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NEWSLETTER OF THE WELLINGTON TRAMWAY MUSEUM INC.

No. 2016 / 2 APRIL 2016



Above: This new lean-to transformer shelter and covered storage area has been built on the east side of the rectifier building. The 11 kv. transformer, originally one of the two that supplied the New Plymouth trolleybus system (closed 1967), has been cleaned and repainted and is now under cover. More information inside.

Photo: Mike Flinn



Above: Allan Neilson (standing) and Grahame Kitchen examine an old earth cable during the current checking and upgrading of our power supply.

Photo: Mike Flinn



Above: On 6th April newly restored tram 260 was moved over the workshop pit to allow finishing jobs to be completed underneath. This photo was taken on 20th April.

Photo: Keith McGavin



Above: Tram 159 is currently in the position in the workshop long occupied by tram 260. It is undergoing a general refurbishment. Note that the saloon windows have been removed. *Photo: Keith McGavin*

TRAVLINES

NEWSLETTER OF THE WELLINGTON TRAMWAY MUSEUM INC.

No. 2016 / 2 APRIL 2016

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PLEASE NOTE: Editor Marlene Wilson's contact details have changed and are now as above.

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Left: Upper Hutt Probus Group Visit:

A group from the Upper Hutt Probus Club paid us a visit on $16^{\rm th}$ March even though the Trams were not operating at the time.

Whilst they enjoyed their morning beverage & bikkie Russell Jenkins gave a talk on the history of Kapiti Coast Electric Trams followed by a tour of our facilities. All went away happy and with the promise to return when we are running once more.

Photo: Marlene Wilson

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From The President, Russell Jenkins

Well, as I write this, we are still a "No Tram Operating" Tramway Museum BUT there is a glimmer of light on the horizon.

One piece of good news is that the Insurance Company has accepted our claim for repairs to the damaged switching equipment. They have also reimbursed the museum for the deposit we were required to pay before construction of the new switch gear commenced.

Another plus has been the upgrading and maintenance work that has been undertaken in preparation for the re-commissioning. A big thanks goes to all members who have put a great deal of effort into upgrading the transformer compound and the surrounding area. Well Done Everyone.

It could be June before we are operational once again but please be assured everything is being done to get "BACK IN BUSINESS" as soon as possible.

In the meantime work continues to fully re-commission 260. It has now been moved over the pit on Road 5 so that work can be done on the underfloor equipment. It is planned to have this tram ready for final commissioning into service soon after the overhead power is restored.

Tram 159 has been moved onto Road 6 where Bernhard, Ted and the rest of the team are busy carrying out body repairs.



Above – A hive of activity on Wednesday 24th February as work is in hand on the new transformer shelter and storage area, and on cleaning down the 11kv transformer preparatory to repainting. Members in this photo, from left: Murray Gibson, Steve Porter, Henry Brittain, Russell Jenkins, Robert Hatten and Bernhard Riddering.

Photo: Keith McGavin

FINALLY AN INVITATION

Any member or members who would like to be part of the Wednesday Workforce are welcome to come along. There are always jobs to be done to keep the museum operational and the more we have doing the various tasks, the better it is. The only downside is if too many come we may have to have two sittings at lunch time in the Palace but that shouldn't be a problem.

In the meantime, fingers crossed that the power will back on soon and we can once again become "An Operating" Tramway Museum.

Lussell Jakuss

Russell Jenkins

APRIL 2016

NEWS FROM THE APRIL BOARD MEETING.

Contributed by Henry Brittain, Museum Secretary

The Board met on Sunday 17 April. The following are some items of interest that were covered during the meeting.

Resumption of Services:

- Once we resume tramcar operations, the Museum will hold an open day with appropriate publicity to announce we are back in business.

Rubbish Disposal:

 We are no longer able to use the Regional Council's bins for disposal of rubbish that cannot be disposed of through our incinerator. Now that summer has passed we will apply for a fire permit for the burning of paper and cardboard. Other rubbish will need to be taken to the Kapiti tip.

Driver Training:

- Russell Jenkins is to head the review of training and see it through to completion. A small committee of members will assist him.

Civic Award:

- The Mayor of Wellington, Celia Wade-Brown, has announced that a Civic Award is to be awarded to "THE WELLINGTON TRAMWAY MUSEUM VOLUNTEERS" for being absolutely positive Wellingtonians. The award to be presented is known as the "Absolutely Positive Wellingtonian's Award". This is given in recognition of our efforts in preserving heritage Wellington tramcars.
- The award is to be formally presented by the Mayor of Wellington, Celia Wade-Brown, at a Council meeting on Wednesday 11 May. To accept the award, on behalf of all members, will be our President, Russell Jenkins, plus past Presidents Mike Flinn, Keith McGavin, Henry Brittain and Trevor Burling and also our long-time member, past Secretary and past Editor of Tramway Topics Alan Smith.

OUR PEOPLE

Good to see Mike Flinn and Keith McGavin back on site. Mike after his operation and Keith after breaking his wrist.

Denys & Felicity Peck have returned to Kapiti and Denys is now back at Trams just like the old days. Welcome back. It's good to have you in the fold again.

And a contribution from the Assistant Editor – best wishes to Marlene Wilson, our Editor, who has been seriously "under the weather" recently. We hope all goes well and that you are soon back with all your normal energy.

WINTER DINNER

DUE TO OUR TRAMS BEING OUT OF COMMISSION IT HAS BEEN DECIDED THAT OUR ANNUAL MID-SEASON DINNER, NORMALLY HELD IN MAY, WILL BE HELD OVER TO A LATER DATE.

DETAILS TO BE ADVISED.

Obituary - Bob Cornish

Members were saddened by the death of Robert (Bob) Cornish who passed away on 20 November 2015 after a period of deteriorating health.

Born on Anzac Day 1940, Bob had a lifetime interest in trams being brought up in Wanganui, the son of a Wanganui Tramway employee. When he moved to Wellington in the late 1950's Bob was able to enjoy his passion in a city where tramcars still operated.

Bob was one of the founding members of the Tramway Preservation Association (Wellington Centre) which later changed its name to the Wellington Tramway Museum. As a dedicated member he was actively involved in the acquisition of trams when the system closed in 1964 and the setting up of a Museum site at Queen Elizabeth Park. He became an integral part of the workforce holding various elected positions including being a member of the



Above: Bob Cornish (right) in full tramway uniform on duty with Barrie Marsh and Tram 239 on a fine crisp mid-winter day in 2011 (25th June).

Photo: Keith McGavin

traffic staff after gaining his motorman's ticket.

Together with fellow stalwart Noel Donaldson they formed a close liaison and for many years were rostered together as a tram crew where, dressed in full tramway uniform, they became very well known to the public.

Given his interest in Wanganui, Bob became an expert in Wanganui trams travelling around the District collecting parts and artefacts from retired trams. He even acquired a tram body itself for WTM which he spent many hours restoring. This tram, number 8, has now been gifted to the fledgling Wanganui Tramways Trust and is currently in storage awaiting its turn for total restoration and ultimately return to service.

Bob never married but had many good friends who shared his passion of Tramcars. He was always willing to assist in work parties and take his share of rostered duties. He was looking forward to participating in the 50 year anniversary of the Museum on 19 December 2015 but unfortunately this was not to be.

Bob's funeral was well attended by family and friends and he was given a fitting farewell with the sharing of many stories of his long-time membership of the Wellington Tramway Museum.

AROUND THE SITE AND DOWN THE LINE

Contributed by Allan Neilson, Vice-President, Maintenance & Engineering

Sub-station upgrade activity:

Since February this year, we have swung into action to clean up and upgrade the sub-station area ready for the installation of a new 11kV circuit breaker to control the power to the traction transformer. The old 11kV switchgear was removed along with the old auxiliary transformer.



Above: The old 11kv switchgear inside the substation prior to dismantling.

Photo: Allan Neilson, 30th January



Above: Colin Dash with the Museum's loader removing part of the 11kv switchgear from inside the substation.

Photo: Mike Flinn, 30th January



The removed 11KV switchgear has been placed in our storage compound for further dismantling and disposal.

Photo: Keith McGavin, 3rd February

The old transformer compound fencing which was well past its "use by" date was taken down and a new nib wall surround for pipe fencing installed.



The old transformer fencing – "well past its use by date" – prior to being taken down.

Photo Mike Flinn, 30th January

The decision was made to create a secure storage area on the north side and put a lean-to roof over both areas.



Above: By 13th February a start had been made on the pipe fencing frame for the new transformer shelter.

Photo: Mike Flinn



Above: A concrete nib wall was constructed around the base. 20th February 2016.

Photo: Keith McGavin



Above: The traction transformer is being cleaned down by Bernhard Riddering (standing on top with a water blaster) while others stand well clear!

Photo: Allan Neilson, 24th February2016



Above: By the 2nd March the roof was in place and cleaning and undercoating of the transformer was well underway.

Photo: Mike Flinn



9th March – transformer being painted. The shelter has been extended north to include a storage area. *Photo: Keith McGavin*



Cladding was fixed to the north end on 9th March. Steve Porter admires the result.

Photo: Keith McGavin



Above: The transformer, undercoated, was looking considerably improved by 9th March too. *Photo: Keith McGavin*



Above: Fixing the first cladding to the north wall. Murray Gibson (left) and Henry Brittain, 9th March.

Photo: Keith McGavin



Above: Some of the crew involved in roof construction: from left Colin Dash, Steve Porter, Grahame Kitchen and, on the roof, Murray Gibson. Marlene Wilson is inside, painting the transformer.

Photo: Allan Neilson



Above: 27th March – John Tier digging out the ground prior to concreting the floor of the north end storage area.

Photo: Mike Flinn

Once the lean-to roofing was completed we dug up the existing substation earthing grid and relayed the cables between the earth pegs.



Above: Trenching for extending the earth grid, 9th April. Steve Porter (foreground) and Colin Dash. *Photo: Mike Flinn*

Right: The near completed structure with concrete path on the east side, concrete floor in the storage area and newly painted transformer.

Photo: Keith McGavin, 27th April



13th April. Preparing for laying a concrete path. *Photo: Mike Flinn*



Denys Peck (left, on trailer) and Robert Hatten on the concrete mixing brigade, 19th April.

Photo: Allan Neilson



On Sat 16th April we laid a concrete path on the east side of the substation compound.

New 11kV circuit breaker

RPS Engineering in Lower Hutt are supplying a new 11kV breaker for the substation. An order was placed in mid February, but supply has been delayed due to workload issues. We are now working through the detailed engineering requirements and wiring hopefully installation will take place towards the end of May. We have to do guite a bit of wiring work to connect up the control circuits and ELECTRA will carry out the re-connection of the 11kV cables and associated testing.

Coincident with this we are starting to work towards installing a new remote control panel in the Palace.



Above: Trench dug for future remote control operation of tram power from the "Palace" tea room.

Photo: Keith McGavin, 20th April



Above: A services inspection hatch has been built at the point the remote control cable enters the building.





Above: A project to improve drainage in the substation and transformer vicinity is also being carried out, led by Mike Vash and assisted by others.

Photo: Keith McGavin, 20th April

On a lighter note.....



Above: The imprisoned inmates (from left Bernhard, Steve, and Russell) gratefully accept chocolates from zoo-keeper Marlene, 16th March 2016. When last checked it appeared the inmates had made good their escape!

Photo: Allan Neilson



Above: We also found time to celebrate John Tier's birthday on 10th April, during a tea break.

Photo: Allan Neilson

Trams

While no services are being run the opportunity is been taken to catch up with some servicing and repair work. Barry Ollerenshaw has been carrying out roof repairs on 159, and Ted Kendal and Bernhard Riddering have started doing some repair work on 159's sides. (see photograph on page 2).

Trevor Burling and others have been working on tram 260 as time permits. A photo of tram 260, which is now over the workshop pit, is on page 2.



Above: Keith McGavin tests his fitness climbing the newly installed steps on the side of 260.

Photo: Mike Flinn, 27th January

Other things

Mike Vash has been setting up the round wire grooving machine for possible use around the pole 1 to 5 area, at the start of the tramline, to replace the old ear hangers.

Henry Brittain, Mike Vash and others have now demolished the old steam tram

dummy. This was a made up contraption for kid's to play on and came from Wellington but was no longer considered safe.



Above and below: Dismembering of the steam tram dummy. Henry Brittain and Denys Peck are in the photo above. It has yielded some useful materials. *Photos: Keith McGavin*



We have purchased a replacement weed eater and Mike Flinn has been doing his usual excellent depot and rail corridor trimming work.



Above: Mike Flinn using the new weed-eater.

Photo: Allan Neilson

Meanwhile Colin Dash has spent time reinforcing the two workshop doors.



Above: Reinforcing the south workshop door and (below), assisted by Russell Jenkins, the north workshop door.

Photos: above, Allan Neilson & below Keith McGavin



Allan has been accumulating 2nd hand traction overhead cantilever equipment for use by us and also Ferrymead for a 1500v DC traction extension. Some of the cantilever pipes came in handy for construction of the transformer compound fence. A load of parts were sent off on Thursday 14th April and loaded into the Ganz EMU destined for the National Rail museum at Ferrymead.



Above: A collection of traction overhead cantilever equipment on 13th April.

Photo: Mike Flinn

Automatic Tramway Points Turner

For some years a Collins automatic points turner machine has been stored next to the substation compound. With the complete overhaul of this area the opportunity has been taken to remove it into the tram barn where Mike Flinn has commenced the task of cleaning it up and finding out what its condition is like.



Above: The automatic points turner machine being shifted on 30th January. It was taken to the tram barn for inspection and cleaning.

Photo: Mike Flinn

The machine was originally used in Wellington streets on selected facing points. We plan to display this item and provide a commentary on what these machines did and how they worked.

Right: The automatic points turner machine in the tram barn on 19th March, after a lot of cleaning and painting by Mike Flinn.

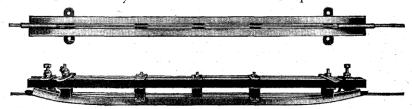
Photo: Mike Flinn

Below is some information on the Collins Patent Automatic Point Turner as used by Wellington Tramways. (courtesy Allan Neilson)



Collins Patent Automatic Point Turner

with Delayed Action Remote Control Operation.



Contactor viewed from underneath and one side.

We believe that the delayed action remote control point controller described in these pages is distinctly in advance of any other point turner at present in use.

The complete apparatus for operating the Point Switch consists of:-

Simplified line contactor.

Relay box with delayed action remote control relays.

Watertight foolproof street box, type "Q," containing the operating mechanism.

The line contactor is shorter and lighter than those previously used.

The running strips are continuous and without spark gaps, and the trolley wheels run from the trolley wire to the underside of the line contactor and back to the trolley wire without bumping.

 $\begin{array}{c} {\rm The~current~broken~on~the~line~contactor} \\ {\rm is~only~0.2~ampere.} \end{array}$

There is no arcing on the line contactor.

Cars may remain with their trolley wheels on the line contactor continuously without causing damage to the street box coils.

With standard contactors the cars will turn the points while travelling at speeds up to 15 miles per hour. Higher speeds may be employed with special contactors.

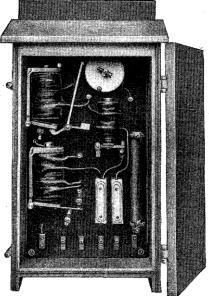
If the motorman changes from "off" to current "on" or vice versa while the trolley wheel is on the line contactor, there is no arcing at the series relay latch contacts.

The delayed action relay mechanism is sturdy, reliable and foolproof.

The type "Q" street box is an improved model of the type that has given satisfactory service since first introduced in 1911.

The current only passes through the street box coils for approximately I second. The points are turned as the trolley wheel leaves the line contactor.

The current taken by the car motors does not pass through the street box coils. The standard machine with street box coils taking $4\frac{1}{2}$ amps. at 500 volts will operate the heaviest double points with ease.



Relay Box. Patent No. 448841.

THE FOREST CITY ELECTRIC CO., LIMITED,

4. LONGFORD ROAD. STRETFORD. MANCHESTER.

Telegrams: "ROLLDROP, Manchester."

Telephone: LONgford 2275.

Items for Sale

New Carpet Pieces for sale: (from Marlene Wilson)

Kapiti Coast Electric Tramway has two pieces of new carpet left over from the carpeting of the Fiducia Centre.



The colour is a soft beige/brown. One piece is approximately 2m sq. and the other 4m sq.

The following item is surplus to requirements *Please submit your offer/s to missmawilson2@gmail.com or phone 04* 2936968.



The shop price for this was \$470.00 but as it was a floor model I got it for \$170.00. It can be yours by emailing or phoning me.

Email <u>missmawilson2@gmail.com</u> phone 04 293-6968

Picture from the Past



Tram 260 was less than two years old when this photograph of her on Karori Road during a Karori Park to Courtenay Place run was taken in 1953 or 1954. The Karori line closed on the 1st October 1954 and, together with the closure of the Northland route two weeks earlier this reduced the number of trams required to run the tramway system and spelt the end of pre double-saloon types such as Combination and Palace trams.

Photo courtesy Henry Brittain

TRAM 17 RESTORATION REPORT - Keith McGavin

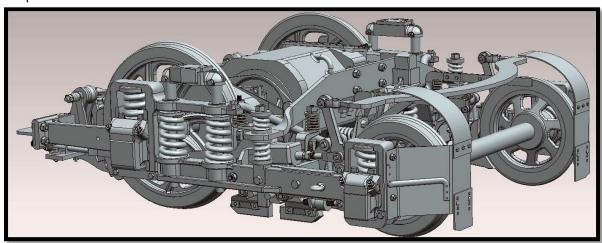
Body and Chassis:

At "The Wheelwright Shop" at Gladstone in the Wairarapa work is about to recommence on the chassis and body of Tram 17, after a three month lay-off while work was completed on a railway carriage.

Work still to be carried out comprises completion of the main body and open section, restoration and repair of the chassis, the reuniting of the open section, closed saloon and the two end motorman compartments on the chassis, the wiring fitment and finishing of interior joinery, painting etc. plus reassembly, final finishing and adjustments. The Wheelwright Shop is intending to have all this complete in October when the tram will be returned to the Museum.

Trucks:

Meanwhile mechanical engineer Leyton Chan was commissioned last year by the Museum to prepare a complete set of engineering drawings, a computer aided design (CAD) model and written specification for the pair of 22E type trucks required. The drawings (over 140 of them) and CAD model are now substantially completed and these enable the museum to (1) precisely sort out what parts and patterns it has on hand for the trucks and what will be required and (2) prepare comprehensive tender documentation.



Above: 3D CAD model of 4 foot gauge 22E truck fitted with an ex-Melbourne GE247 motor, designed by Leyton Chan for the Wellington Tramway Museum. Note magnetic track brakes fitted, as they were to the original Wellington Tramways ones.

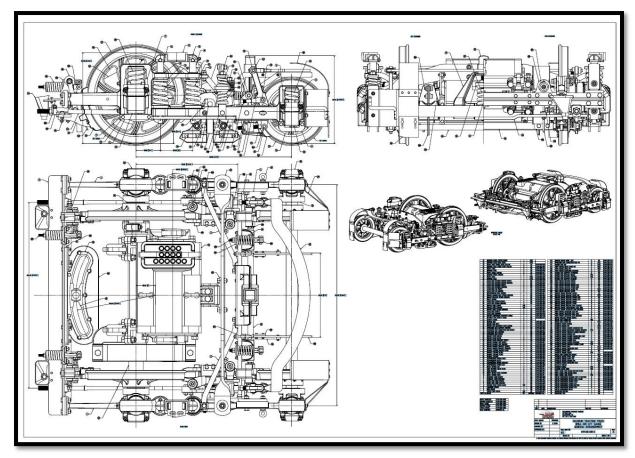
To fit our ex Melbourne GE247 motors within the four foot gauge track original design "Wellington style" wheels are required.

We are fortunate to have on hand one spare pair of driving wheels and that Motat has agreed to donate a second pair. And we have two pairs of the smaller pony wheels on hand.



Above – Two boxes of valuable wood patterns for our 22E trucks. Having the completed plans has enabled us to identify these patterns in our pattern store. Motat is going to check its pattern store to see if others are available.

Photo Keith McGavin



The above small scale reproduction of the 22E truck general arrangement plan for Tram 17 prepared by mechanical engineer Leyton Chan gives some indication of the complexity of the task. There are over 140 supporting plans of individual components or sets of components. For the magnetic brakes, which are unique to Wellington 22E's and for which there are no known pre-existing plans, Leyton spent three days removing and disassembling, measuring and drawing and then re-fitting those on Wellington double-decker No.47 at Motat which has the only surviving set of Wellington 22E trucks.



Left: Some of the Tram 17 team at work studying the 22E truck plans with Leyton Chan at the Museum on 27th April.

From left: Leyton Chan, Colin Dash, Henry Brittain and Trevor Burling.

> Photo: Keith McGavin



Above: A very rare colour photo of a Wellington Combination tram (in this case No. 18). Despite the "Kilbirnie" destination this photograph was taken inside Newtown tram depot. It was taken about the time of the closure of the Northland and Karori routes in 1954 and it is likely that this tram and its sister, No.16, behind it were used rarely, if at all, after this time. Nos.16 and 18 were the last two survivors of the group of trams that No.17 is a part of (Nos.13 to 20). No.17 was withdrawn in 1945 or 1946. Note also the old Daimler tower wagon in the background, similar to the one owned by the Wellington Tramway Museum.

Photo: Hugh Ballment, Australia, from his book "More Tram Images of a journey through Australia and New Zealand", Transit Australia Publishing, 2014.

PLEASE READ!

Obtaining the truck parts from Ballarat and having the excellent detailed drawings prepared has consumed nearly all funds raised for the trucks so we again appeal for funds to support this fantastic project.

Help see Tram 17 run again.

Donations are sought to help us fund the preparation of tender specifications for the 22E trucks – which has come to a stop at present.

Please send them to Wellington Tramway Museum, P.O.Box 2612, Wellington 6140, NZ or credit the Museum's bank account 06 0501 0075414 00 referencing "Trucks".

The Wellington Tramway Museum Inc. is a registered charity.

All NZ donations are eligible as charitable donations for tax purposes.

Receipt will be forwarded.



Above: The saloon of tram 17 in all its glory at The Wheelwright Shop, Gladstone, Wairarapa, on 7th April. The saloon makes up two-thirds of the length of passenger accommodation in these trams which, although often thought of as small trams, are only three feet shorter than a double-saloon (36 feet overall, compared with 39 feet).

All the body of the tram, including the open portion and the two cabs has now been removed from the chassis and work on the chassis overhaul is about to commence.

Photo: Keith McGavin

Members' Subscriptions Reminder:

Have you paid your membership subscription for 2016? It fell due at 1^{st} January. If it is still outstanding please pay now.

New Members:

Do you know of anyone who could be interested in supporting the Wellington Tramway Museum by becoming a member, either in the wider Wellington area or beyond. We are constantly on the lookout for supporters. The membership rate is a modest \$60 p.a. (\$30 for junior members and age beneficiaries). Please email info@wellingtontrams.org.nz or write to the Museum at P.O.Box 2612, Wellington 6140, N.Z. for any further details or information.

"Tramlines" is the bi-monthly newsletter for members of the Wellington Tramway Museum Inc. Its aim is to keep members in touch with practical notices and the details of current developments and will also include occasional articles on matters of historic tramway interest. Please also see our website which is our instantly-updated Museum fact resource and notice to the wider world. Contributions and notes welcomed. Contact details are on page 3.