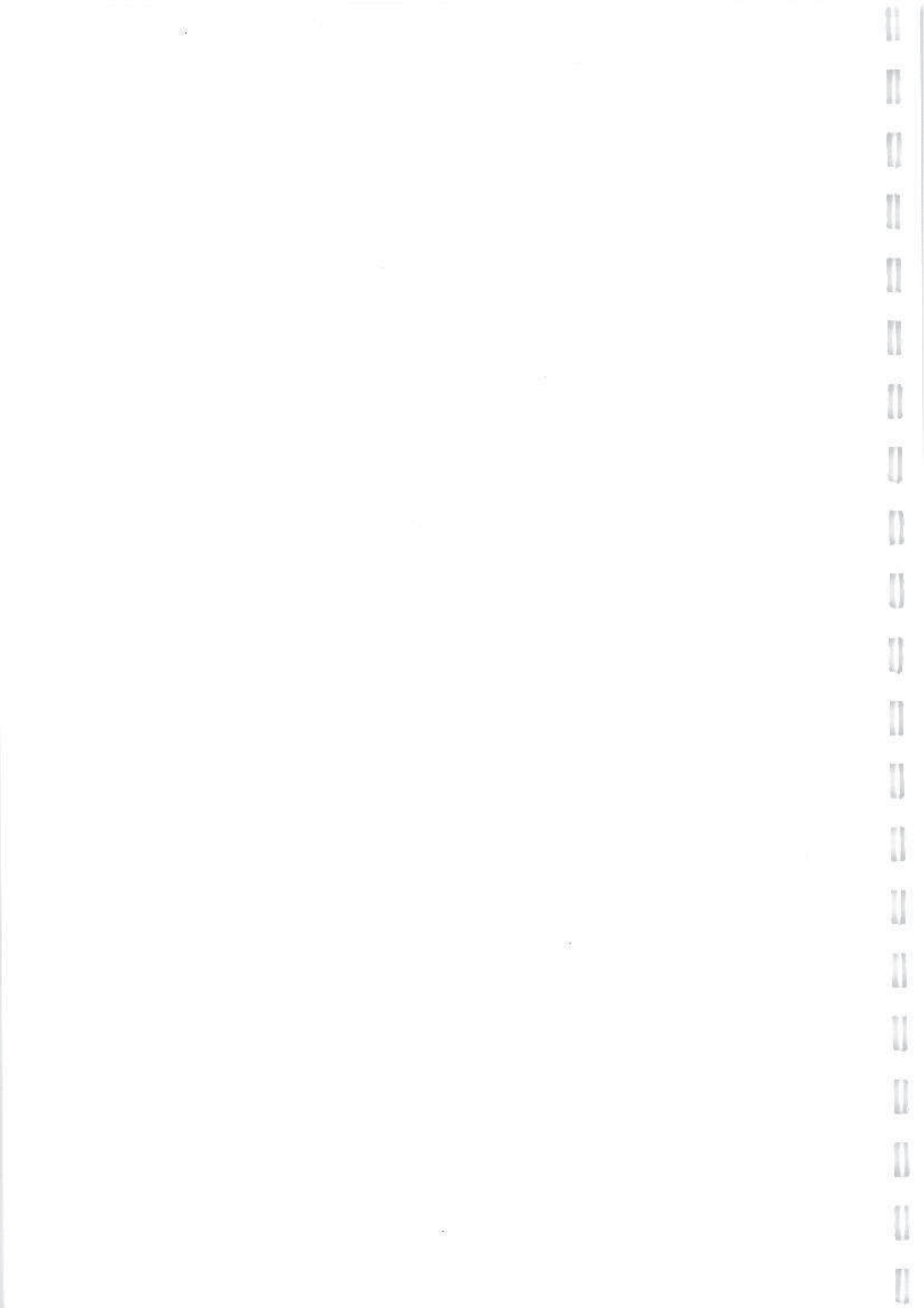




SECTION 3

FIELD TRIPS AND SOCIAL ACTIVITIES





**FIELD TRIPS AND
SOCIAL ACTIVITIES**

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SPARKS, SPARKS AND SPARKS

TROLLEY BUSES, ELECTRIC LOCOMOTIVES AND A STEAM TRAIN

Introduction

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

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

Foxton Trolley Bus Museum

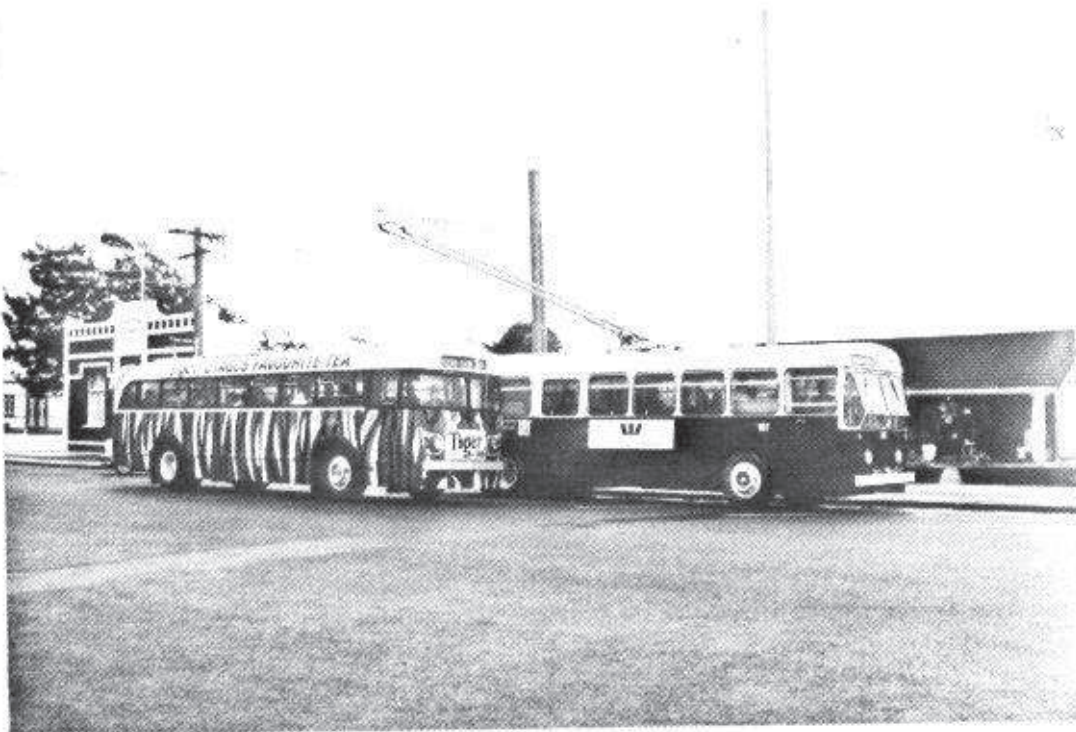
On the way north to Foxton various items of interest were pointed out to visitors by the coach drivers and by local delegates. Of particular interest were Steam Incorporated's Engine Shed on State Highway 1 at Paekakariki, and the Wellington Tramway Museum at McKay's Crossing, Paekakariki. Arriving at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

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

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



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



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

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

Electric Traction Maintenance Depot, Palmerston North

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

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



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

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

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

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

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

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

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

F 163 to Woodville

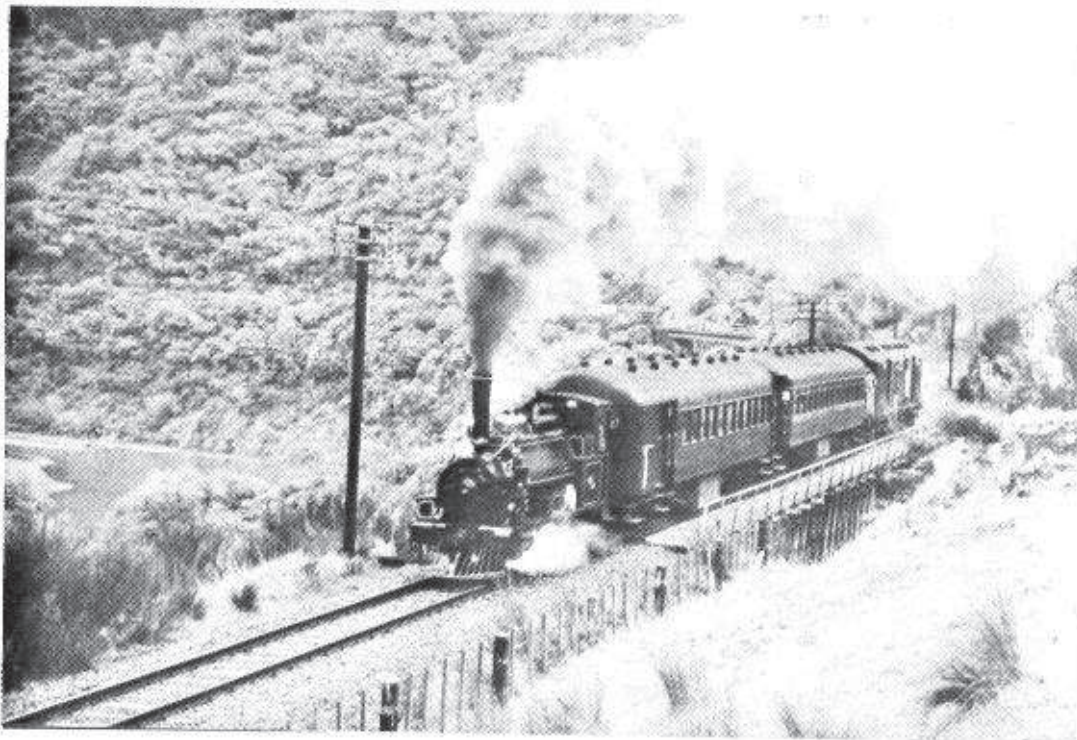
At Palmerston North Railway Station, delegates boarded a train, comprising F 163, two steel sided carriages and a modern FM guards van, for a trip through the Manawatu Gorge to Woodville and back. On board delegates were able to take in the scenery over lunch.

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

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

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

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



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

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

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

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

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

THE GREAT DEBATE

**"THAT RAILWAYS ARE
OVERGROWN TRAMWAYS"**

Chairman: Les Stewart

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

John Radcliffe (Leader)
Dave Hinman
Lindsay Richardson

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

Paul Dillicar (Leader)
Russell Paul
Ken Henderson

Introduction:

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

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

John Radcliffe (Affirmative):

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

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

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

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

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

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

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

Paul Dillicar (Negative):

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

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

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

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

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

Dave Hinman (Affirmative):

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

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

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

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

Russell Paul (Negative):

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

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

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

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

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

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

Lindsay Richardson (Affirmative):

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

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

Mr Richardson concluded by reiterating that railways are overgrown tramways.

Ken Henderson (Negative):

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

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

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

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

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

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

John Radcliffe (Summing Up for the Affirmative):

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

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

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

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

Paul Dillicar (Summing Up for the Negative):

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

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

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

Conclusion:

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

RE-COMMISSIONING OF WELLINGTON DOUBLE SALOON TRAM 159

The Era of the Double Saloon Tram

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

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

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

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

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

A Brief History of Tram 159

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

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

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



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

The Re-Commissioning Ceremony

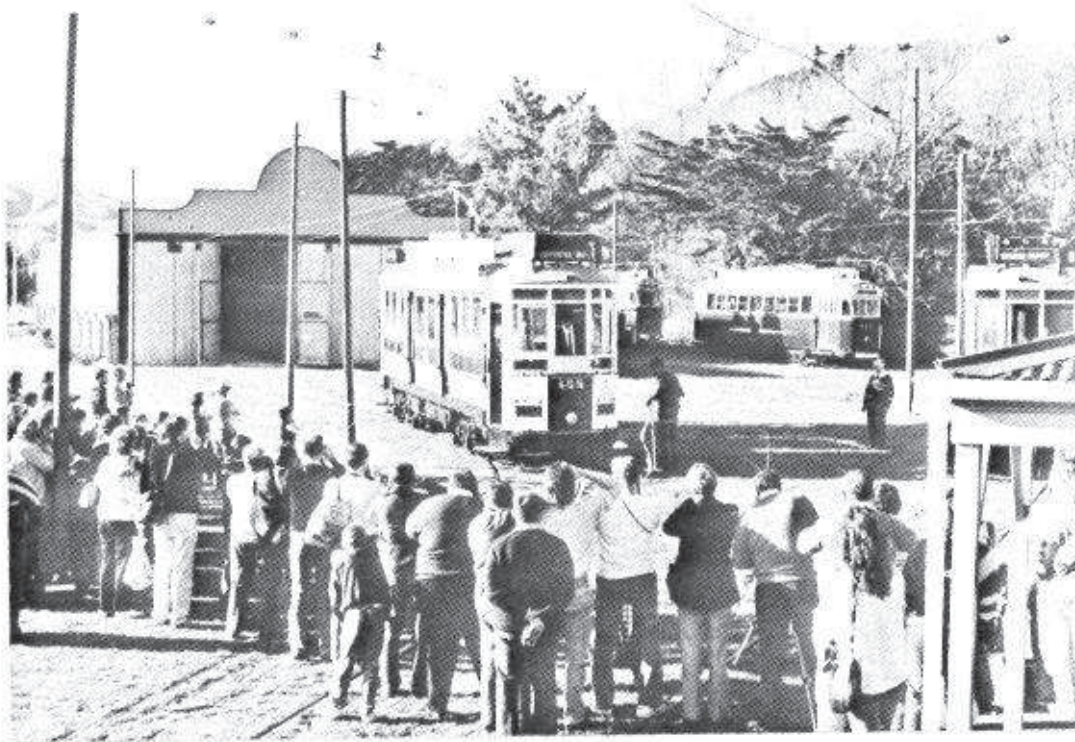
Monday 4 June 1990 was a red letter day for the Wellington Tramway Museum - the re-commissioning of Wellington Double Saloon tram no. 159. The weather was fine and mild and by 1.30 p.m. Museum members, their families

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

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

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

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

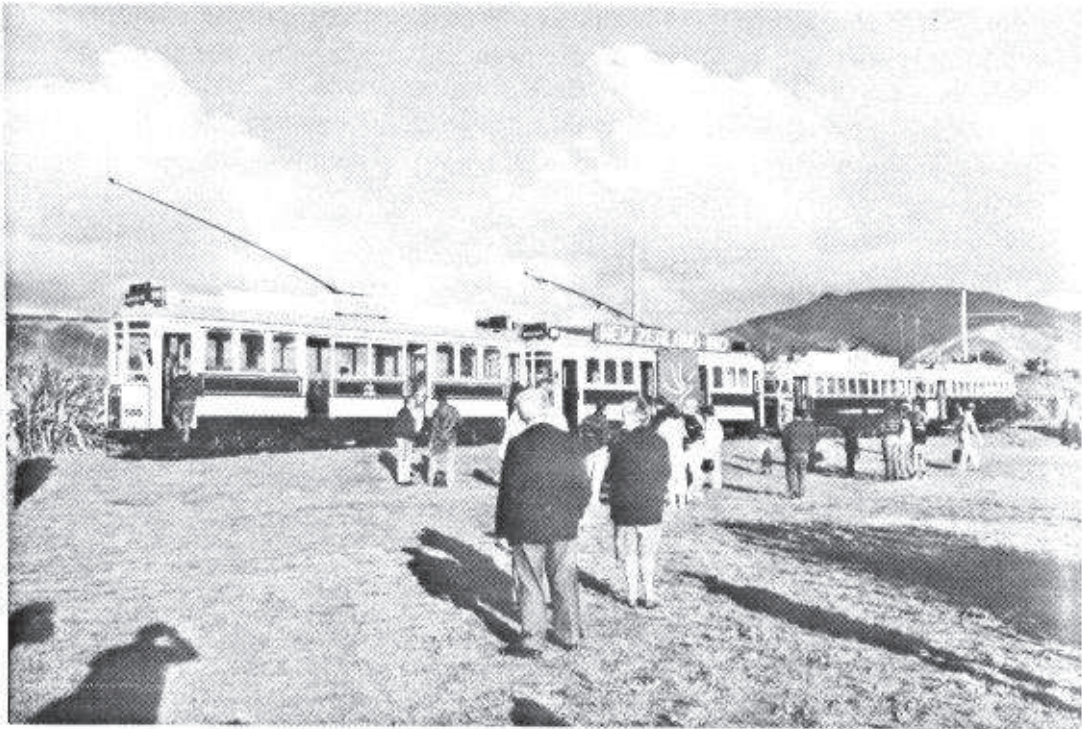


Mr Heffernan, at the controls of 159, during the re-commissioning ceremony, 4 June 1990.

Photograph: Stuart Harper.

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

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



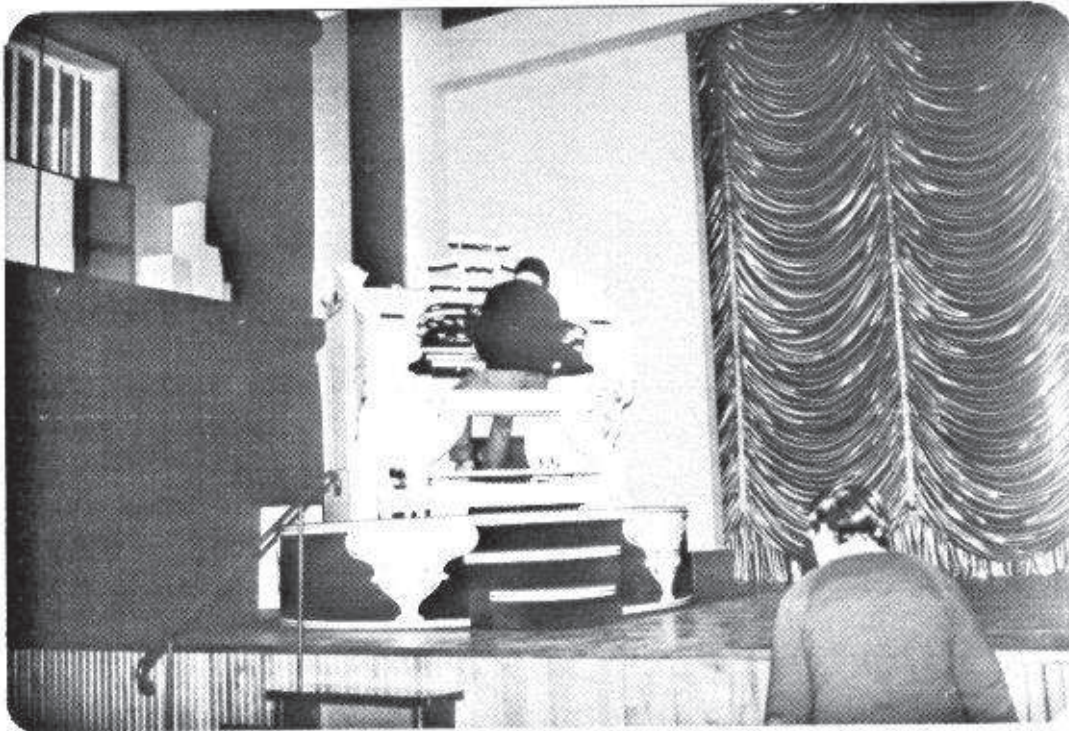
The four trams at the beach terminus, 4 June 1990. *Photograph: Les Stewart.*

SOUTHWARDS CAR MUSEUM

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

Wurlitzer Theatre Organ

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



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

The Car Collection

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

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

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

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

1990 ILLUMINATED TRAM

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

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



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

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

THE ROYAL NEW ZEALAND POLICE COLLEGE MUSEUM

Introduction

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

The Public Museum.

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

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

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

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

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

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

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

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

The Non-Public Collection

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

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

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

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

WELLINGTON'S TROLLEY BUSES AND CABLE CAR

Introduction

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

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

The Volvo Trolley Buses

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



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

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

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

The Ansaldo Trolley Buses.

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



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

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

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

B.U.T Trolley Bus No 39

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



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

Photograph: Bryce Pender.

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

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

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

B.U.T. Trolley Bus No. 88

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



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

Photograph: Les Stewart.

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

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

Wellington Cable Car

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

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

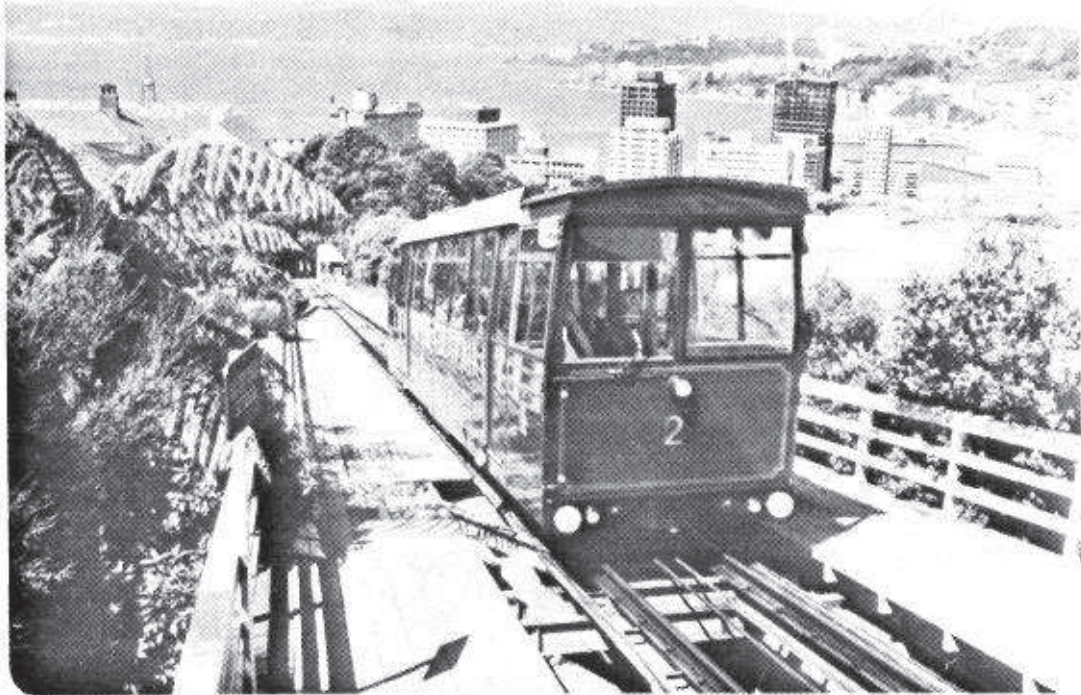
The two original cable cars, connected by a balance rope, travelled on separate parallel tracks. Starting and stopping the cable car was controlled by gripping a second moving cable in the traditional cable car manner. As demand grew trailers, which were converted horse trams, were added to each car.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

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

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

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

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



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

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

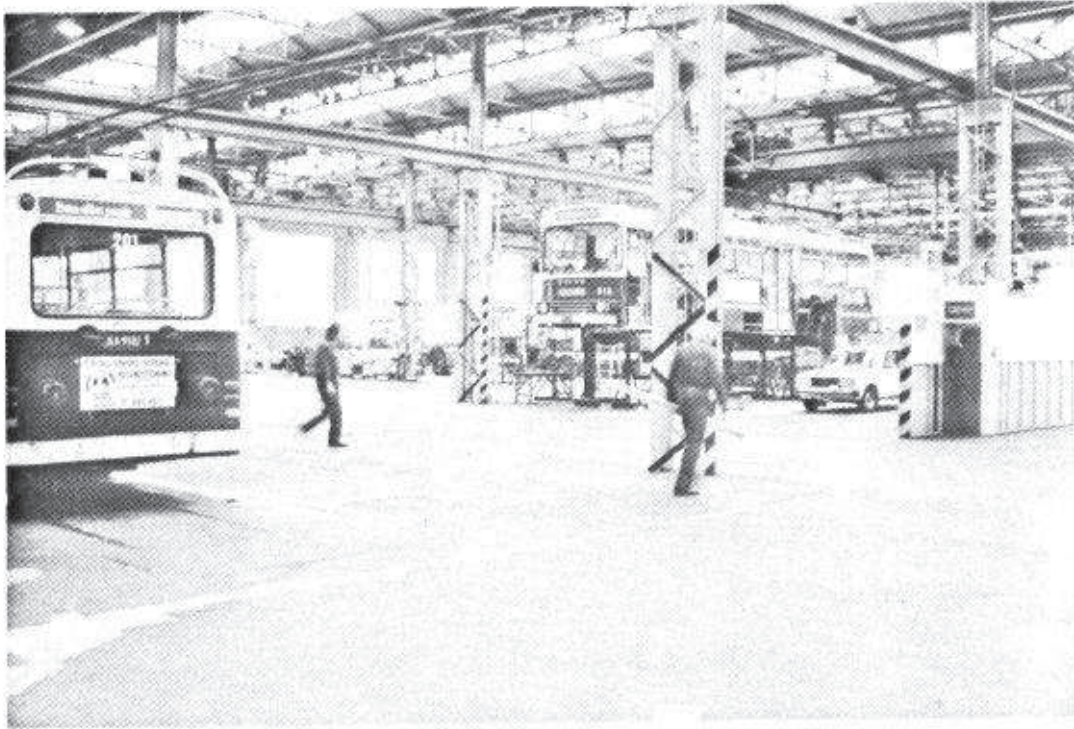
Kilbirnie Bus Depot and Workshops

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

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

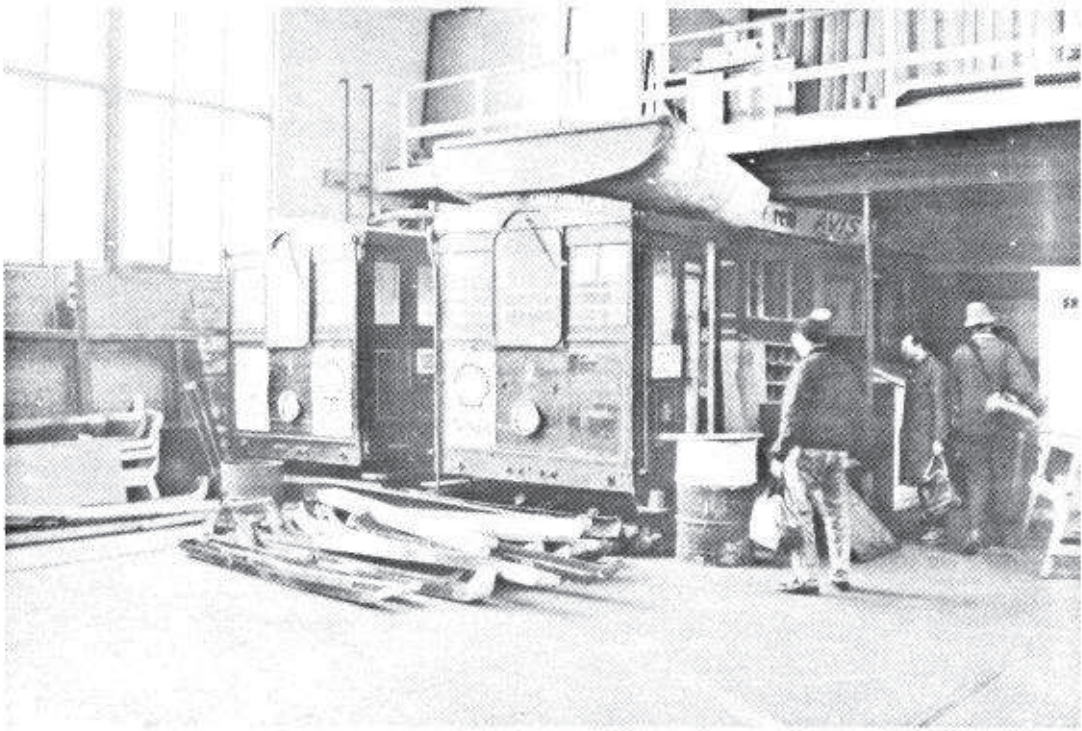
Wellington City Transport's entire bus fleet, both trolley and diesel, are maintained and serviced at Kilbirnie. A full range of specialist facilities are

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



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

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



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