporting visitors from the main entrance at Ferrymead to the township.

Mr. P. Kahn: Reported that the Sutherland Shire has formed a tourist committee to rationalise the attractions of its area. In contrast to this, he noted the desire of the National Park Board to remove the tramway from the Royal National Park. Between these two conflicting pressures, he saw an opportunity for his organisation to prepare a new site and to enhance its attractions with further outside equipment. This led his organisation to consider the option of joining a composite museum and to undertake the role of transport link between exhibits. Such a move he considered would enhance the status of his organisation and give it a measure of influence in the planning of such a complex because of the importance such a tramway would have in the development of the site.

CRITERIA FOR ADMISSION OF NEW GROUPS:

Discussion took place on possible criteria for the admission of new groups to existing composite museums. As it is accepted that it is desirable to attract new groups to the museum organisation, the following were suggested by Mr. I. Mison as guidelines for the museum's Management Committee to follow in reaching its decision:

(1) Is the organisation seeking admission compatible with the existing museum structure?

(2) Will the admission of this organisation give a greater cross-section coverage of exhibition material to the museum?

(3) Is this group capable of earning its own keep and reaching financial self-sufficiency within the museum structure?

Mr. Mison considered that these criteria must be met before the Committee could consider the admission of an outside organisation and emphasised that the decision on suitability of an applicant organisation must be a committee decision.

After further discussion, it was concluded that a museum structure suitable for small cities may well be different from what is suitable for large cities, e.g. while Auckland and Christchurch have land available close to the city, Sydney has no central site available for such museum activities and, indeed, for the types of exhibits under discussion, very large areas of land were necessary which, in every case, posed museum promoters with a complex problem.

Mr. Mison commented at this point that MOTAT is becoming fragmented because the additional land being developed is 2 km away from the present museum site. This, however, suits the Tramway Division because it gives purpose to the existence of the tramway.

Dr. Radcliffe asked if admission had ever been refused to any group by MOTAT or Ferrymead.

Mr. I. Mison: Yes, two groups wished to develop in their own way. One has already left MOTAT and the other is to do so shortly. (The Bush Tramway Group and the Model Railway Group.)

Mr. S.H. Wood: Yes, groups have been refused admission to the membership of the Ferrymead Trust because their proposed use of the site was not compatible with the long term objectives of the Ferrymead Trust or because it was felt that their presence on the site would cause difficulties. It is interesting to note that Ferrymead started as a technological museum but has developed into an historical museum. (Mr. Wood asked what percentage of the total population had passed through the gates of MOTAT and Ferrymead.) After discussion, it was revealed that ½ of the population of Auckland had visited MOTAT and 1/6th of Christchurch had visited Ferrymead. Mr. Wood outlined the initial steps taken to acquire the present magnificent Ferrymead site: 12 members had used their private savings to acquire the land at Ferrymead until sufficient funds were available from a major fund raising campaign. Although this action had seemed wrong in the short term, it has proven right in the long term and this attitude should apply to all aspects of museum activity.

Mr. G. Taylor: Asked if any Australian museum was at present considering expanding into a composite museum.

Dr.J.C.Radcliffe: It has been proposed to move the Adelaide railway museum collection to St. Kilda. However, finance has prevented this so far. Dr. Radcliffe stated that if this should occur he would prefer a Ferrymead type constitutional arrangement, although he conceded that the MOTAT system is more business-like.

Mr. S.H. Wood: Commented that in deciding which organisation to invite to join you, you do not want the responsibility of looking after them. If you invite a going concern, this could cause some conflict. However, Mr. Wood felt that at Ferrymead "this has increased the enthusiasm of members".

Mr. I. Mison: Do you limit the size of an invited exhibit?

Mr. S.H. Wood: The storage problem should limit the size of a display.

Dr.J.C.Radcliffe: Crich, with so many trams, may have to dispose of some. The same would apply to other Societies for their exhibits.

Mr. A.M. Law: You must be ruthless.

PROXIMITY OF OTHER MUSEUMS:

After commenting on the nearness of some parallel museums to each other, Mr. C. Mottram commented that a large population can make several such museums profitable. This remark prompted the following comments:

Rev. M.H. Kerr: There are two small museums within 100 miles of Christchurch trying to copy Ferrymead. This is ridiculous with a population of only 14,000. While it may be satisfactory in the short term, it is not satisfactory in the long term.

Mr. S.H. Wood: These museums must combine with a large museum eventually, otherwise they will die and the exhibits will be lost.

Mr. W. Denham: The establishment of a composite museum in the Sydney area became bogged down because likely participants were already established in their own areas, the available land was rather wet and unsuitable and, further, because 14 sundry local bodies and Government authorities were required to give approval.

Mr. G. Taylor: Drinking in the same hotel has prevented serious conflict between the Ferrymead societies.

Mr. A.M. Law: Large quantities of persuasion and a ton of persistence will get results.

Mr. S.H. Wood: Expressed sympathy over the problems experienced in Sydney with Government and local authorities and commented that determination will win the day. Sometimes it is only anger that keeps you going.

SITE PLANNING AND CO-ORDINATION IF VARIOUS GROUPS ARE INVOLVED

WORKSHOP 2B

Chairman: Mr. B.L. Efford

WORKSHOP MEMBERS: Miss E.G. Butland, MOTAT
Messrs. D. Rawlings, SPER
A. Griffin, SPER
C.R. Perfect, WTM
R. Green, TMSV
D.D. Hinman, THS
A.T. Webster, THS
R. Cowing, SPER
R. Clarke, SPER
M. Skinner, AETM
G.T. Harris, THS
J.R. Procter, THS

Within COTMA very few museums are faced with a composite situation. SPER was interested some years ago but as there was no advantage to them, the composite situation was not pursued. However, with the proposed transfer to a new site, the possibility has again arisen.

It is interesting to note that with composite museums it appears that they have started with a composite concept (e.g. MOTAT and Ferrymead) rather than starting as an independent tramway museum and simply growing into a composite situation.

In tramway museums, trams do tend to take preference over, for example, trolley bus preservation, to the extent that some museums express the wish to keep tramway museums for trams only.

AETM, in Adelaide, is investigating the possibility of the Mile End railway museum being transferred to St. Kilda with an overall composite museum to be spread out over a triangular area and the public invited to travel round the site by vintage transport.

If a tramway museum exists on its own because of the problems of its site, it may be possible to involve other arts and crafts and interests into a "vintage street" concept and to use these activities as working exhibits. Furthermore, such a street should be spread out to give maximum interest and visual impact to the passing trams. In such a situation it is essential that good liaison be maintained by the tramway with the other interested parties and also with local authorities in the area.

Societies may from time to time obtain a special vehicle or special display facilities which will help them to draw interested manpower. If a new society is set up to promote a new area of interest there may well be a "spin-off" effect so that the original society may gain members from the new society.

Recommendations: (1) It is most important to have as many modes of vintage transport as possible in a museum actually operable and operating to and from fixed points of interest for a practical purpose such as linking other attractions or amenities.

(2) The planning of transport routes is essential for the overall benefit of a composite museum. Transport routes should be planned so that several forms of transport can be taken to complete a circuit of the museum area and should, if possible, be planned so that, if necessary, one mode of conveyance can provide the entire circuit.

(3) In planning such a circuit as that referred to in (2) above, it is necessary that the costs of operating the various forms of vintage transport be considered very carefully, e.g. trams are cheaper to operate than trains.

(4) Workshops. It is ideal for individual societies to have a good "small tool" workshop and associated equipment but it is strongly recommended that a central heavy machine-shop be built and be operated under the control of a supervisor. It is also possible to operate an inter-society borrowing pool.

WHY A COMPOSITE MUSEUM - FUNDING : WHO GETS WHAT AND WHY - SHARING OF THE CAKE

WORKSHOP 2C

Chairman: Mr P. Hyde

WORKSHOP MEMBERS: Messrs. R. Merchant, SPER
B. Weedon, TMSV
K. Stodden, TMSV
T. Bettany, WTM
R. Jenkins, AETM
B. Ollerenshaw, WTM
P. Hyde, BTMS
L. Day, THS.

In this discussion, museum representatives indicated some of the ways in which their organisations funded their activities as follows:

WTM: This museum raises funds primarily through fares, supported by raffles and has received a Government grant. A budget is prepared each year for each section of the museum.

AETM: Funds for this museum are raised in a similar way with a budget being prepared for specific projects. Each division head ensured that funds were available in the annual budgeting for the needs of his section.

THS: Major works, such as site works, laying of concrete track in "Township Street" etc. are funded by the THS but may receive financial assistance through a loan from the Ferrymead Trust to make up the full amount required. For example, in meeting the costs of laying the concrete track, the Society found $2,000 and received a loan of $2,000 from the Ferrymead Trust.

SPER: This museum makes no gate charge and survives from tram fares, booklet and souvenir sales and donations. The latter are usually small except when a major project is being undertaken when members will be approached for financial support. This organisation considered joining forces with the local railway museum society to form a composite museum but has decided to carry on on its own at its proposed new site. This museum's fares cover the operating costs.

SUBSCRIPTIONS AND DONATIONS FROM MEMBERSHIP:

(i) From the discussion it became apparent that museum organisations depend to a considerable extent upon the generosity and support of their members and, in the case of some museums, donations are regularly made by the members to fund the development of the museum. The following notes summarise the situation as outlined at the workshop:

AETM: The members of this museum pledge themselves to make an annual contribution towards museum development. In times of need it has virtually taken the hat around its members in an appeal for support.

The museum makes no charge by way of fares as such but charges an admission at the gate. The museum has calculated its fixed costs as $50 per full day of operation and has estimated these costs, on the basis of average patronage, to make a profit of $4.50 per trip by a tram. This profit is divided amongst the demands for restoration, track work and maintenance.

SPER: This museum follows a similar plan and for a time stopped encouraging non-working members from joining as it considered that these members were a drain on the organisation's funds. However, a revision of this policy now appears to be taking place. In the past it had levied its members for funds for museum purposes.

WTM: Has found that the cost of servicing non-working members amounts to approximately 75%-80% of the annual membership fees. This museum has borrowed from its members when a "quick need" project arose. On occasions, sections of the museum have overspent but have been able to restrain this expenditure when the museum's financial predicament was explained.

(ii) The question was raised on whether any museum had a contingency fund set aside for unexpected projects or repair work not budgeted for.

AETM: Solved this problem by borrowing from other sections in the museum.

THS: Operates various sinking funds, such as a steam tram boiler replacement fund and a shipping fund for the importation of necessary items of tramway equipment, and these funds have been built up over the years from a portion of the regular fare takings.

(iii) Further questions were raised on the possibility of approaching individual museum members for financial support and on the likelihood of an adverse reaction from the membership in the event of such an appeal being mounted.

AETM: Considered that on occasions there could be a problem of donations for somebody's "pet" project when other priorities were more urgent and recommended that museums ensure that contributions are made to the general funds of the museum. It further suggested that a selective approach is needed in an appeal to members, i.e. the members most likely to be able to assist are those that are approached for support.

TMSV: Had approached its members for assistance for the shifting of a car or for other similar specific tasks. It felt that there was a danger of persons "buying" their way in and pushing their project and opinions to the fore and that safeguards were needed against such people.

WTM: Such a problem can be overcome by insisting that donations be given with no strings attached, although the appeal may be made at a time of specific need.

BTMS: A budgeting system has to be set up to budget the funds available and the costs likely to be involved and from such budgeting it becomes possible to eliminate lesser priority tasks if the finance is not available.

AETM: Pointed out that inflation is making such budgeting practices very difficult. It further emphasised that subscriptions should be used only to meet the costs of servicing membership.

WTM: Has been selling life membership at the current rate for 10 years' subscriptions.

TMSV: This museum had been using membership subscriptions to meet museum development costs as well as the costs of servicing membership but had found that this resulted in membership subscription fees becoming excessive and has now pegged membership subscription increases for the present.

THS and WTM: Recommended that museums should put aside a sum on a monthly basis from fare takings to provide for emergencies.

COMMENTS ON FUND RAISING METHODS USED:

AETM AND SPER: Indicated that they prefer not to use raffles for fund raising purposes. This viewpoint was supported by BTMS which stated that it was in the process of holding a raffle in which the prize was a rail pass. They commented that the difficulty with museums undertaking sales of raffle tickets was that a large percentage of the tickets available must be sold to the general public if the raffle is to be a profitable proposition and that the great majority of museum members would prefer to be actively engaged on museum work and not on the sale of raffle tickets.

Recommendation: That Museum Boards and Committees should report regularly to their members on the state of the organisation's finances and thus keep the membership fully acquainted with the financial position at any given time rather than waiting for the publication of the Annual Report.

MUSEUM COMPRESSED AIR USE - STANDARDS, PARTS AVAILABILITY, MAINTENANCE ETC.

WORKSHOP 3A

Chairman: Mr L. Day

WORKSHOP MEMBERS: Messrs. B. Ollerenshaw, WTM
M. McAulay, SPER
R. Jenkins, AETM
T. Bettany, WTM
G. Taylor, THS
R.J. Scott, Martinair Division, MacEwans Machinery Ltd.

The following summarises the discussion which took place at this Workshop:

(1) Sandblasting equipment could be used (with great care) for the removal of rust and corrosion in restoration work. However, sandblasting has not been used to any great degree by museum organisations so far.

(2) Lubricators should be fitted wherever possible. These are available, usually at a low cost. Museums should investigate means of fitting lubricators to their vehicles to reduce wear.

(3) Air reservoirs should be drained each night. It is possible for ice to form around the openings to the air cocks on air reservoirs but usually the velocity of the escaping air will blow any ice formation away. Automatic draining devices have been tried but have not been successful and experience where these have been tried has been to change back to manual draining of air receivers.

(4) Compressed air can be used for the operation of power tools and is particularly suitable for track work purposes away from an electric power source.

(5) It can be desirable to replace steel pipes on vehicles with copper pipes where larger diameter pipes are not required.

(6) No standards for the testing of air receivers can be set because of local variations in the regulations which apply. Some museums have set their own standards and have based these on the local regulations which apply in their particular area. Although standards required by regulation have not been enforced on very small sized air receivers, all air tanks should be tested at regular intervals.

(7) Availability of Parts. Wherever possible, it is desirable that standard parts be used, where these are available and suitable for tramway use. In many cases, parts used on museum vehicles have not worn out as the vehicles do not receive the degree of use which they would in normal tramway service and the parts, where needed, can in many cases be made up by the museums themselves.

In summary, members present at this Workshop saw no difficulty in obtaining and replacing parts for compressed air systems.

Recommendations: (1) Sandblasting may be of use to remove rust and corrosion (with careful use to ensure that damage is not done to the original parts).

(2) Lubricators should be fitted to vehicles.

(3) Air reservoirs should be drained daily.

(4) Compressed air systems can be useful for the operation of powered track tools.

(5) It can be desirable to use copper pipe work rather than steel pipes where large diameter pipes are not required.

(6) It is a recommendation from COTMA that air reservoirs should be tested, hydraulically normally every 12 months.

(7) Where museums are faced with the replacement of unusual or rare parts, it is suggested that they enquire whether other museums also require the same parts so that these can be made for all museums at the same time at a saving in cost. It is suggested that a list of such parts could be built up through COTMA.

(8) It is suggested that museums could assist each other in the development of maintenance methods and in seeking expert help where necessary.

PROGRESS - UPGRADING MUSEUM SAFETY PROGRAMMES

WORKSHOP 3B

Chairman: Mr G. Jordan

The Chairman introduced this workshop by commenting that this question had been discussed on numerous previous occasions and referred members to Page 146 of the Proceedings of the previous Conference held in Adelaide. That Conference had requested that progress in the matter of safety be reported to the Expert Panel but this had not been done.

The following summarises the present situation at each museum:

BTPS: This museum had discussed the question of safety at Board level but, as members "felt safe" no action had been taken. In Ballarat, the Traffic Manager decides, after an accident if on-site, whether the driver should continue in service, although there is no real control over this situation. No action has been taken against drivers involved in accidents by the Board to date.

SPER: Fire extinguishers had been provided in each tram and in each building. It had also been proposed that all staff be trained in first aid. However, this proposal had encountered some organisational difficulties in getting members together and making suitable arrangements to undertake this training in conjunction with the St. John Ambulance Association. SPER reported that it has two accident report forms: (a) for accidents to persons, and (b) for accidents involving vehicles. However, the writing up of reports of accidents has been very lax, taking as long as several weeks on occasions. SPER has a crew training committee and has drawn up standard guidelines regarding procedures to be adopted when an accident occurs.

AETM: The dispatcher for the day is responsible for running procedures and is answerable to the Operations Manager. AETM has no adequate report form and has not done a great deal in recent months on this matter. A Traffic and Depot Safety Committee has prepared recommendations on fire safety such as the construction of an inflammable paint store separate from other buildings. The whole question of museum safety and fire safety is at present being reviewed by outside experts and an annual members' refresher training day is to be organised. Motormen's licences are renewed every two years. AETM has no printed Motorman's Manual as such, but is able to supply candidates for driver training with printed notes. New electrical installations to improve safety have been arranged but safety recommendations relating to the pit have not yet been carried out.

THS: This museum had taken no formal action on the recommendations but has taken steps on its own initiative to ensure safety, viz. (a) Fire extinguishers are in position and are serviced regularly under contract to the agents which supply the extinguishers. (b) There is a fire detection system in operation throughout most of the tram barn building. (c) A fire sprinkler system is installed and has recently been connected to the water mains, although at the time of this Conference it had not been tested. (d) Accident report forms are available in every tram and after a mishap, a report has to be furnished to the Committee within 48 hours.

A first aid and resuscitation course has been mooted and is under investigation.

BTMS: A Committee of this museum is examining the Brisbane City Council Regulations and adapting these for museum use. This is a continuing programme.

WTM: As required by New Zealand legislation, this museum has appointed a General Manager who is responsible in the event of a mishap befalling the tramway. The General Manager also serves as Safety Officer and, as required under the Public Works Act, must report within 48 hours to the Minister of Works and Development in the event of a serious accident occurring.

WTM is undertaking a major motorman re-training programme incorporating safety procedures and including advice from expert speakers. In addition, the following precautions have been taken:

(a) Hand held fire extinguishers are placed in all buildings.
(b) First aid sessions are conducted annually by the New Zealand Railways and all museum members are requested to attend one of these. A register is kept of museum members who have fulfilled their obligations in this respect.
(c) A safety board is positioned at the tram barn entrance and all drivers must read this board before proceeding to take up their rostered duties.
(d) The museum has endeavoured to replace all obsolete and dangerous equipment with modern electric or compressed air tools e.g. tools, track spanners, etc.
(e) Although no protective clothing is provided, protective headgear is available.

MOTAT: This museum is subject to the same Regulations as those applying to Wellington or Ferrymead and has a General Manager, Mr. Ian Stewart. The Fire Safety Regulations and General Safety Regulations drawn up by the Management Committee of MOTAT apply to each group within the museum, including the Tramway Division. MOTAT insists upon the observance of several safety precautions in its workshop, such as restricting the use of machines to trained and competent staff only. In addition, safety equipment, such as goggles and hard hats, has been renewed within the past 12 months and the workshop pit has been covered over.

TMSV: The Board of this museum has appointed a Safety Officer, Mr. Noel Gibbs, and has adopted the following proposals:

(a) Paint and inflammable liquids are to be stored in a separate building.
(b) Warning signs are erected to advise of total fire ban days.
(c) The number of fire extinguishers available in buildings has been increased and these extinguishers are regularly inspected.
(d) To avoid the danger of people tripping in the depot and grounds, Scouts have spread gravel through the depot up to rail level and have undertaken general tidying and improvement of unsafe conditions around the site.

This museum has no accident report procedure at present because it operates using a horse tram only. This form of operation involves a measure of unpredictability on the part of both the driver and the horse.

RECOMMENDATIONS: (1) That there be standard safety signs for museums.

(2) That there be standard tramcar safety signs, e.g. "car under repair - do not run" and that these signs be provided by AETM for all Societies.

(3) That standard accident report forms be designed suitable for use by all museums and covering both public traffic operations and workshop accidents. It was agreed that all member museums would forward examples of their accident report forms within 3 months to Mr D. Rawlings of SPER and that Mr Rawlings would, after circulating a rough draft of a proposed standard accident form to all constituent museums for comment, arrange the printing of these standard forms so that within 6 months a suitable common form would be available to all member organisations.

(4) That if a driver is found to be at fault in an accident, disciplinary measures be taken for re-training or suspension of the driver involved.

(5) That Mr D. Rawlings be the COTMA Safety Officer concerned with the standardisation of safety procedures.

(6) That Messrs. D. Rawlings, G. Jordan and Dr. J.C. Radcliffe present further recommendations to COTMA on safety.

TRACK WORK ENGINEERING - A COMPARISON OF TECHNIQUES AND SKILLS BEING DEVELOPED BY MUSEUMS

WORKSHOP 3C

Chairman: Mr M. Boyton

An informal discussion took place in this Workshop and the following points are worthy of notice:

(1) Methods of Concrete Track Construction.

The pros and cons of laying mass concrete track in its various forms, the provision of resilience under the rails and the problems of transition from one track type to another, i.e. from mass concrete to sleeper track, were discussed. The question of the use of concrete or steel sleepers was also raised and it appears that no museums in Australasia have yet used either, although the present track extension being undertaken at Crich is being laid on British rail type concrete sleepers using "Bandol" rail fastenings on one side only, with the gauge being held by tie-bars. The THS has used a form of buried rail set on a concrete beam construction for depot and service roads but this form of construction is not recommended for passenger carrying service track. Both THS and MOTAT were at the time of this workshop constructing mass concrete track and undertook to keep other museums informed of their progress.

(2) The Burying of Track.

Some museums, notably WTM and THS, have sections of track filled in with soil and grassed over. This technique is not recommended unless it is absolutely necessary, as it is very difficult to maintain a level running top to the track because the ballast layer becomes penetrated by water and water-borne soil. The ensuing discussion pin-pointed a reasonably easily identified area of risk in using this type of track - this is the air/soil inter-face. It was suggested that if such buried track construction was necessary, the top layer of filling material could be compacted in order to exclude air as much as possible.

A further point made in this discussion was that there is a right-side-up when re-laying second hand sleepers. In such sleepers, the growth rings must be placed to the top to prevent water penetration of the timber and a subsequent rapid deterioration through rotting.

(3) Obtaining Rail.

Most groups are already using or hope to change to the use of railway profile rail. Most, with the exception of THS, have experienced no problems in obtaining their needs from local transport operators. Although there was some discussion on the problems of using railway profile rails for tramway operation, no conclusions were reached.

(4) Lubrication of Rails.

From discussion, it appeared that there is a variety of methods employed by museums to apply a variety of lubricating materials, ranging from oil to graphite grease, to flanges and check rails. As yet no museum uses mechanical lubricators, although MOTAT is considering installing one on the major curve of the Meola Road extension. MOTAT is also investigating the use of carbon block lubricators similar to those used by the New Zealand Railways on its locomotives.

(5) Mechanical Assistance with Track Work.

WTM uses a tractor with front end loader fitted and THS and AETM are constructing specific service vehicles using, in the main, components obtained from Melbourne.

SPER has its ballast motor tram available and other groups use vehicles and other mechanical aids as and when these are available and needed.

ENTICING PEOPLE TO YOUR MUSEUM - THE PUBLIC

WORKSHOP 4A

Chairman: Mr R. Merchant

WORKSHOP MEMBERS: Messrs. T. Bettany, WTM
E. Brockie, DMOTT
W. Denham, SPER
R. Green, TMSV
P. Kahn, SPER
P. Rendall, THS
A.L. Roi, THS
K. Stodden, TMSV.

The following aspects of encouraging the public to visit museum projects were discussed:

(1) Advertising.

Various types of advertising were discussed and it was obvious that some museums had experienced limited success with newspaper and "give-away" type advertising.

"Give-away" brochures were not always successful as it is difficult to gauge the response from these as this response is not always immediate. One possible method suggested of gauging the success of "give-away" brochures would be to issue these brochures for a limited period with complimentary ride tickets. The return of these free tickets would allow, in some measure, a gauging of the response to the "give-away".

The amount of advertising which a museum can undertake depends to a great extent on the stage of development of the museum but workshop members considered that all advertising avenues should be tried by museums.

The best publicity results from personal approaches by museum members and these should be made wherever possible, e.g. to radio and television stations with suitable public relations material and such material should include the use of posters and photographs of vehicles in service.

Museums need to "get out into the community" with displays and exhibitions; arranging for speakers to speak about their museum at local functions and arranging for outside groups to become involved with activities such as the holding of festival days on the museum site are both excellent ways of involving the community and creating a community awareness of the presence and activities of the museum.

Approaches can also be made to children through schools and to older people who remember the "tram age".

A further promotional avenue exists through coach firms which operate sight-seeing trips and conducted tours, although these require the availability of a tram service on weekdays.

Business firms can be encouraged through their social clubs to hold Christmas parties, picnics and similar functions at the museum site where the presence of the tramway provides built-in entertainment.

Recommendations: (1) That COTMA prepare a standard advertising contract form.

(2) That COTMA prepare a census form seeking information from museum visitors and including a question which asks how the visitor learned of this museum.

(3) That COTMA undertake a joint analysis of the results of this survey.

ENTICING PEOPLE TO YOUR MUSEUM - WORK PARTIES

WORKSHOP 4B

Chairman: Mr R. Cowing

WORKSHOP MEMBERS: Messrs G. Jordan, BTPS
F. Gear, Canterbury Branch, New Zealand Railway and Locomotive Society
P. Hyde, BTMS
C. Mottram, TMSV
M. Skinner, AGTM
G. Taylor, THS.

The Chairman opened the discussion by requesting delegates to outline the methods of organising work parties employed by their museums. It was apparent that the most common method was for the person or persons in charge of the project to ring members for support. The other most common technique was for members present on the site to be gathered together to assist with a specific project.

All delegates present at this workshop recognised that there is a problem faced by all museums in gathering a work force and a round-table discussion ensued on the various problems and methods tried in order to find a solution to the problem.

Delegates present agreed that there is no set method which is guaranteed to produce results as each museum has problems of its own, for example, public transport to and from the museum, especially if it is some distance from the town or city from which it draws its work force.

After discussion, the following suggestions were recorded for the guidance of member museums as some of these may not have been tried by all museums:

(1) Telephone members asking them to assist at work parties.

(2) Set regular work days and work party evenings.

(3) Make the fullest possible use of service clubs, such as Lions, Scouts, etc.

(4) Advertise for members - although museums conceded that they had experienced only limited success with this in the past.

(5) Try approaching a member personally for his assistance - a refusal to you in person may be harder to give than over the telephone.

(6) Make the member feel wanted on work days.

(7) Keep close supervision.

(8) Use social activities as an opportunity to promote future work parties.

AUCKLAND TROLLEY BUS SPARE PARTS

WORKSHOP 4C

Chairman: Mr. R. Clarke.

INTRODUCTION:

Mr Ian Mison advised members that he will arrange for samples of spare parts to be available for inspection at MOTAT.

DISCUSSION:

It was noted that the Auckland Regional Authority is at present the only source of overhead equipment and spare parts. At the moment, copper trolley wire is being cut down for scrapping in span lengths, but that the ARA would probably undertake removal in complete rolls if requested to do so.

It was further observed that it is possible to obtain new copper grooved trolley wire at a price not very much greater than the scrap value of used trolley wire. For example, it was noted that new trolley wire for the length of the AETM line at St. Kilda cost approximately $2,000. A more significant cost was the cost of obtaining overhead fittings. The fittings used at Auckland are 3/0.

Copper scrap prices are at the present time at an all time low of approximately $1,100 per tonne. Some new fittings are obtainable from the Melbourne and Metropolitan Tramways Board. Frog pans are available at the time of writing for $70 each.

A letter from the ARA on the subject of spare parts availability was read to the meeting by Mr. Clarke. This letter and a report on the availability of these spare parts will be found on pages 121 and 123.

Mr. Clarke alluded, at this point, to a lack of response on the subject from member societies. However, it was noted that members of the Tramway Historical Society have received assistance with storage, packing and dispatch of spare parts and that the New Zealand Motor Corporation may well be able to supply crates for packaging these parts or that freight forwarding organisations may be able to assist member museums with freight forwarding arrangements and consolidated packaging arrangements.

Member museums were then asked to indicate the types of equipment which could be of assistance to them as follows:

BTMS require no spare parts at the present time, except two trolley retrievers of the modern Earl type.

SPER indicated that bus and trolley bus equipment was required.

AETM (Adelaide) requires one set of trolley bus equipment, contactor panels and a compressor to complete the re-equipping of the trolley buses.

It was noted that the Wellington City Corporation Transport Department may have motors available in the future. This would be B.U.T. equipment.

It was noted that the Park Royal bodied buses are the only trolley buses remaining in operation in Auckland and that the bodies of the older trolley buses are at the present time being scrapped. Motor generator sets are available from these older buses.

Side arm bracket arms are being used at MOTAT and further supplies may be available from the ARA?

It was agreed that the obtaining of further supplies of overhead fittings should be investigated.

It was further noted that the overhead equipment at the ARA May Road depot is still in position.

It was further noted that trolley bus trailing frogs are usable in tramway overhead.

Some discussion ensued on the possibility of representatives of all museum groups being present at one time in Auckland to conduct an inspection, as a group, of equipment which could be available.

It was decided that a further discussion would take place on the evening of this workshop to make final arrangements for such a visit.

Members reported that a large amount of overhead remained in position in the streets of Auckland, that 32 trolley buses remained in operation, and that the ARA had received a Government directive to consider continued operation of trolley buses.

It was further noted that the Wellington City Corporation Transport Department has been manufacturing its own parts and that the ARA has sold crates of new overhead hangers to the W.C.C.

FINANCIAL - SUBSCRIPTIONS, SYSTEMS SALES AND FUND RAISING

WORKSHOP 5A

Chairman: Mr P. Hyde

WORKSHOP MEMBERS: Mrs Dorothy Hinman
Messrs. T. Bettany
E. Brockie
G.B. Claydon
C. Perfect
J.R. Procter
D. Rawlings
Rev. M.H. Kerr
Dr. J.C. Radcliffe.

Panel members were invited to explain the various methods used by their museums to cope with the topic areas of this panel.

CURRENT ADMISSION CHARGES:

Set out below are the charges made by the member museum organisations:

AETM, Adelaide - Operating

Charges $1.00 Adult. 50c Child. Entrance and unlimited number of rides inclusive.
Minimum fee for charter $30.00.

BTMS, Brisbane - Not operating but guided tours.

Charges 40c. Adult. 20c Child. $1.00 Family Ticket (any number of children).

BTPS, Ballarat - Operating

All day charge $1.00 Adult or Child.
Single 40c. Adult. 20c Child.

MOTAT, Auckland - Operating

Entry $1.20 Adult. 60c Child. (Pensioners 60c)
Additional tram rides: 10c Adult. 5c Child.
Bus fares: 20c Adult. 10c Child.

SPER, Sydney - Operating

Charges 40c. Adult. 20c Child per ride.
All day pass $2.00 Adult. $1.00 Child.
Charter rates available on application.

THS, Christchurch - Operating

Admission charge to site: 25c, then pay for tram rides.
Available concession tickets: $1.00 Adult. 60c. Child. (Includes admission to site and two rides (each way) and admission to Display Hall.)
Single rides: 15c. Adult - Return 30c.
(one way) 10c. Child - Return 15c.
Charter rates available on application.

TMSV, Melbourne

Charges 60c. Adult. 30c. Child - per ride.

WTM, Wellington - Operating

Charges 30c. Adult. 15c. Child - per ride.
Minimum charter fee $15.00.

CRICH MUSEUM - Operating

Charges 60c. Adult. 40c. Child - First ride.
20c. Adult, 10c. Child - Subsequent rides.
Party rates available.

No Australasian museum charges for car parking and no charges are made for viewing additional displays after the payment of admission fees with the sole exception of admission to the Hall of Wheels at Ferrymead.

CHARTER WORK

It is desirable for museum organisations to charge a reasonable figure as a minimum fee for undertaking charter work. The museum representatives indicated their own museums' attitudes to charter work as follows:

SPER do not encourage charter trips.

WTM have had some success with school visit trips.

TMSV do very few charter trips.

THS undertake school trip charters and also other charter work arrangements made on its behalf by the Ferrymead Trust. A proportion of the charge for such charter work belongs to the THS.

Crich coach operators make the charter arrangements and charge a total combined fee from which the Tramway Museum Society receives its proportion in due course.

FUND RAISING:

It was noted that professional fund raisers are not being used to any great extent by member museums.

AETM undertakes fund raising (in addition to membership fees) by obtaining pledges of cash from its members towards its Capital Works Budget.

Tax concessions are available in one form or another to persons and organisations contributing to the support of museum projects as follows:

Crich reported that in England members could undertake to pay a certain amount each year for a specified period thereby earning themselves tax concessions under United Kingdom income tax legislation.

In New Zealand, museum members can make donations to their project and can claim this amount as a deduction from their income tax.

Company tax concessions apply in New Zealand, Australia and the United Kingdom.

One museum provides an extra line on its membership renewal notice, advising that donations to the project would be accepted, e.g. a member is invited to pay his subscription and to include an additional amount as a donation.

Museums also receive donations of goods and professional services are donated.

ADVERTISING ON TRAMS:

One problem which each museum organisation has to resolve for itself is the question of whether advertising on its trams is desirable. Some museums have already undertaken such advertising as a means of raising funds. Experience appears to show that advertising through commercial advertising agencies is not successful and yet a certain expertise is needed in approaching such advertisers and probably, in view of this, one member should concentrate on the particular task of making the necessary approaches to the advertisers and arranging the details. Advertisers approached may undertake to do their own painting or preparation of the advertising material.

T.H.S.: Outlined its technique for soliciting advertising as follows: An initial approach is made by letter to the advertising manager of the firm concerned, requesting an invitation to meet and to discuss details.

Approximately 60% of those firms approached had accepted and arranged such an interview. Of those interviewed, some 60%-70% had subsequently taken up advertising. Rates of advertising have been worked out on either an annual basis or on the basis of providing advertising rights for a five year term.

W.T.M.: Charges advertisers $150 per year for the roof boards of a tram and $30 per year for the smaller end apron advertising boards. These smaller boards could be changed around regularly.

D.M.O.T.: Approaches had been made to advertisers seeking a loan of $50 in return for showing their name on one page of a booklet about Dunedin trams. Repayment would be made to the advertisers as the booklets were sold. It was reported that all the expenses had been recovered and that these loans had been paid back.

T.M.S.V.: Commented that they had had some success in advertising on top of their horse tram.

BUDGETS:

Not all museum organisations have employed the policy of compiling an annual budget. A budget must take into account all anticipated expenses and expenditure where costs may rise and must budget ahead for the forthcoming 12 months. It was suggested that budgets could be prepared for longer periods than 12 months, i.e. museum organisations could prepare short term and long term budgets, for example: for a period of 6 months and for a period of 5 years.

It can also be advisable to take into account "as and when" budgeting where cash is to be set aside when available to take account of "once only" projects. It is also necessary to allow flexibility for contingencies that may arise.

"TREASURY DEPARTMENT" -
NUMBER OF PEOPLE REQUIRED TO OPERATE:

CRICH: Has both a Treasurer and a Cashier who is the Deputy Treasurer. It is possible not enough thought has been given to this side of a museum's operation. The administration aspects of museum management, i.e. financial and secretarial, are just as important as restoration and site work.

A.E.T.M.: Provides for a position of Treasurer and also for a proxy Treasurer whose function it is to attend meetings in place of the Treasurer.

AUDITOR:

Mr. Claydon observed that museums are obliged to have an auditor who must be appointed by resolution of members voting at a general meeting of members. If a change of auditor is required, an explanation must be given and reasons for such a change must be stated.

In all cases, the auditor must be elected by members and be annually re-elected.

Some museums have their accounts audited by a firm of public accountants which results in payment of high professional fees. Such fees, in many cases, could be reduced by undertaking a preliminary internal audit.

The assets of the museum should appear in the annual accounts. These assets should be reviewed from time to time in order to maintain realistic figures.

FORM OF PRESENTATION OF ANNUAL REPORT AND ACCOUNTS:

Reference was made to the high standard of presentation of the Annual Report and Accounts of the Tramway Museum Society of the United Kingdom. It was suggested that the Annual Report and Accounts should be of a high standard in order to impress upon members of the public that the museum is a valuable investment and one which is worthy of people investing their resources in. Such a report should contain photographs, if possible, comparisons of operating results of several years and some reference to special facets of the museum. The cost of preparation of such a report can be included in the membership subscription fees.

RESTORATION, METHODS, PARTS, LIAISON ETC.

WORKSHOP 5C

Chairman: Mr M. Skinner

WORKSHOP MEMBERS: Messrs R. Cowing, SPER
D.D. Hinman, THS
G. Jordan, BTPS
M. McAulay, SPER
C. Mottram, TMSV
B. Ollerenshaw, WTM
M.C. Sanders, THS.

This workshop consisted of a general discussion of the problems encountered during tram car restoration work and covered such topics as:

(1) Obtaining patterns and castings.

(2) Encouraging members to conform with organisational procedures necessarily involved with restoration, particularly to overcome such problems as the one of the tools growing "legs".

It was decided that full notes would not be taken but that the recommendations arising from this workshop would be recorded. In the event there was only one recommendation and research has showed that this recommendation had already been made to COTMA at an earlier date, viz. Memorandum 5, dated 29.12.75, requested that a list of patterns held by member museums be forwarded to the Spare Parts Committee. Only three member museums have so far replied to this memorandum.

It was also suggested in this memorandum that any museums planning to make castings of tram car components should notify other museum organisations via COTMA memoranda of their intentions to enable these other museums to take advantage of the opportunity thus presented if they wished to do so.

FOOTNOTE: As Workshops 5B and 5D were completely informal discussions, no formal notes were taken.

ARCHIVES AND LIBRARIES

WORKSHOP 5E

Chairman: Mr K.M. Stodden

WORKSHOP MEMBERS: Messrs. L. Day, THS
W. Denham, SPER
R. Green, TMSV
R. Thomson, BTMS
A. Webster, THS.

This Workshop was a continuation of discussion which took place under Workshop 1A "Progress in Archival Storage and Recovery and Display of Tramway Era Relics".

Discussion during this workshop indicated that there are a number of important points to be noted in the storage of archival material. Such details as the avoiding of the use of cellophane tape were noted and also the availability of an instruction manual published by the Museum Association of Australia. This publication is available free and it was suggested that Mr. W. Denham of SPER could edit the information available so that it suits the needs of tramway museum organisations. It was noted that further papers produced by I.C.O.M. and UNESCO in Paris are available in some public libraries.

The New South Wales State Library also has information available on conservation techniques and on the cataloguing and storage of archival material. It was further noted that in New South Wales, grants are available to organisations undertaking conservation and archival work for storage and for particular conservation programmes. Other Australian States have similar programmes and funds available to meet the particular priorities and policies of those States. No such grants are available in New Zealand.

It was reported that SPER had received a grant of $750 from the New South Wales Government to record documentary material on micro film. The advantage of such micro film is that the material is recorded in a very compact form and may be stored in small fireproof cabinets.

Discussion by workshop members warned of the danger to archival materials when members stored such materials at home, e.g. a member holding such material on a long term basis tends eventually to think of the material as his own. There can also be dangers of "pilfering" of material by enthusiasts, workers on the site, etc.

For the above reasons, workshop members considered that it was necessary to have adequate storage facilities for archival material and that such materials should be adequately catalogued. It is further necessary that museums be particularly selective on what material they allow to be removed from the museum's storage area. Such loans should be recorded and the record book entry signed by the person removing the material.

Suggestions included the possibility of duplicate material being lodged in other libraries or depositaries for safety (BTMS advised that it is considering returning materials relevant to other tramway societies to appropriate depositaries in those cities). At the very least it was considered that photo-copies of material relevant to a particular tramway society should be available to the appropriate museum in that city's area.

The suggestion was made that COTMA could be involved in such a transfer of material and copies and that lists of archival material held should be made available to other allied organisations by museum organisations holding such material.

It was further suggested that COTMA could recommend to its member organisations:

(1) That moves be made to improve the storage of archival materials.

(2) To undertake a standard listing of all spare parts available.

(3) To undertake a standard listing of archival and information reference material.

(4) To provide master catalogues of library material, patterns and plans and that this task could be given priority over the proposed drop-centre booklet.

Recommendation: (1) That archives, including libraries, and documentation be given a very high priority in museum activities.

(2) That a catalogue of information available be set up on an inter-state basis.

Panel Discussion

PANEL DISCUSSION

VOLUNTEERS v. PAID STAFF

PRESERVING AND PROMOTING HARMONY AND PRODUCTIVITY

Panel Members: Rev. M.H. Kerr (THS), Panel Chairman.
Messrs. G.B. Claydon (Tramway Museum Society, U.K.)
I. Mison (MOTAT)
D.R. Muir (Ferrymead Trust)
M.C. Sanders (THS)
M. Skinner (AETM).

Discussion commenced with each panel member giving an outline of his background and experience in the area under discussion.

Mr. M.C. Sanders: Stated that he was an electrical technician with industrial supervisory experience. He was employed by the Ferrymead Trust and undertook tasks which are formulated on recommendations from THS. He supervised eight students for two months during the Christmas holidays and now has four regular workers including two tradesmen. He considers that time taken to supervise other persons working is less personally rewarding than time spent working himself, although more work is done in this way (i.e. one year's work performed in about one month). He has been a THS member for ten years.

Mr. G.B. Claydon: Advised that he was the honorary secretary of the Tramway Museum Society of the United Kingdom and that he also filled the position of Vice-Chairman. He was not paid for these positions, although his expenses were reimbursed. He stated that in Great Britain, the controlling body of a museum organisation such as his must be entirely voluntary.

Mr. M. Skinner: Advised that he had been a member of the Australian Electric Transport Museum at St. Kilda, Adelaide, for ten years and had acted as General Manager for the past two years. He co-ordinates the tasks to be done at the Museum, controls finance and generally provides the "oil for the machine". He is not paid for this role and undertakes the necessary administrative work in the evening and the supervision at the weekends. It is his responsibility to ensure that budgets are not exceeded.

Mr. I. Mison: Advised that he had been a member of MOTAT for fourteen years and honorary secretary of the Tramway Division for the past four years. Through the various work schemes of the Labour Department, MOTAT has had approximately 230 workers. He commented that it appeared that about 80% of these workers were not, in fact, unemployed, but unemployable. Despite this, MOTAT has been able to use the services of three gangs of workers: (1) a rail building crew; (2) a track formation crew; (3) an overhead crew.

Mr. Mison at present spends three days of each week on the site. He commented that, although there has been some success with this scheme, the turnover rate of workers is high.

Mr. D.R. Muir: Advised that he had been construction manager for the Ferrymead Trust for three years and, approximately 18 months ago, had taken over the position of Trust Manager in addition and that thus he wore "about five hats". He was paid by the Ferrymead Trust. His job was constructing, organising and promoting the Museum project for the Trust. His project had approximately 80 workers employed under various Labour Department schemes. His experience was that provided the job would hold the interest of the workers, jobs could be found for approximately 80% of the people referred by the Labour Department.

Following the above introductions by Panel Members, the following discussion took place:

Rev. M.H. Kerr: Considered that there are three different categories of paid workers at Museum projects in addition to what he termed "pure volunteer":

(1) The worker paid under a Government Relief Work Scheme - usually unskilled.

(2) The skilled persons brought in for a particular function - usually skilled tradesmen.

(3) The managerial and administrative staff.

Mr. Kerr posed the following question: "Can a Museum survive without paid staff?"

Mr. D.R. Muir: Yes, but only just. It would stagnate without seven day a week staff as opportunities would be missed for such things as the collecting of exhibits.

Mr. M. Skinner: Don Muir's observation is correct in a way. However, sympathetic employers do allow Museum members to re-arrange their working hours to permit essential Museum business to be conducted during business hours.

Mr. G.B. Claydon: Progress slows down if people are not on the site all the time, and some activities, such as the following, require persons present during the week:

(1) Supervision of contracts.

(2) Delivery of goods.

(3) Security.

(4) Continuity.

(5) School visits.

Museums will progress without paid staff. They will bump along somehow if they can manage using shift workers and school teachers.

Mr. M. McAulay: Asked "Is Crich a seasonal museum?"

Mr. G.B. Claydon: Yes, it is only open from Easter to October for the public. However, work continues all year, although the closed period allows time for maintenance work to be carried out.

Mr. M.C. Sanders: A weekend Tramway Museum could run with volunteers only - a composite Museum could not.

Rev. M.H. Kerr: Posed a further question to the panel: "Should the day to day manager be paid or volunteer in a weekend only Museum or is this not important?"

Mr. I. Mison: Can't really comment as MOTAT is a 364 day per year Museum. MOTAT has a Director responsible for the day to day running and a Management Committee, elected by members, is responsible for long-term planning.

Mr. M. Skinner: If there are paid employees at the Museum, it is essential that there be competent supervision. It is preferable to have a Museum member with supervisory experience to avoid such problems as placing rails in mass concrete the wrong way round.

Mr. D.R. Muir: It would be disastrous to have no paid administrative staff. Friction would arise over the priority of jobs to be done. Ferrymead has an ideal set-up where an Executive Committee plans the priorities and sets a budget. With reference to paid management, during development a paid builder would be the most suitable person but once the Museum is established, a paid administrative person may prove more suitable.

Mr. G.B. Claydon: There are three levels of paid staff:

(1) Labourers.

(2) Intermediate.

(3) Managerial.

Members who become unemployed are taken on at the intermediate level. These members then become the administrative and supervisory staff when unemployed relief workers arrive on the site. No managerial staff are available from the unemployment scheme in the United Kingdom, and therefore direction comes from the Board to both paid staff and volunteers at the intermediate level. This works well.

Mr. M.C. Sanders: Stated that he was unashamedly a supporter of THS and only supervised paid workers on THS work.

Mr. G. Taylor (THS): Asked Mr. Claydon the following question: "Are the unemployed people the majority of your work force?"

Mr. G.B. Claydon: Yes, four people are paid full time to supervise about fifty unemployed.

Mr. G. Taylor: What can be done when the unemployment scheme ceases to ensure that projects are finished?

Mr. G.B. Claydon: Is there a package scheme operating in New Zealand or is it open-ended?

Mr. D.R. Muir: No, it is open-ended on a three month basis.

Mr. G.B. Claydon: In Britain there is a package system, and workers are retained until the package is finished.

Mr. M. Skinner: The same conditions apply in Australia.

Dr. J.C. Radcliffe: Agreed with the tiered system suggested by Mr. Claydon. However, he stated overall control must be by voluntary members - and in Australia this is required by law - and to avoid conflict between volunteers and paid staff, it is essential that interchange of information take place frequently.

Mr. P. Hyde (BTMS): Asked the following question: "What are the relative work outputs of paid unemployed as compared with the volunteers, both in quantity and in quality?"

Mr. I. Mison: MOTAT was caught on the hop by this scheme and the tramway workers have only recently started. However, they have done much preparatory work.

Mr. P. Hyde: Is the quality and quantity as good as volunteers?

Mr. I. Mison: The quality is satisfactory but it takes a long time.

Mr. M.C. Sanders: Volunteers are variable but although they work shorter hours, they are prepared to improvise and to make do. Paid workers are on the site for their full 8 hour period. In spite of this, however, a minor problem will hold up the work.

Mr. D.R. Muir: There are good workers among the unemployed and these people are frustrated and slowed down by the lack of equipment, materials and finance. Restoration work is not the field of the unemployed worker who doesn't have the required variety of skills. Given the opportunity, the unemployed workers will work quickly.

Mr. G.B. Claydon: In Britain, the employing organisation may nominate the skills which it requires. It is not an abrogation of responsibility to have paid staff to restore trams. Trams are needed to make the Museum work and therefore the chance to prepare running trams for service should be taken.

Dr. J.C. Radcliffe: Stated that restoration in Adelaide was being done by unemployed workers on a relief scheme and that it would be interesting to see the results of this work. The work is being done by people with related skills, supervised by staff with the necessary skills but with no particular love for the vehicles.

Dr. Radcliffe issued the warning that political fickleness could remove the source of labour under such schemes leaving Museums in an embarrassing situation.

Mr. I. Mison: Suggested that it is worth trying to plan work so that the harder work is done by unemployed persons, leaving the easier work for volunteers to complete, should the unemployment relief scheme collapse.

Mr. M. Skinner: Commented that restoration is an emotional topic - volunteers do not want their favourite tram "molested" by unemployed workers.

Rev. M.H. Kerr: Posed the question: "How can you create harmony in this situation?"

The following comments ensued in answer to this question:

Miss E. Butland: (MOTAT) Stated that she was very happy that paid staff were working on her favourite tram.

Mr. G.B. Claydon: Commented that if the work were done properly, by tradesmen, there should be no conflict.

Mr. I. Mison: Commented that if there is a duplication of vehicles there should be no reason why paid workers could not restore a "hack" vehicle.

Mr. D.R. Muir: Stated that he was happy to allocate unemployed workers to paid members to supervise. This scheme depends on the Labour Department's administrator. Early workers were unskilled but late last year the Labour Department was required to justify its expenditure on the Ferrymead project and Ferrymead was made into a Work Rehabilitation Scheme. The Labour Department's administrator "played it right down the middle", threatening to "dump" the whole scheme. The result is that Ferrymead is now permitted to employ tradesmen and professional persons and to pay the going rates to them.

Rev. M.H. Kerr: Commented that an important point to be noted is that, as the New Zealand situation deteriorates, more and more skilled workers will become available.

Mr. G.B. Claydon: Suggested trying to avoid conflict by having two trams to be worked on together with two sets of tools. He suggested that fulltime staff could be selected from volunteers and would bring their knowledge and enthusiasm to the project.

Mr. D.D. Hinman: (THS) Observed that friendly competition between volunteers and paid staff could speed up the restoration work.

Dr. J.C. Radcliffe: Commented that volunteers will undertake work that no one else wants to do if they are paid for this work on a part time basis. He cited, as an example, AETM rail which, after relaying, required packing.

Mr. D.D. Hinman: Posed the following question: "Will they, at a later date, pack track if they are not paid?"

Mr.M. Skinner: Answered that volunteers did the job more thoroughly than paid staff, and no supervision was required. If the unemployed relief scheme finishes, volunteers could be used to complete jobs.

Dr. J.C. Radcliffe: Commented that this question required careful consideration. Members may do their own thing and say that the Museum can pay to have done whatever they do not want to do, particularly unpleasant jobs.

Mr. F. Gear: (Canterbury Branch New Zealand Railway and Locomotive Society Inc.) Asked if any Museum had made use of labour available from the Justice Department under the Periodic Detention Scheme.

Mr. I. Mison: Considered that this labour provided good value since, if they do not behave themselves, they are transferred to more unpleasant jobs.

Mr. G.B. Claydon: Crich had been approached by the Home Office to take labour under such a scheme and had refused this offer as no indemnity for damage caused was forthcoming.

Mr. I. Mison: Explained that periodic detention labour in New Zealand did not include criminals and therefore posed no major problem.

Mr. D.R. Muir: Advised that he considered these people good value as the supervision is provided with the group. He commented further that the museum using such a group must have everything ready and that the group can be used only on specific jobs as arranged with the supervisor.

Open Forum

OPEN FORUM

OBSERVATIONS AT FERRYMEAD

A CRITICAL ANALYSIS

CHAIRMAN: DR. J.C. RADCLIFFE

RECORDER: MR. B.J. DALE.

The areas for discussion by this Forum covered such things as Site and Track Layouts, Operations, Restoration, Maintenance, Use of Buildings, Relationships with Other Groups, etc.

As an introductory comment, the Chairman emphasised that it must be borne in mind that the Tramway Historical Society has been in what is probably the most difficult position of any tramway museum organisation in Australia or New Zealand from the point of view of the long gap between the closure of the tramway services and the opening of the museum line at Ferrymead. He asked members to keep this thought in mind when commenting on the progress of Ferrymead.

INITIAL IMPRESSIONS:
i.e. As a general member of the public sees Ferrymead for the first time.

Dr. J.C. Radcliffe: Commented that because of the lack of large accurate and informative signs at the entranceways to the site, the visitor arriving for the first time was immediately faced with the need to make a decision about the type of ticket to purchase - whether this should be merely an admission ticket, or a "Hall of Wheels" Special, etc. This impression is bad and needs to be improved. Dr. Radcliffe also considered that insufficient effort had been made to show that the Truscotts Road site exists and to set before the patron all the amenities that this site contains before he enters the gates. Dr. Radcliffe suggested that the site admission charge could well be raised and that the public could be given only the option of obtaining a "Hall of Wheels" special ticket as an alternative to admission. He pointed out that persons attending such a venture as Ferrymead do expect to pay for admission. Dr. Radcliffe further commented that, although the present state of the site development can be excused because of the development which is patently taking place, there are points where a feeling of depression can be created. He felt that insufficient was being done to cultivate the local market for Ferrymead and to promote it to local people as a project which was developing all the time.

Mr. M. McAulay: Considered it essential that a large signboard be erected outside the entrance to the site, if possible providing an indication of the length of the ride which was available.

Mr. P. Kahn: Considered that the public address system needed to be used both for Trust announcements and to announce tram departures.

Mr. G.B. Claydon: Suggested that a large finger-post sign should be erected at each entrance, pointing out the various amenities and in particular indicating the direction to the toilets.

SITE AND TRACK:

Mr. T. Griffin: Commented upon the tightness of the curves on the tramline but observed that he accepted the necessity for this because of existing site conditions. He emphasised that these curves highlighted the problem of planning museum tramlines round existing obstacles. As a result of the tightness of curvature, maintenance on these curves will need to be accorded a high priority and it will also be necessary to recognise that considerable wear and tear will take place on the cars.

Dr. J.C. Radcliffe: Commented upon the location of buildings on the site in relation to the tramline and some of the curves and observed that in places there existed a real visibility problem which needed to be recognised. He considered that paved pathways would help to keep the public where they were wanted, although at times it might prove necessary also to fence certain parts of the track to restrict unintentional public access.

Mr. G.B. Claydon: Considered that loading the tram at the square shelter with the track visibly available in both directions tended to confuse visitors and should be clarified with signs. He commented further that the entrance point to the site was confusing but appreciated that it was provided as an interim measure only.

Miss E. Butland: Stressed the need to explain to passengers and the public about the presence of the rubbish dump and that it was most important to outline the future proposals for relocating this dump to these people.

Mr. M. McAulay: Commented on the need to keep a track such as that at Ferrymead fully check-railed, in particular at special work. He also observed that the bolt heads of the check-rail bolts need to be checked regularly as there is a likelihood that they may fracture.

Dr. J.C. Radcliffe: Expressed concern at the ease of public access to the Traverser contact wire and suggested that an overhead contact wire system could be contemplated.

OVERHEAD:

Dr. J.C. Radcliffe: Considered that the reporting of defects noted by motormen should be carried out on a special form and considered that attention should be given to this matter urgently. He further suggested that it may be prudent to earth steel poles to the track and that triple insulation of the overhead could also be considered.

OPERATIONS:

Mr. G.B. Claydon: Commented on the relative slowness of car turn-around and suggested that an "on demand" service could be instituted, although this would require very considerable care and planning.

Comment was also passed on the possibility of introducing Inspectors or Dispatchers.

RESTORATION AND MAINTENANCE:

Mr. D. Rawlings: Commented favourably upon the standard of restoration and maintenance achieved by the Tramway Historical Society as did other Conference Delegates present.

In return, members of the Society offered to provide advice where appropriate to other museum groups if this was desired.

In the ensuing discussion, the view was expressed that, in view of the high standard of restoration achieved by the Tramway Historical Society, this Society should consider very seriously the possibility of acquiring what was described as a "Hack Every Day" car, such as an ex-Melbourne W2 class, for week day operations.

Reports

2ND REPORT OF THE EXPERT PANEL ON TRAMWAY MUSEUM SAFETY STANDARDS TO THE CHAIRMAN AND MEMBERS OF THE COUNCIL OF TRAMWAY MUSEUMS OF AUSTRALASIA

It would appear that although all COTMA members agree that both public and member safety is an extremely important issue, the time of the volunteer is limited, and safety comes a poor second to other more pressing, tangible problems.

Sadly, not one submission was received prior to this conference from any member group and therefore, without having any information on local authority regulations or any thoughts from member groups concerning safety items, as discussed at the last Conference, the Panel decided reluctantly that to endeavour to formulate broad guidelines and/or draft standards would be something of a wasted exercise.

It is proposed, therefore, to prepare a questionnaire that would cover basic requirements that would enable guidelines and standards to be drafted, and to send this questionnaire to each member museum.

It is recommended that each museum be requested to appoint a safety delegate who would be the contact the panel would correspond with, so that delays that may be caused through the handing on of mail can be minimised.

"TRAMWAY TOPICS" REPORT

1. Since last year's report, "Tramway Topics" has continued at about the same circulation of 650 copies per issue with the same number of issues being published.

2. Production standards have been improved with a new type format and cover layout.

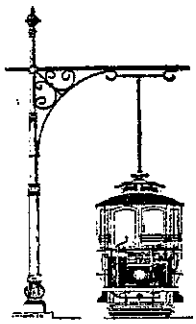
3. The compilation is still the result of the combined efforts of people in both the North and South Islands.

4. Last year's report indicated that there was a dearth of information available for publication. This situation has improved markedly since then and there is now a reasonable pool of articles available for publication. However, more high quality articles relating to New Zealand topics would be desirable.

5. Following comments at the previous COTMA conference in Adelaide on the accuracy of news items, the Overseas Editor wrote to the various Australian museums and to some other overseas ones, requesting regular correspondents and some museums now contribute on this basis.

6. Production costs have now increased since January 1978 from 40 cents to 65 cents per copy.

REPORT (c)



South Pacific Electric Railway

CO-OPERATIVE SOCIETY, LIMITED

TRAMWAY MUSEUM, ROYAL NATIONAL PARK, LOFTUS, N.S.W.

POSTAL ADDRESS:
BOX 103, G.P.O.,
SYDNEY, N.S.W., 2001

TROLLEY WIRE REPORT FOR COTMA CONFERENCE 1978

The change in format of "Trolley Wire" as from February 1976, whilst initially bringing the financial benefits envisaged, has unfortunately resulted in a deterioration of quality of production and reliability of publication.

The problems involved in producing a viable small circulation magazine are many and are compounded when the goodwill and co-operation of many widespread individuals and organisations is required.

Production of the magazine proved to be beyond the capacity of the printers and the sub-contracted work, negative and plate making, was generally unsatisfactory. The recession has closed many printing and ancillary establishments in Sydney and those surviving generally have ample work and the situation has arisen that small printers are faced with a take it or leave it attitude.

The change, as expected, enabled costs to be reduced and this, together with an increasing circulation, helped to bring the loss on "Trolley Wire" down from a high of $596 in 1974 to $94 in 1977 (to the end of our financial year on 31 March). Economic conditions soon eroded this reduction and threatened once again to overtake the subscription rate and face value. The new arrangements for 1978, whilst very favourable and offering the prospect of a better on-time production, have increased costs; and as we are not, at present, willing to carry a large loss as in the past, the subscription rate and face value have been increased as from February 1978 to:

Australia	$6.00	Overseas	$7.20
Face Value	$1.25		

It will be noted that the subscription rate for members and non members is now the same. $1.00 is considered to be the maximum that the magazine is worth and an effort will be made to hold this for subscribers. Retail sales, whilst contributing to the overall income, have usually been at a loss and the new face value of $1.25 is intended to fully cover costs even if it discourages these sales.

The magazine was increased in size to 36 pages in February 1978 and it is hoped to hold this size for the remainder of the year as it provides scope for a wider range of articles and hopefully will appeal to a larger readership and thus result in increased sales. It also provides better value for money, although marginally dearer,

than 32 pages due to the printing process. (4 pages per plate, therefore 8 pages per sheet; 8 x 4 = 32 + covers - 4 pages - heavier stock). A heavier paper has been used which enhances the appearance and rigidity although it has increased postage. The increased size requires more material to fill it and thus it is essential that all participating museums regularly (and on time) contribute news. Other articles, both major and minor, are required, especially from other than NSW, on tramway or related transport or industrial subjects. As these are typeset by the printers they should be on hand 8 to 10 weeks before publication and because of this we are presently very short of material.

Much criticism is made of the magazine and our methods and approach, although little of this is received directly by us. One complaint that has been justified is the slowness in returning photos. This has mainly been caused by their non-return by the printers. With the exception of those from December 1977, which are now on hand, the backlog has generally been cleared. The present arrangements should see photos from one issue returned by the printers when the next issue is put in for printing. The updating of subscription records is causing many problems. Complete lists of financial members and the very large number of changes of address are in the main slow in being forwarded to us and this creates considerable extra work and increases costs (all magazines returned have to be paid for at the ordinary postage rate). It is realised that members rather than their societies are often to blame for this but, nevertheless, it is proving extremely difficult to keep the mailing list current and understanding and help in keeping this going as smoothly as possible would be appreciated.

We, for our part, are not pleased with the lack of co-operation received or interest shown by some of the participating societies. It is for this reason that we are now less inclined than in previous years to carry a loss which has been borne by our other publishing activities which have shown a major downturn in turnover in our financial year just ended. Whilst this reflects the general economic downturn it has also been partly affected by non co-operation and obstruction where this would not have been expected. With the exception of the AETM, TMSV, and TTMS, museum news contributions have not been satisfactory. It is apparent that the job of "T.W." correspondent has been delegated to the lowest possible level and whilst in no way denigrating the efforts of those concerned they are obviously not always in a position to obtain the information or photos required. The latest mail strike notwithstanding, some news contributions were received extremely late for the April 1978 issue and this finally destroyed attempts to regain ontime publication with this issue.

Our efforts to effectively cover current transport news have not been successful due to an apparent misguided desire in some quarters to protect the AETA and "Electric Traction" which does not appear to need any such protection. "Electric Traction" does not hesitate to run museum news and in some instances news appears there before "T.W." has it. The circulation of "Trolley Wire" is more than twice that of "E.T." and it appears that the majority of the readership of the two magazines is largely different, therefore many people do not have access to an adequate source of current news.

It is believed that "Trolley Wire" has an important part to play in promoting and uniting the tramway museum movement in Australia and it was undoubtedly this thought that drew all the participating societies in to it. However, an on-going commitment is required if this is to be achieved.

(SGD) LAURENCE GORDON

EDITOR

20 April 1978.

REPORT ON THE AVAILABILITY OF EQUIPMENT FROM THE AUCKLAND REGIONAL AUTHORITY TROLLEY BUS SYSTEM

21 April 1978

1. TROLLEY BUS EQUIPMENT

Useful equipment for restoration and spare parts was recovered from the available B.U.T. and Saunders Roe trolley buses before they were scrapped.

Despite the short notice of the scrapping and the fact that MOTAT members were working against the clock to complete their Tram No. 11 project, the job of recovering the parts was well attended.

An inventory of parts available will be submitted to COTMA in the near future. The following is a list of the main equipment recovered and in storage:

Traction Motors	M.V. and	B.T.H.
Contractor Panels	"	"
Controllers	"	"
Battery Changeover Switches	"	"

Motor generator sets M.V.
Westinghouse Motor Driven E.10 Compressors
Trolley bases and poles
Various Control Panels
Many other parts such as Differentials, Half-shafts, Stub-axles etc.

In the case of Compressors, I know from enquiries received, that there will be a shortage. Not all buses had compressors when scrapped while some buses were sold complete to private buyers.

Also the remaining 33 Park Royal buses with B.T.H. equipment may not become available for some years as the lack of finance for replacing aged diesel buses has made their removal from service indefinite.

2. OVERHEAD TROLLEY WIRE AND FITTINGS

The removal of Overhead along the abandoned Auckland trolley bus routes is being carried out slowly by the A.R.A. Wire and equipment is available at scrap value or on other very acceptable terms.

MOTAT is arranging to collect the line equipment and intends to store as much as practicable. It would be appreciated if museums wishing to obtain any of this equipment could notify their needs fairly soon so that an estimate of requirements could be obtained.

The equipment available is of Ohio Brass Company manufacture and includes the following main items:

Type A.G.C. Tangent Span Hangers
Type H.S. Trolley Clamps (line ears)
Curve Hanger assemblies
Wood Strain Insulators
Porcelain Strain Insulators
Curve Segments
Section Insulators
Trailing Frogs
Electric Frogs
Selectric Frogs
Cross-over Assemblies.

3/0 S.W.G. grooved trolley wire is available at the current scrap value.

Full information and a catalogue is being prepared.

MOTAT will be pleased to continue to obtain and store overhead and trolley bus equipment. However, we would ask that the packing and transport arrangements be attended to by the Museum concerned.

(SGD) I. W. STEWART

AUCKLAND REGIONAL AUTHORITY

Regional House, 121 Hobson St, Auckland 1, New Zealand.

Telegrams: Regional

L.E.E./GR 12/0/199

3rd August, 1977

Dr. John C. Radcliffe,
Chairman,
Council of Tramway Museums of Australasia,
135 Through Road,
Burwood,
Victoria 3125
AUSTRALIA.

Dear Sir,

REQUEST FOR TROLLEYBUS PARTS AND FITTINGS

I refer to your letter dated 16th June 1977, requesting parts from our trolleybuses and overhead wiring systems for your transport museums and apologise for the delay in answering.

At a meeting of the Passenger Transport Committee held on 27th November 1974 a recommendation was adopted that redundant trolleybuses and associated equipment be offered to the Museum of Transport and Technology at Western Springs and that other museums be advised that they negotiate with MOTAT for the parts required.

We will be pleased to co-operate with MOTAT and if we can be advised of the trolleybus and overhead parts required will do our best to supply them.

We do have one major problem in providing manpower to remove parts. Perhaps MOTAT could assist by removing parts they require.

Regarding costs we do not envisage any charges for the parts except for trolleywire which has a high scrap value and if it is necessary to charge for special labour costs this would be negotiated at the time with MOTAT, but this charge would be kept to a minimum.

Yours faithfully,

J. V. Brown
Transport Controller

Per: L. E. Everiss
Chief Engineer - Passenger Transport Division

REPORTS AND QUESTIONS

SPARE PARTS PANEL

Dr. J.C. Radcliffe: Commented that some museums are writing direct to the Melbourne and Metropolitan Tramways Board seeking supplies of parts and equipment and that this is causing embarrassment to the Board.

Dr. Radcliffe stressed the need for museums to confirm their requirements with Mr. Keith Kings, Executive Officer of COTMA.

Mr. C. Mottram: (TMSV) Enquired about the availability of tramway equipment overseas.

Dr. J.C. Radcliffe: Advised that some of the equipment for Paraquay in Brussels had already been purchased.

Mr. G.B. Claydon confirmed this.

Mr. G. Jordan: (BTPS) Expressed concern at the out-flow of spares to other countries.

Mr. M. Skinner: (ATEM) Commented that business principles applied in this matter and that hence a sum of $5,000 entitles the purchaser to better equipment than the $150 that museums are prepared to pay.

Mr. M. McAulay: (SPER) The 30 cars going to San Francisco is a deal between San Francisco and the Mayor of Melbourne.

Dr. J.C. Radcliffe: Advised that parts being disposed of are to be offered to COTMA first and that a list of items sought is to be submitted to the Melbourne and Metropolitan Tramways Board by Mr. Keith Kings. It should be noted that this is not a high priority activity for the M&MTB.

Mr. R. Cannemeyer: (THS) Asked whether individuals may pursue initial contacts without involving COTMA until there is some certainty of tramway equipment being available.

Dr. J.C. Radcliffe: Yes.

Mr. T. Griffin: (SPER) Advised that he had information on GE 265A railway motors being available.

AUCKLAND TROLLEY BUS SPARES PANEL

Dr. J.C. Radcliffe: Advised that museums requiring overhead equipment are required to notify their needs to COTMA through Mr. Keith Kings.

Mr. D.D. Hinman: (THS) Asked if it was necessary for New Zealand museums also to go through COTMA.

Dr. J.C. Radcliffe: Not in the case of New Zealand museums but it is necessary for them to supply a copy to Mr. Keith Kings for his records.

MUSEUM SAFETY PANEL

Dr. J.C. Radcliffe: Stated that museums have important public responsibilities in the matter of safety and that museums cannot be proud of their record in this respect. He advised that the matter was to be considered by the Executive.

MAGAZINE PUBLICATION REPORTS

"Tramway Topics"

Mr. D.D. Hinman: Stated that it was not desirable to repeat in "Tramway Topics" the material which has been printed in "Trolley Wire" and therefore we should resolve the roles of these two publications. We do not want detailed reporting of the same topics in both magazines.

Dr. J.C. Radcliffe: Enquired of the meeting, however, whether there was in fact much overlap of readership as it was his impression that such overlap did not appear to be very great.

"Trolley Wire"

Mr. M. Skinner: (ATEM) Asked what progress was being made on the book about drop centre cars.

Mr. R. Merchant: (SPER) Replied that SPER was waiting for the material for this book to be supplied.

Dr. J.C. Radcliffe: Commented in the light of this that this poor response from member museums highlights the problem of communication being experienced by COTMA.

Mr. I. Mison: (MOTAT) Enquired if all museums were on the free mailing list for "Trolley Wire".

Mr. M. McAulay: Yes.

Rev. M.H. Kerr (THS) Expressed his approval of "Trolley Wire".

Mr. W. Denham (SPER) Advised that it was not intended to report on New Zealand activities in detail in "Trolley Wire" unless these were of major importance.

Mr. R. Merchant:	Considered that acquisitions and the major activities of New Zealand museums should be reported.
Dr. J.C. Radcliffe:	Commented that COTMA has no control over the operation of these publications but that it is pleasing to receive these reports of the publishing activities.
Mr. K. Stodden: (TMSV)	Has been advocating increased public sales of these magazines
Mr. T. Bettany: (WTM)	Informed the meeting that copies of "Tramway Topics" were sent overseas for public sales.
Mr. W. Denham:	Spoke of SPER's problems with "Trolley Wire" in public marketing: that they had experienced difficulty in receiving full payment for copies sold and not receiving payment at regular intervals and these factors have involved SPER in large losses on "Trolley Wire" sales. The new selling price has been set therefore to discourage commercial retail sales. However, public sales at the museums will continue.

THIRD ANNUAL REPORT

OF THE

COUNCIL OF TRAMWAY MUSEUMS OF AUSTRALASIA

Presented At: The Fourth Australasian Tramway Museum Conference, Christchurch, New Zealand.

April 25, 1978.

Council of Tramway Museums of Australasia

Chairman: Dr. John C. Radcliffe

Executive Officer: Mr. K.S. Kings

Member Organisations as at March 31. 1978:

Australian Electric Transport Museum (South Austrialia) Incorporated
Box 2012, GPO, Adelaide, South Australia 5001.

Ballarat Tramway Preservation Society
Box 632, Ballarat. Victoria, 3350.

Brisbane Tramway Museum Society
2 McGinn Road, Ferny Grove, Brisbane, Queesland 4055.

Museum of Transport and Technology (Incorporated)
Western Springs, Auckland 2, New Zealand.

South Pacific Electric Railway Cooperative Society Limited
Box 103, GPO, Sydney, New South Wales, 2001.

Steam Tramway and Railway Preservation (Coop) Society Limited
Box 108, Kogarah, New South Wales, 2217.

Tramway Historical Society Inc.
Box 1126, Christchurch, New Zealand.

Tramway Museum Society of Victoria Ltd
Box 4916 Mail Exchange, Melbourne, Victoria, 3001.

Tasmanian Transport Museum Society Inc.
Box 867J, GPO, Hobart, Tasmania, 7001.

Wellington Tramway Museum Inc.
Box 2612, Wellington, New Zealand.

West Australian Transport Museum Inc. (Perth)
Box 33, Maylands, Western Australia, 6051.

Council Address:- 135 Through Road, Burwood, Victoria 3125

CHAIRMAN'S REPORT

The Council of Tramway Museums of Australasia held its third meeting in Adelaide on April 26 1977.

MEMBERSHIP

Membership of the Council has remained static at 12 organisations during the past year. At the last COTMA Council meeting, applications for membership from Haddon Tramway Workshops and Newcastle Historic Vehicle Association were considered but not accepted as it was considered these organisations had not met criteria for membership. However, the Haddon group has been serviced with memoranda during the year as an aid to their development.

COMMUNICATIONS

Three memoranda were circulated during the year covering a wide variety of topics. In addition, the Chairman and/or Executive Officer were able to visit member organisations at Loftus, Paramatta Park, Ballarat, Bylands and Adelaide as well as the Haddon group. A report of the Conference held in Adelaide was published in both Trolley Wire and Tramway Topics and periodic notes were suppled to these journals.

TRANSPORT AUTHORITIES

COTMA had significant dealings with three transport authorities during the year. These were the State Transport Authority in Adelaide in connection with the Conference, the Melbourne and Metropolitan Tramways Board concerning provision of parts and vehicles and the Auckland Regional Authority in regard to trolleybus parts and overhead.

On two occasions, the Chairman was able to have helpful discussions with senior officers at the M & MTB Preston Workshops. As a result, a set of suggestions regarding procedures for purchasing and taking delivery of items from the Board was circulated. The surplus No. 9 trucks from the Melbourne W-3 and W-4 type cars were delivered to the various museums in mid-1977. The distribution was as arranged among the various museums at the 1976 COTMA Conference in Sydney. We must pay credit to the various museums for the promptness with which they each carried out their responsibilities in taking delivery of this equipment. Following negotiations through COTMA, the AETM acquired W-2 type car 354 and some additional parts in February 1978 for the construction of a works car. COTMA officers have also discussed informally the distribution of other potentially surplus equipment with Board staff and it is anticipated that further equipment will become available in due course. It is a pleasure to record the co-operation which M & MTB staff have given during the year, particularly as they have been under heavy pressure taking delivery of 115 new trams and preparing contracts for a further order of 100 trams. Such pressures also stress the desirability of as many matters as possible being co-ordinated through COTMA rather than being separately channelled to the Board from individual museums. In this regard, the Council's Executive have been a little disturbed that a couple of museums have not adhered to this principle but have communicated directly with the Board over matters which extended rather further than the provision of routine spare parts for equipment previously secured from the Board. Delegates will recall that this arrangement was determined at an earlier Conference.

The Auckland Regional Authority, following a request emanating from the last COTMA Conference, has agreed to make surplus trolleybus equipment available to COTMA affiliates and has agreed that MOTAT should act on behalf of the other museums in this matter.

FUND SOURCES

No further developments appear to have taken place at national level in either Australia or New Zealand for the passage of legislation to aid museums such as those represented by COTMA. However, matching grants have been secured in Brisbane and seem likely in Ballarat. Unemployment Relief assistance has been available in Christchurch, Auckland and Adelaide. SPER received a grant from the New South Wales Cultural Affairs Department for the development of an historical display. This is one of the first grants made specifically in recognition of the potential which COTMA museums have in this area.

GOVERNMENT AWARENESS - THE FUTURE ROLE OF MUSEUMS

Appreciation of the role of transport preservation was given increased government recognition in two Australian states in 1977-78. This in turn resulted in two transport authorities being able to budget some of their own resources for exhibit restoration.

A very successful "Transport Cavalcade" was held in Spencer Street, Melbourne on January 30 1978. TMSV was instrumental in arranging the provision of horse, cable and electric trams for the display. One tram was also provided by the Bendigo Trust, while the M & MTB restored two other cars for the occasion. Kindred railway organisations also made major contributions to the event. The lesson to be learned is that there is a public demand for the type of event staged, that it is acceptable for some public funds to be used in preparations for it, and that the public itself is discerning enough to pick out the truly historic vehicles from those still available for occasional service.

In Adelaide, the Minister of Transport has agreed for the State Transport Authority to sponsor a celebration on June 11 1978 of the beginning of urban street public transport by the Adelaide and Suburban Tramway Company on June 10 1878. It is intended the Premier of South Australia will enter Victoria Square on a horsecar previously displayed at St. Kilda, followed by a number of the AETM's preserved electric trams. The STA has already commenced resotration works in its own right by salvaging a 1925 model open-top double-deck Garford bus for the display. It has also salvaged and stored a later doubledecker of 1937 for a possible long-term preservation project.

These events are notable for the entry of two more transport authorities into the restoration field following precedents set in earlier years by the Brisbane City Council and the NSW PTC and its antecedents.

These developments could herald a changing role for COTMA museums as the value of transport preservation is recognised. The museums could look forward in the future to an even more important stewardship role in maintaing and exhibiting vehicles which have already been restored to display standard by their original owners using recognised public funds. If such a development occurs, it behoves us to ensure that our respective museums are able to meet the responsibilities involved.

Our obligation to maintain this type of vehicle will be even greater than when we have taken over run-down time-expired equipment at the end of its working life.

PUBLICITY

One project which came to fruition this year was the "Directory of Australasian Railway and Tramway Societies". Such a publication had previously been contemplated by both the N.Z. National Federation of Rail Societies and COTMA but was finally completed by the Diamond Valley Railway. COTMA and all affiliated museums are represented in the publication. The authors deserve our appreciation for the standard of the publication they have produced.

THE FUTURE

After four years, it may well be appropriate to review what is being achieved by COTMA. The strong and cooperative ties which have developed between the museums in place of the diffidence which previously existed is the first and greatest advance. The second, which has brought tangible results, is our ability to present a united and rationalised approach to transport authorities and governments.

This has served us well in recent acquisitions of equipment from the M. & MTB. It was also instrumental in securing a grant from the Victorian Goverment for the construction of a former for the use of all members for rewinding GE 201 traction motors. This equipment was completed during the year and is currently held by BTPS on behalf of COTMA. COTMA has become recognised overseas, and is in receipt of regular publications from the International Association of Transport Museums. Its worth was recently alluded to in a review of museum activities carried out for the Canadian Government.

The 1978 Conference is being held in Christchurch, our first meeting in New Zealand, andan impressive programme has been arranged. COTMA is also setting a new precedent in sponsoring an overseas speaker to present the main discussion paper. This will be given by Mr. G. B. Claydon, Secretary of the Tramway Museum Society, Great Britian, operators of the Crich Tramway Museum. It may be once again appropriate to reconsider the frequency of COTMA Conferences. They are time-consuming to organise and expensive for delegates to attend. Previous Conferences have been very valuable, but we must not allow annual precedents to wear out our enthusiasm.

The real proof of the organisation is in the extent that it is able to help the individual museums lift their own standards. As a result of detailed reviews of museum safety standards at the 1977 Conference, a motion to adopt various procedural principles was adopted by COTMA delegates. It will be our responsibility in 1978 to review what effect the adoption of these principles has had on our operation. Unless within our individual museums we can fulfil the expectations of such resolutions, the usefulness and influence of COTMA is nothing.

We thank you for another successful year.

K.S. KINGS
EXECUTIVE OFFICER

JOHN C. RADCLIFFE
CHAIRMAN

April 25 1978

MINUTES OF THE THIRD ANNUAL GENERAL MEETING OF THE COUNCIL OF TRAMWAY MUSEUMS OF AUSTRALASIA

Held on Tuesday, 25th April 1978, at the United Service Hotel, Christchurch, New Zealand, at 10 a.m.

The meeting was declared open by the Chairman, Dr. J.C. Radcliffe.

1.1 PRESENT:

Dr. John C. Radcliffe (Chairman) and the following delegates:

Messrs	R. Green	- Tramway Museum Society of Victoria Ltd.
	D.D. Hinman	- Tramway Historical Society Inc.
	P. Hyde	- Brisbane Tramway Museum Society.
	G.R. Jordan	- Ballarat Tramway Preservation Society.
	I. Mison	- Museum of Transport and Technology Inc.
	C.R. Perfect	- Wellington Tramway Museum Inc.
	D. Rawlings	- South Pacific Electric Railway Co-operative Society Ltd.
	Mark Skinner	- Australian Electric Transport Museum (South Australia) Inc.

The guest speaker, Mr. Geoffrey Claydon of the Tramway Museum Society, Crich, United Kingdom, and 26 Society observers.

1.2 APOLOGIES:

Tasmanian Transport Museum Society.
Steam Tram and Railway Preservation Society.
The Executive Officer, Mr. K.S. Kings.

1.3 OBSERVERS:

It was resolved that observers from constituent museums be admitted.
Skinner/Hinman.

It was resolved that external observers be admitted.
Rawlings/Jordan

2.1 MINUTES OF THE PREVIOUS ANNUAL GENERAL MEETING - ADELAIDE, 1977:

It was resolved that the minutes of the previous Annual General Meeting, held in Adelaide on 26th April 1977, be confirmed.
Perfect/Jordan

2.2 MATTERS ARISING FROM THE MINUTES:

(a) Directory of Railway and Tramway Museums of Australasia.

The Chairman advised that this directory was now available in Australia, produced by the Diamond Valley Railway.

(b) International Association of Transport Museums.

The previous A.G.M. had resolved that *"COTMA seek to join the International Association of Transport Museums"*. The Chairman advised that this had been done and some literature had been received, although COTMA is not strictly the sort of organisation which holds membership of this Association.

It was agreed that the publications received be listed in the memoranda with an explanation of the nature of each publication and could be requested by member organisations if required.

(c) Sponsorship of Publications.

Drop-centre Book: Mr. Rawlings indicated that insufficient material had come to hand yet for publication to be considered but advised that SPER would persevere with its preparation.

It was agreed that member organisations would forward material on Australasian drop-centre cars to the SPER Publishing Department within three months.

Postcard folder/map: Mr. Rawlings advised that sales of some publications had fallen considerably this year.

It was resolved that the publication of a postcard folder be deferred and reconsidered at the next COTMA conference.
Rawlings/Skinner.

M&MTB Poster: At the previous A.G.M. the Executive Officer had been asked to seek supplies of the poster produced by the Melbourne and Metropolitan Tramways Board to mark the fiftieth anniversary of the Preston Workshops. The Board had advised that 100 posters could be supplied at a cost of $1 each. Further supplies would involve a reprint at greater cost and this was considered impractical.

(d) Installation of Fire Sprinkler Systems in Museum Car Barns by Voluntary Labour.

This question had been investigated. It appeared that the only way it was possible in Australia for sprinkler systems installed by voluntary labour to be approved was for these systems to be independent of the public water supply and not dependent upon a tie line to the local fire brigade, and for the weekly testing programme to be undertaken by the officers of the museum themselves.

The Chairman outlined the various requirements for sprinkler systems in Australia and advised that there appear to be considerable difficulties in installing second-hand sprinkler systems using voluntary labour in Australia as was done at Ferrymead.

After discussion, it was considered that this question should be investigated further with the express intention of ascertaining:

(i) the legality, in Australia, of member organisations installing their own systems and

(ii) the source of appropriate expertise if such an undertaking is found to be legal.

It was resolved that a Fire Sprinkler Committee of three be established with power to co-opt.

Rawlings/Hyde.

It was resolved that this Committee comprise Messrs. R. Clarke (Convener), M. Skinner and G. Harris.

The Chairman declared the above persons to be elected to the Committee and requested the Committee to present a progress report by 1st November 1978.

(e) Safety Policies.

Recommendations that were formulated at the previous day's workshop sessions on Safety were read to the meeting.

It was resolved that the recommendations formulated be adopted as follows:

1. That standard safety signs be adopted for use by all Australian and New Zealand museums, such signs being those prescribed by the appropriate Standards Association or, where none are prescribed, that those prepared by the AETM be adopted and that an offer by the AETM to provide suitable signs to all museums who are COTMA affiliates be accepted.

   Hyde/Rawlings.

2. That Mr. D. Rawlings, Convener of the Expert Panel on Museum Safety Standards be appointed COTMA Safety Officer.

   Green/Perfect.

3. That all member museums conduct a further safety review of their activities in the light of the discussions at the conference and through their appointed Museum Safety Officer, and by using a questionnaire provided by the COTMA Safety Officer, provide details of current progress to that Officer by 1st August 1978.

   Green/Rawlings.

4. That by 1st August 1978, all museums provide the COTMA Safety Officer with a copy of any current accident report forms used by them with a view to that officer compiling a draft standard Accident Report Form for examination by all member museums by 1st October 1978, with the objective of universal adoption by 1st January 1979.

   Rawlings/Hyde.

5. That each museum forward to the COTMA Safety Officer copies of all accident reports and that he report on the accident situation at the next Conference.

   Rawlings/Skinner.

6. That all museums develop established procedures for immediate accident management and investigation to be carried out in the event of an accident and report details of these procedures to the COTMA Safety Officer by 1st August 1978.

   Rawlings/Perfect.

7. That all museums develop a system of disciplinary measures to be taken against tramway motormen and traffic staff found to have been negligent and that details of these disciplinary measures be forwarded to the COTMA Safety Officer with a view to recommending standard disciplinary procedures by 1 August 1978.

Rawlings/Green.

(f) Institution of Engineers, Australia.

The above Institute had invited COTMA to attend its Conference on historical engineering relics to address a meeting of the Division Committees for Historical Engineering Relics. Mr.K.S. Kings attended on behalf of COTMA and presented a paper.

The Chairman considered that it was important for COTMA to retain communication with this Institute.

(g) Membership - Haddon Tramway Workshops.

The previous COTMA Conference had deferred approval of an application for membership from this organisation until its Articles of Incorporation were completed.

A letter from Haddon Tramway Workshops was placed before the meeting complaining that it had not been invited to this Conference. The Conference organisers had advised, however, that an invitation had been sent to their address as held by COTMA and it had recently been ascertained that this address had changed.

It was reported to the Conference that the Haddon Tramway Workshops was still not incorporated, and further that it had not advised its new address to the organisers of this Conference. Mr. Hinman expressed the view that it was important for COTMA to maintain lines of communication with this organisation and to continue to service it with memoranda until its case for membership can be considered at the Brisbane Conference.

It was resolved that COTMA offer to continue to service Haddon Tramway Workshops until the next Conference at an annual fee of $10 to cover the costs involved and further, that Haddon Tramway Workshops be informed that its application for membership would be considered at the next Conference, subject to incorporation to the satisfaction of COTMA delegates.

Jordan/Hyde.

GENERAL BUSINESS:

(a) Paul Class's *"Lizard"*.

The Chairman advised that Mr. Class had offered the use of this machine to constituent organisations for the sum of $50 per day plus 20 cents per mile for transporting trams when it was available in Australia. The Chairman advised that any organisations interested in availing themselves of this offer should advise him.

(b) Brill 21E Trucks.

The Chairman advised that COTMA had written to the Société des Transportes Intercommunaux de Bruxelles, which had advised that no further trucks were available at present but that it would be prepared to discuss this matter further with COTMA after the end of April 1978.

Mr. Claydon advised that Oporto was at present disposing of standard gauge cars and recommended this source of equipment for the consideration of member organisations.

Mr. Skinner raised the question of prices for shipping tramway equipment from Europe to Australasia.

It was resolved that the COTMA Executive make enquiries of local shipping companies for prices for cartage of Brill 21E trucks to Australia and New Zealand.

Skinner/Hinman.

In further discussion, Mr. Claydon advised that TMS members had never found it necessary to be present in person to supervise ship loading and shipping and that in such transactions, the supplying authority has always been able to arrange this as a normal commercial task.

(c) Casting Patterns.

Mr. J. Moore - THS - reminded delegates of a past COTMA resolution that member organisations advise COTMA of any items they intend to have cast and of any patterns that they hold and pointed out that most member organisations have not done this.

The Chairman requested delegates to note this and to ensure that it was done.

Mr. Hinman advised that THS was, in due course, to commission the manufacture of Peckham single trucks and that the cost per unit becomes cheaper the larger the order.

(d) Relationships with Melbourne and Metropolitan Tramways Board.

The Chairman advised that M&MTB was somewhat confused that some member organisations had submitted their individual requests for equipment and thus had not permitted COTMA to co-ordinate these requests.

The Chairman stressed the importance of working through COTMA as this resulted in a more favourable reaction from M&MTB.

(e) Archival Responsibilities.

Mr. Green, the Chairman of the Archival Workshop, asked if COTMA could obtain bulk orders of various documents advising on archival preservation techniques for distribution to member organisations to ensure that archival material is preserved and not destroyed.

Mr. Denham offered to obtain such material which has been produced by the New South Wales Government.

The Chairman suggested that appropriate action would be the publication of an article discussing the basic principles of archival preservation in *"Trolley Wire"* and *"Tramway Topics"* magazines.

The *"Trolley Wire"* and *"Tramway Topics"* representatives undertook to reproduce such notes in their respective journals.

It was resolved that COTMA accept Mr. Denham's offer to make available advisory papers on the preservation of archival material and that it be recommended that *"Trolley Wire"* and *"Tramway Topics"* publish a synopsis of this material.
Green/Hinman.

It was resolved that each museum organisation consider appointing an archival officer.
Hinman/Rawlings.

(f) Standard Census Form.

A proposal that COTMA develop a standard census form to assess the numbers of visitors to museums was discussed. The Chairman asked if Mr. Denham could prepare a suitable census form for submission to COTMA for distribution.

It was resolved that COTMA accept Mr. Denham's offer to produce a standard census form for submission to the COTMA Executive and distribution to member organisations.
Rawlings/Jordan

(g) Advertising Contracts.

It was resolved that the COTMA Executive be left to produce a draft advertising contract.
Skinner/Hyde.

(h) Request for Membership - Dunedin Museum of Transport.

Mr. E. Brockie spoke to his museum's application for membership of COTMA, outlining the aims and objectives of his museum as set out in its constitution. Mr. Brockie summarised his museum's objectives and present activities as follows:

(i) To set up an operating tramway museum as part of a museum complex that was primarily a technological rather than purely a tramway museum. His museum's constitution was to be altered to accommodate these wider aims.

(ii) The museum at present had approximately 60 members.

(iii) Management Structure. An Executive of 13 persons elected at an Annual General Meeting: President - Mr. Brockie; Secretary - Mr. Lindsay; Treasurer - Mrs. Brockie plus 9 Executive members.

(iv) There are at present two divisions - Tramway Division and a Printing Division. The museum has power to set up further divisions as required.

(v) The museum keeps an accessions register and keeps an accessions form for each new exhibit.

(vi) The museum site is in the grounds of Seacliff Psychiatric Hospital, some miles from Dunedin.

(vii) Electric trams are to be operated in the future. It is proposed that primarily Dunedin rolling stock will be operated. Although it is also planned to operate a Melbourne tram. The museum is probably also interested in operating a Dunedin trolley bus eventually.

(viii) The active membership of the museum is limited at present because the site is in the process of being made available to the museum from the Department of Lands and Survey. The term of the lease of this site is 21 years with right of renewal, provided that the museum is operating to the satisfaction of the Department of Lands and Survey.

(ix) The Divisions are under the control of the Executive of the museum until the next Annual General Meeting.

(x) The constitution provides that the disposal of the assets of the museum in the event of its being wound up must be to another museum.

It was resolved that COTMA service the Dunedin Museum of Transport until the next Conference for a fee of $10 or 20 cents per member per annum, whichever shall be the greater, with a view to the Museum submitting a formal application for membership of COTMA at this Conference.

Hyde/Rawlings.

(i) Details of Societies.

The Chairman requested that those member organisations which have not submitted their details on the appropriate form do so before leaving the Conference Room.

(j) Number of Copies of Proceedings to be Printed.

The Chairman advised that after the previous Conference, 100 copies of the proceedings were printed but that few of those now seem to be available.

Mr. R.E. Silcock indicated that THS had considered producing 120 copies of the proceedings of this Conference, at a probable cost of approximately $10 per copy.

(k) Next Conference Venue.

It was resolved that the next COTMA Conference be held in Brisbane Queen's Birthday, June 1980.

Rawlings/Green.

(l) Letter of Condolence.

It was resolved that this Conference forward a letter of condolence to Mr. G.C. Stewart, expressing its sympathies at the passing of his wife.

Perfect/Mison.

(m) Third Annual Report of COTMA - Chairman's Report.

The Chairman presented the Third Annual Report of COTMA and spoke briefly to it.

It was resolved that this report be received.

Rawlings/Hyde.

(n) Financial Statement.

The Chairman presented the audited annual accounts of COTMA and spoke briefly in explanation of these accounts.

It was resolved that the financial statement as presented be received and adopted.

Hyde/Jordan

(o) Fee for COTMA for Coming Year.

It was resolved that the fee for the coming year be the same as for the previous year.

Hinman/Jordan

It was agreed that the COTMA Executive Officer would forward a formal account to member organisations for their subscription.

(p) Election of Officers.

The Chairman, Dr. J.C. Radcliffe, vacated the chair. Mr. G.B. Claydon assumed the chair and called for nominations for the position of Chairman.

It was resolved that Dr. J.C. Radcliffe be elected Chairman.

Jordan/Hinman.

Dr. Radcliffe resumed the chair and called for nominations for the position of Executive Officer.

It was resolved that Mr. K.S. Kings be elected Executive Officer.

Hyde/Green.

(q) Auditors.

It was resolved that K.L. Paroissien and Associates, Public Accountants, Melbourne, be appointed auditors.

Jordan/Skinner.

GENERAL DISCUSSION:

(1) Mr. D. Rawlings, SPER, thanked all those involved in organising this Conference.

(2) The Chairman commented that the Workshop sessions seemed to produce little that had not previously been said.

Mr. Hinman considered that this may have been because copies of the proceedings of the previous Conference had not been readily available for study by delegates before this Conference.

(3) Mr. Skinner observed, however, that discussion at these workshop sessions may be helpful to local museum areas who are new to each Conference and thus the COTMA Conference and its workshop sessions are helpful to the host museum.

(4) Mr. Perfect considered that it would be helpful if Workshop topics were circulated to member organisations before the Conference to assist in the preparation by Conference delegates and that early notification of these topics would enable museums to select the most suitable delegates to attend each Workshop session.

MR. GEOFFREY CLAYDON'S COMMENTS:

The Chairman called upon Mr. Claydon to make a few general comments on the Conference and on the Australasian Tramway Museum scene in general.

In his comments, Mr. Claydon made the following points: He considered the COTMA concept to be a particularly good idea, which had no direct parallel in the United Kingdom. He commended the idea of getting together to pool ideas, to share problems, to co-ordinate the supply of spare parts and to encourage standardisation.

He stressed how much he had enjoyed the social contact with museum members as well as the formal sessions in which he had taken part. He stated how impressed he was with the enthusiasm of all member groups which he found particularly remarkable in view of the sparse population of Australia and New Zealand compared with the United Kingdom and the great remoteness of member museums from World sources of spare parts.

Mr. Claydon expressed his delight at the invitation to attend this Conference and indicated that he and the Tramway Museum Society of the United Kingdom would benefit by his attendance. He thanked member organisations for the warmth of their welcome and for the hospitality he had received and commended the smooth organisation of this Conference and the efficiency of the Chairman.

Mr. Claydon concluded his comments by extending his good wishes to all connected with COTMA.

The Chairman thanked Mr. Claydon most warmly for his presence and help at the Conference.

ACKNOWLEDGEMENTS:

It was resolved that a vote of appreciation be extended to the Christchurch Transport Board for the courtesies extended on the occasion of this Conference.

Mison/Hyde.

It was resolved that a vote of appreciation be extended to the Melbourne and Metropolitan Tramways Board for its help during the year.

Rawlings/Hinman.

The Chairman expressed the deep appreciation of all Conference delegates to Mr. D.D. Hinman and the Tramway Historical Society for their efforts in ensuring the success of this Conference.

THE MEETING CONCLUDED AT 12.55 P.M.

CONFIRMED THIS ..... DAY OF ..... 1980.

CHAIRMAN

K. L. Paroissien & Associates

Public Accountants . . . Chartered Secretaries

14 Wakefield Street, Hawthorn, 3122 (P.O. Box 226) Telephone 818 0468

K. L. Paroissien, F.A.S.A., A.C.I.S.
H. D. Paroissien, A.A.S.A. (Snr.), A.C.I.S.
R. G. Paroissien, A.A.S.A., A.C.I.S.
A. K. Paroissien, A.A.S.A., A.C.I.S.

COUNCIL OF TRAMWAY MUSEUMS OF AUSTRALASIA

AUDITOR'S REPORT

In my opinion the accompanying Balance Sheet as at 31st March, 1978 and the Income & Expenditure Statement for the year ended 31st March, 1978 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; ACIS.
Registered Company Auditor

20th April, 1978

K. L. Paroissien & Associates
Public Accountants . . . Chartered Secretaries
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K. L. Paroissien, F.A.S.A., A.C.I.S. — R. G. Paroissien, A.A.S.A., A.C.I.S.
H. D. Paroissien, A.A.S.A. (Snr.), A.C.I.S. — A. K. Paroissien, A.A.S.A., A.C.I.S.

COUNCIL OF TRAMWAY MUSEUMS OF AUSTRALASIA

BALANCE SHEET AS AT 31ST MARCH, 1978

1977 $			
	COUNCIL FUNDS		
	Accumulated Fund		
575	Balance brought forward		860.98
286	Add Surplus for Year		170.38
$861			$1031.36
	THESE FUNDS ARE REPRESENTED BY:-		
	Current Assets		
361	Australia & New Zealand Banking Group Ltd.	410.36	
500	Prepayment	500.00	
-	Members Subscriptions in Arrears	121.00	
861			1031.36
	Less Current Liabilities		
-			Nil
861			
	Plus Non Current Assets		
-	Electrical Former (at cost)	1800.00	
-	Less Government Grant	1800.00	-
$861			$1031.36

INCOME & EXPENDITURE STATEMENT FOR YEAR ENDED 31ST MARCH, 1978

1977 $			
	Income		
434	Members' Subscriptions	397.20	
20	Interest Received	15.13	
28	Sundry Fees	9.50	
482			421.83
	Less Expenses		
80	Printing & Stationery	13.08	
56	Postage & Telephone	138.37	
-	Bank Charge	-	
60	Sundry Expenses	100.00	
196			251.45
$286	Surplus for Year		$170.38

INDIVIDUAL PRESENTATIONS

Progress of Each Museum Over The Past Twelve Months

Chairman: Mr R. Thomson

Conference delegates reassembled at 7.30 p.m. on the Opening Day of the Conference for a programme of summaries of the progress of each museum since the last COTMA Conference twelve months previously.

The following summarises the presentations of each museum.

1. Museum of Transport and Technology -
Introduced by Mr I. Mison.

The aim of the tramway division of MOTAT for the year was to restore 1902 Brush Car No. 11 to operating condition, to have the Baldwin steam tram engine in operable condition and the new tram line to the zoo commenced. These objectives have been achieved.

Delegates were then entertained by the screening of a brief film forwarded by Mr I.W. Stewart, Chairman of the Tramway Division of MOTAT, showing No. 11 and the Baldwin in operation.

2. Tramway Museum Society, Crich, United Kingdom -
Introduced by Mr G.B. Claydon.

Mr Claydon screened slides depicting the development of Crich from 1960 as a quarry site before work on the tramway museum commenced up to the present time, including views of the first tram cars in the first "Depot A" and general vistas of the museum and a site plan. Further slides showed a new track extension of 500 yards on a 1 in 30 gradient to give a total operating route approximately 1 mile in length.

Other Crich projects depicted included car restoration being undertaken under the job creation scheme and construction projects undertaken under the same scheme. One car under restoration was anticipated to cost some £13,000. The reconstruction of the Derby hall originally built in 1775 and transported stone by stone to the Crich site will cost £35,000.

Mr Claydon outlined further diversification being undertaken at Crich to strengthen the background support for the tramway, including the reconstruction of the Red Lion Hotel from Stoke-on-Trent, a restaurant, traction engines at the wellknown "Extravaganza" and the reconstruction of an 18th century lead mine.

The museum operates until 10 p.m. for the August Bank Holiday weekend.

3. Dunedin Museum of Transport and Technology -
Introduced by Mr E. Brockie.

This museum is being built on the site of the former Seacliff Hospital, a site of 8 acres in area, adjacent to a Lands and Survey Department reserve through which an easement will eventually be given for the

construction of a tramway. However, the Lands and Survey Department has insisted that the existing buildings, which are unsuitable for housing tram cars, be repaired before new buildings are erected. The museum is, therefore, unable to house its tram cars under cover on the site at present.

4. Tramway Museum Society of Victoria -
Introduced by Mr C. Mottram.

Mr Mottram described the progress of his society on re-gauging the former 5'3" gauge railway branch line to the 4'8½" gauge required for tramway operation. A team of Rover Scouts had assisted in this work and with site tidying work.

The group had undertaken a number of publicity ventures in Melbourne as public relations exercises and had been fortunate in having the costs of these ventures paid for by the Victorian Government. Mr Mottram further outlined his Society's progress towards the purchase of the freehold of its museum site at Bylands.

This discussion concluded with a set of slides illustrating the points outlined in Mr Mottram's talk and depicting the horse tram which at present provides passenger service at Bylands.

5. Brisbane Tramway Museum Society -
Introduced by Mr P. Hyde.

Mr Hyde outlined the new vehicle acquisitions, new work done on storage depots and the legal problems experienced by his museum over the tenure of these storage depots on the site.

His museum has 11 kV circuit breakers installed in its substation with rectifier cabinets and d.c. switchgear under storage. It has also been fortunate in that the Brisbane City Council has granted it the opportunity to salvage building materials from the former Milton Tramway Workshops.

Mr Hyde's points were illustrated with a movie film and slides which depicted a most attractive site in a park-like setting of gum trees.

6. Wellington Tramway Museum Inc. -
Introduced by Mr C. Perfect.

Through a series of slides taken during the past year, Mr Perfect outlined the programme of work undertaken by his museum, in particular in the upgrading of its track. A new car barn has been completed and painted with paint supplied to the museum by the Queen Elizabeth II Park Board, the owners of the museum site. An ornate facade is to be placed on the tram barn, financed by the Park Board as part of a colonial street re-creation.

Work on overhauling cars and bogies is continuing and the museum is seeking a high pressure water supply for fire protection sprinklers. Various other improvements being carried out by the Park Board were also outlined.

7. Ballarat Tramway Preservation Society -
Introduced by Mr G. Jordan

Mr Jordan outlined a reorganisation of work and staff duties undertaken by his Society in order to allow non-traffic staff to get on with the work in hand without continual questions and interruptions from passengers and the public.

The Society decorated tram No. 14 for Christmas.

Depot additions were planned but had still to pass the hurdle of approval of the Ballarat City Council.

Mr Jordan was able to report that Council approval had finally been obtained after a pleasant evening with Councillors, at which a presentation of detailed submissions was made.

The Society is planning to repaint one bogie and one single truck car in a livery which illustrates an earlier stage of S.E.C. ownership. The tram car fleet has grown since the last COTMA Conference from 10 to 16 cars.

Mr Jordan illustrated these points with slides showing the picturesque street running available to his Society round the lakeside and through the tree studded botanical gardens. He stated that his was "one of the most attractive museum sites in Australia" and those present could only agree with him.

The Society has a storage yard available to it at Sebastapol in which spare trams are stored. They have also salvaged a number of ex-Ballarat cars which were "preserved" by community organisations when the system closed.

8. Australian Electric Traction Museum - Adelaide -
Introduced by Dr J.C. Radcliffe

Dr Radcliffe showed slides of the progress made by his museum during the year and provided a suitable commentary on its activities in conjunction with these slides.

Views depicted included the repainting of No. 192, a glorious line-up of cars viewed at night at the St. Kilda Beach terminal at the previous COTMA Conference, the overhauling of H1 class No. 381 and repainting the original paintwork of this car.

Newly acquired ex-Melbourne cars, including one for use as a works car, were also shown.

Dr Radcliffe outlined the proposal of his museum to run a double decker horse tram in King William Street to celebrate the centenary of tramway operation in Adelaide on 11 June 1978, a proposal put up by the museum and accepted by the Government.

This horse tram was to be driven by the State Premier in period costume, followed by a parade of vintage transport down King William Street, including some of the museum's vehicles. These vehicles were to be transferred to the City system at ramps to be constructed on a disused tramway siding at Morphetville. A similar transfer ramp is to be constructed at the St. Kilda Museum site.

Dr Radcliffe's commentary illustrated the very happy and co-operative relationship enjoyed by his museum with the various authorities, in particular as the tramway administration seeks suitable vehicles to restore and exhibit at its forthcoming centenary celebrations.

9. Tramway Historical Society Inc. -
Introduced by Mr D.D. Hinman

Mr Hinman described the use made by his Society of ex-Melbourne trucks obtained through COTMA: (1) to make a steeple-cab works locomotive (2) to provide a spare truck for Brill car No. 178 and (3) to provide parts for the fabrication of maximum traction bogies for Boon car No. 152 which was under restoration by his Society.

Mr J. Moore outlined the completion of the restoration of English electric trolley bus No. 210. Further work undertaken by the Society included the extension of track work by unemployed relief workers, and the preparation for the construction of concrete track. Overhead extension has also been undertaken.

It was further reported that the sprinkler system in the main tram barn was now completed and is connected to the high pressure water supply. A second car barn was under construction, despite set backs occasioned by storm damage. Most of the labour for this project has been provided by unemployment relief workers.

Acquisitions by the Society during the year included two trolley buses - 209, ostensibly to provide spare parts for 210, and Ransomes No. 216; and a Stephenson combination electric tram, No. 20, from mainly covered storage. A spare boiler for the Kitson steam tram was also obtained.

The Society had taken part in an Easter Festival which was organised at very short notice. A film showing activities at this very successful festival was screened, followed by a film depicting the final years and closure of the City tramway system.

10. SPER -
Introduced by Mr D. Rawlings

Mr Rawlings summarised the various developments at his organisation's site and its version of a bottle drive as a fundraising venture - the collection of aluminium cans!

Mr Rawlings screened slides which showed the proposed new site for SPER's museum. This site provides for an initial kilometre length of track with a further extension possible to give a total operating length of approximately 1 mile.

Others slides screened showed the restoration of R1 car and other cars and related museum activities.
