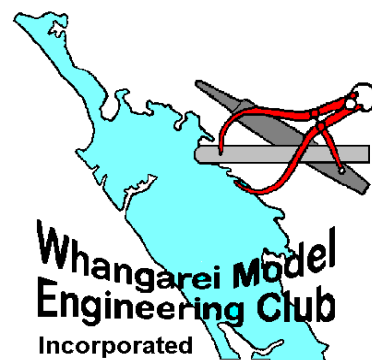


# NORTHERN VIEWS

Website: [wmec.org.nz](http://wmec.org.nz)



ISSUE No 300 ... .. March 2017

Clubrooms/Running Track at Heritage Park, SH14, Maunu, Whangarei.



Even the clothes suit the time. Boater hat, bow tie, parasol, etc, make this picture as passengers take a ride behind Bob Wines' locomotive driven by Mike Orange.

## **CLUB NOTICES**

General Meeting — Tuesday, March 7th, @ 6 pm (Clubroom open 5.30 pm)

Committee Meeting — Wednesday, March 15 @ 2 pm

3rd Sunday Running — March 19, 2017, 10 am - 3 pm

Mid-week Workdays — Mostly Every Wednesday.

**Extra Running Days This Month:**

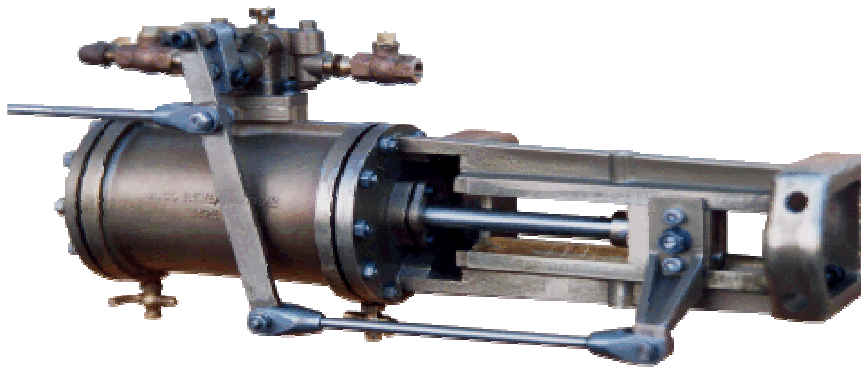
**NOTHING ADVISED**

THESE WORK IN WITH  
MUSEUM "LIVE" DAYS AND OTHER  
EVENTS WHEN HELD



## QUIZ — What is it?

See Page 5.



## The Things You Find in 2nd-hand Shops

One of the sons of our president (Brian) saw this picture in a 2nd-hand shop in Waipu a while ago and thought that it would be good to give to Brian considering his interest in trains both big and small.

It was looking a little jaded and after a proper clean-up now looks as good as original.



But here is the surprise ... it is a numbered print of North British built streamlined J Class locomotives being loaded onto a ship for export to New Zealand.

They were brought to the quayside on trailers hauled by traction engines because there was no 3' 6" gauge tracks and if you have a closer look you will see two more engines in background. Behind the leading traction engine you can also see the ship that they are being loaded on to.

The whole area is now apparently no longer in existence. The trailers have probably been cut up for scrap but hopefully the traction engines have been saved somewhere in the U.K.

The huge crane used for the lifting of the locomotives is apparently still there ... whether it is used I know not.

## LIST OF MAIN CLUB OFFICERS

**President:** Brian Mould. Telephone (09) 434 6188. E-mail; thewrinkles@clear.net.nz

**Vice President:** Rankin Kennedy. Telephone (09) 430 8328. E-mail; jenandrankin@gmail.com

**Secretary:** Bruno Petersen. Telephone (09) 438 7600. E-mail; brunopetersen@xtra.co.nz

**Treasurer:** Herb Smith. Telephone (09) 438 1214. E-mail; hsnhrz@orcon.net.nz

## OTHER OFFICIAL POSITIONS

**Committee Members** — Rodney White, Colin Smith, Ian Mison.

**Newsletter Editor** — Ian Mison. Telephone (09) 434 3125. E-mail; julianm@xtra.co.nz

**Librarian** —

**Boiler Committee** — Rodney White, Brian Mould.

**Safety Committee** — John Wright, Colin Smith, Rodney White, Ian Mison.

**MEANZ Representative** — Roger Reynolds.

**Charters and Bookings** — Rodney White. Telephone (09) 436 1185.

**Postal Address:** Whangarei Model Engineering Club (Inc), P.O. Box 10233, Te Mai, Whangarei 0143.

**Club Telephone:** (09) 438 9520 (Available Work and Running Days Only).

# A Great Big Thank You

A great big thank you must go to Jenny Kennedy and her dedicated group of helpers for their unselfish help in manning the kitchen and keeping the food coming for the duration of the recent Open Weekend.

**AND**

Also to Tony Tanner for spending nearly three days in the blazing sun trying to find a fault in the signalling system in and around the tunnel area. It was finally located and a “patch” was put in place to carry things over the same Open Weekend. The fault was finally fixed on the second working weekend in February.

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## WEDNESDAY WORKDAYS:

By The Editor



**1/2/2017:** Not a great attendance today. The place is hellishly hot but things had to be done. A few things manifested themselves over the holiday period and an attempt was made to rectify them. Tony has been busy trying to get to the bottom of problems with the signalling and the crossing flashing lights near the station. It appears that non toilet trained ants have decided to make their homes in the junction boxes of both units. Meanwhile Rankin and a couple of others have made a few adjustments to the new turnouts into the container.

**8/2/2017:** Another hot day but with rain promised later in the day. Tony has finished sorting out the problem with the signals. Most of the trouble was with ants looking for a home (See Pic)►  
The replacement fittings were made from some sort of alloy and, surprise, surprise, they did not fit, so Tony is searching for an alternative. A site for the proposed trap points was looked at and various viewpoints discussed. The trap points (or stop) was to prevent any runaway engine from getting very far before being stopped. General servicing on the club's petrol locomotives was also carried out.



**15/2/2017:** A muggy sometimes drizzly day. Rodney and a helper started fabricating a stop block for the exit line from the steam-up bay. This will prevent the 1:50,000,000 chance that another loco will take to its scrapers and do a runner. I know what will come off worse if the stop-block is tackled. The powers that be have decreed that a sign showing where the assembly area is shall be displayed outside the clubrooms so Bruno and Rankin have made one. Lloyd made a quick trip home to uplift his post rammer and it was done before one could say Jack Robins .....

**22/2/2017:** A bit of a spring-clean day. Rankin and Colin made an attack on the green gunk that adorns the ends of the station. It now looks a lot better. Some indiscernable noises were emanating from the basement which I believe was coming from Rodney building the stop-block for the steam-up bay line. The club has purchased a ph meter to keep tabs on the acidity or otherwise of our water supply that comes from the rainwater tank. Despite the water appearing to be acidic the meter only gave a reading of 7.1 which would indicate that it was only marginally acidic. A second test (different system) gave nearly the same reading. A check was also made on the water tower at the end of the platform and apart from a large ant's nest everything appeared OK.



# PRESIDENT'S REPORT ON OPEN WEEKEND

The 2017 Anniversary Open Weekend is now well over. Special thanks to ALL the VOLUNTEERS who turned out to help with all that had to be done.

Catering by the ladies for the lunches and morning and afternoon teas, station duties, coaling, watering, etc, of the locomotives. All of these activities are so very important to make functions like this the success that they are.

There was a good gathering of visitors from other clubs, including for a first time, a member from the newly formed Albany Model Engineers Club and the Saturday evening meal at the Kamo Club went down a treat. The music from the late 50s and 60s really made the scene.

Earlier last year we decided that we should do something to help a local group by making the profits from the Sunday running of the weekend available. To this end we decided that the local branch of "Riding for the Disabled" should be the benefactors but due to a breakdown in communications with the museum advertising department the total available for them was down on what was expected.

On the Sunday evening we had about 30 persons to a BBQ in the clubrooms.

The next day (Monday) was a display of vintage cars on the Village Green to commemorate the 100 years since the 1917 Parliamentary visit to the north. This visit was to let the MPs of the day see how bad the condition of the roads were in the "forgotten" north. The group then moved on to the comprehensive Packard Car Museum at Maungatapere and then further on to Paihia with various other stops along the way. While all this activity was going on Bob Wines and Mike Orange enjoyed the track running to themselves between cups of tea.

*Brian Mould, President.*

## Other Club's Events:

**Palmerston North Model Engineers:** Locomotion 2017, March 4th and 5th, 2017.

**Thames Small Gauge Railway:** Open Weekend, March 18th and 19th, 2017.

**Great Model Train Show:** Cromwell, Otago, March 18th and 19th 2017.

## Newsletters Received . . .

Title	From	Dated
Blast Pipe	{ Hutt Valley Model Engineering Society (Inc) Maidstone Model Engineering Society (Inc)	February 2017 February 2017
JOURNAL	Federation of Rail Organisations N.Z. (Inc)	January 2017
Model Torque	Hawkes Bay Model Engineering Society (Inc)	February 2017
Piston & Prop	Marlborough Associated Modellers Society (Inc)	February 2017
Pukemiro Junction	The Bush Tramway Club (Inc)	March 2017
The Dam Tram News	Waitakere Tramline Society (Inc)	1st Quarter 2017
The Generator	Palmerston North Model Engineering Club (Inc)	February 2017
The Squeaky Wheel	MOTAT Society	
Southern Rails & Sails	Southland Society of Model Engineers (Inc)	January 2017
Sun City Express	Nelson Society of Modellers (Inc)	January 2017

THESE MAGAZINES ARE AVAILABLE TO READ IN THE CLUBROOMS FOR APPROXIMATELY 1 MONTH

# ANSWER TO QUIZ ON PAGE 2:

## Steam-powered reverser for locomotives

On a steam locomotive, the reversing gear is used to control the direction of travel of the locomotive. It also adjusts the cut-off of steam to the locomotive's cylinders.

The most common form of reverser consists of a long lever mounted, parallel to the direction of travel, on the driver's side of the cab. It has a handle and sprung trigger at the top and is pivoted at the bottom so as to pass between two notched sector plates. The reversing rod, which connects to the valve gear, is attached to this lever, either above or below the pivot, in such a position as to give good leverage. A square pin is arranged so as to engage with the notches in the plates and hold the lever in the desired position when the trigger is released.

The advantages of this design are that change between forward and reverse gear can be made very quickly as is needed in, for example, a shunting engine. Disadvantages are that, because the lever must rest at one of the notches, fine adjustment of the cut-off to offer best running and economy is not possible. On large engines it can be difficult to prevent the mechanism from jumping into full forward gear ("nose-diving") when adjusting the cut-off once the engine has gathered speed: with such engines it was the practice of drivers to select an appropriate degree of cut-off before opening the regulator and to leave it in that position for the duration of the journey.

In this mechanism the reversing rod is controlled by a screw and nut, worked by a wheel in the cab. The nut either operates on the reversing rod directly or through a lever, as above. The screw and nut may be cut with a double thread and a coarse pitch to move the mechanism as quickly as possible. The wheel is fitted with a locking lever to prevent creep and there is an indicator to show the percentage of cut-off in use. This method of altering the cut-off offers finer control than the sector lever, but it has the disadvantage of slow operation. It is most suitable for long-distance passenger engines where frequent changes of cut-off are not required and where fine adjustments offer the most benefit. On locomotives fitted with Westinghouse air brake equipment and Stephenson valve gear, it was common to use the screw housing as an air cylinder, with the nut extended to form a piston. Compressed air from the brake reservoirs was applied to one side of the piston to reduce the effort required to lift the heavy expansion link, with gravity assisting in the opposite direction.

With larger engines, the linkages involved in controlling cut-off and direction grew progressively heavier and there was a need for power assistance in adjusting them. Steam (or later, compressed air) powered reversing gear was developed in the late 19th and early 20th centuries. Typically, the operator worked a valve that admitted steam to one side or the other of a cylinder connected to the reversing mechanism until the indicator showed the intended position. A second mechanism, usually a piston in an oil-filled cylinder held in position by closing a control cock, was required to keep the linkages in place. The first locomotive engineer to fit such a device was James Stirling of the Glasgow and SW Railway in 1873. Several engineers tried them, including William Dean of the GWR and Vincent Raven of the North Eastern Railway, but they found them little to their liking, mainly because of maintenance difficulties: any oil leakage from the locking cylinder, either through the piston gland or the cock, allowed the mechanism to creep, or worse "nose-dive", into full forward gear while running. Stirling moved to the South Eastern Railway and Harry Smith Wainwright, his successor with that company, incorporated them into most of his designs, which were in production about thirty years after Stirling's innovation. Later still the forward-looking Southern Railway engineer Oliver Bullied fitted them to his famous Merchant Navy Class of locomotives, but they were removed at subsequent rebuilds.

Henszey's reversing gear, patented in 1882, illustrates a typical early solution. Henszey's device consists of two pistons mounted on a single piston rod. Both pistons are double-ended. One is a steam piston to move the rod as required. The other, containing oil, holds the rod in a fixed position when the steam is turned off. Control is by a small three-way steam valve ("forward", "stop", "back") and a separate indicator showing the position of the rod and thus the percentage of cut-off in use. When the steam valve is at "stop", an oil cock connecting the two ends of the locking piston is also closed, thus holding the mechanism in position. The piston rod connects by levers to the reversing gear, which operates in the usual way, according to the type of valve gear in use.

The Ragonnet power reverse, patented in 1909, was a true feedback controlled servomechanism. The power reverse amplified small motions of reversing lever in the locomotive cab made with modest force into much larger and more forceful motions of the reach rod that controlled the engine cut-off and direction. It was usually air powered, but could also be steam powered. The term servomotor was explicitly used by the developers of some later power reverse mechanisms. The use of feedback control in these later power reverse mechanisms eliminated the need for a second cylinder for a hydraulic locking mechanism, and it restored the simplicity of a single operating lever that both controlled the reversing linkage and indicated its position.

The development of articulated locomotives was a major impetus to the development of power reverse systems, because these typically had two or even three sets of reverse gear, instead of just one on a simple locomotive. The Baldwin Locomotive Works used the Ragonnet reversing gear, and other American builders generally abandoned positive locking features. In Britain, locking cylinders remained in use. The Hadfield reversing gear, patented in 1950, was in most particulars a Ragonnet reversing gear with added locking cylinder. Most Beyer Garratt locomotives used the Hadfield system.

Many American locomotives were built, or retro-fitted, with power reverse.

In the UK, a screw reverser is sometimes called a "bacon slicer", particularly the type fitted to BR Standard locomotives. In the US and New Zealand, a reversing lever is called a "Johnson Bar". ●



# New Japanese Luxury Train

East Japan Railway is testing a luxury cruise train ahead of its planned launch on May 1. Known as the Train Suite Shiki-Shima (Island of Four Seasons), and bearing the designation Series E001, the 10-car set has an observation car at each end offering passengers unobstructed panoramic views. Three cars have been built by JR East subsidiary J-TREC and the remainder by Kawasaki Heavy Industries.

Intended for trips lasting one, two or three nights, the train has accommodation for a maximum of 34 passengers. Five cars have standard suites and one car offers additional comfort with deluxe compartments and a 'Shiki-Shima suite' that includes a bath made of Japanese cypress. A lounge car and a dining car complete the set. In addition to electric traction equipment, the train has diesel engines installed in each end car, giving it the ability to operate widely over JR East's 1067 mm gauge network.

JR East has drawn up a range of itineraries starting from Tokyo Ueno designed to offer customers scenic and cultural experiences in northern Honshu, with some trips extending through the Seikan tunnel to Hokkaido. Prices start at ¥320 000 per person.



## THE NEWEST TROLLEY

The trolley on the right is the latest item to emerge from the workshops of Brian Mould Enterprises.

I don't know where Brian finds the time to construct all the various things that appear from behind closed doors. He must spend all night working away to finish yet another item.

The latest trolley is mounted on a pair of the new trucks that have just been imported ready-built from Australia.

A test run today (1/2/17) proved that the trucks are well made and ride very smoothly. The finish of the bodywork is really classy.



The three musketeers. From left Lloyd, Rankin and Brian. Trying to get a photograph of this lot is like trying to herd cats.



And speaking of things emerging from Brian's workshop there has appeared a new bum trolley to be used behind his new 7¼" Fairley when it hits the track in the not to distant future.

This was also tested over the holiday period but has required a few minor adjustments which according to Brian have been done and the trolley will be brought in for another test run.

The near finished all-copper boiler for the big Fairley was on display in the clubrooms over the Open Weekend and attracted some attention from the public.



It has been discovered that the flanges of the newly imported Australian-made trucks are thicker than the New Zealand standard and are binding on the guide rails of our system. They are not derailling but need some metal removed from the inside of the wheel to bring the back-to-back measurement into line.



# General Pics from Around the Site



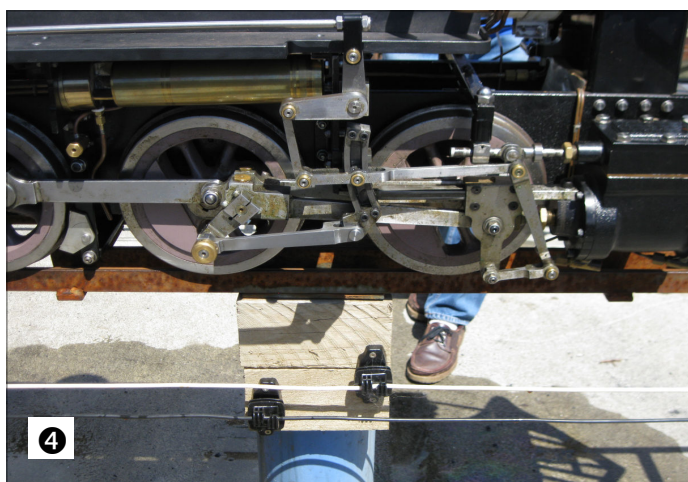
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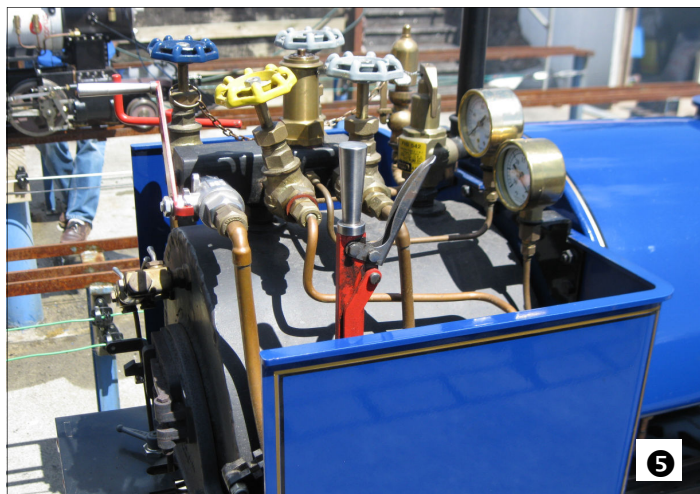
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## PHOTOS ABOVE:

1. Tony Tanner repairing the flashing lights at the foot path crossing. The ants were also a problem here.
2. A view of some of the cars on the village green.
3. Further running repairs! Don tightening up something.
4. A close-up view of the valve gear on Rankin's new loco.
5. The flower garden. The array of different coloured valves adorning Rodney's "Prince George".
6. The "American". Rankin's new loco being admired as it sits on the steam-up tracks. Note the "sexy" seat for the driver.
7. A rear end view showing the fire doors and the various arrangement of the controls.

IF UNDELIVERED PLEASE RETURN TO:—

Whangarei Model Engineering Club Inc,  
P.O. Box 10233, Te Mai, Whangarei 0143.

