



Newsletter of THE PALMERSTON NORTH MODEL ENGINEERING CLUB INC

Managers of the "MARRINER RESERVE RAILWAY"
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TRACK RUNNING

This is held on the FIRST and THIRD Sunday of each month, from 1 pm to 4 pm Summer and 1 pm to 3 pm during the Winter. All club members are welcome to attend and help out with loco coaling, watering and passenger marshalling - none of the tasks being at all onerous.

Visiting club members are always welcome at the track, at the monthly meeting, or if just visiting and wishing to make contact with members, please phone one of the above office bearers.

Sender:- PNMEC
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Palmerston North

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This Months Featured Model



REPORT on the SEPTEMBER MEETING.

John Tweedie had organised a tour of a workshop at, Massey University.

The workshop makes scientific equipment for various research departments on the Campus. The workshop is known as the Institute of Fundamental Sciences Workshop and two of their staff had come back for the evening to explain what they make and why.

We also visited the lab for Protein 3D structure determination where **Gillian Norris** showed us through and did her best to explain what it was they did and how in words that model engineer could understand. A very interesting evening looking at very different equipment to that found in our own workshops. Thanks very much John.

OCTOBER MEETING.

The club is to go to **Colyton Clocks** for a visit.
DIRECTIONS

When leaving Palmerston on Railway Rd, head towards Bunnythorpe. Keep going till you get to the township, turn Right over the lines, then left towards Feilding.

Follow Road until you get to another railway crossing, there will be a road going left over the lines, and another going to the right, you take the right (Keep the railway on the left.) Keep going on that same road until you see the Feilding airfield. Turn right Feilding side of the airfield. There is a sign saying: 5kms to Colyton.

Follow this road to the second crossroad. (Colyton Township) There is a truck yard on the left, turn left towards Feilding. Follow the road, (100metres) there is a church on the right in a paddock. Take the next drive way on the right after the church. There is a sign saying:

“Colyton clocks, all the time in the world”

We will meet there @ 7:30pm.

NOTE As this is a private collection there is a charge of **\$5.00** per person. The cost also includes a cuppa etc.

COMING EVENTS

Mid Week Run at Marriner Reserve Railway

24th October between 10.00 am and 2 pm
28th November between 10.00 am and 2 pm
Please contact Doug Chambers beforehand.

Track running at Marriner Reserve Railway

5th November 1 - 4 pm
19th November 1 - 4 pm

Open Weekends

Rotorua Model Engineers 30th Anniversary
Weekend and Dinner December 9th-10th
Please Note

Price for the evening dinner will be \$15.00
Rotorua require definite numbers before 28th October

Havelock North Live Steamers
20th – 23rd October

New Plymouth Model Engineers
Open Weekend 21st – 23rd October

Tauranga Model Engineers
Open Weekend 11th – 12th November

Palmerston North Model Engineers
Locomotion Weekend
3rd – 4th March 2007

The closing date for the next issue of The Generator is Friday 10th November

🌀🍀🌩️ Many Thanks 🌩️🍀🌀

As many of you know life caught up with me a few weeks ago and I have had a couple of stints in hospital. 😞 This of course has not stopped me attending our regular monthly club meetings, nor have I missed attending any committee meetings on your behalf. The second surgery did however preclude my attendance at the Model Mee Exhibition. 🛠️🏗️ I understand that it was the best public turnout for many years. Well done to everyone who put in time and effort to make it happen. I should like to state at this point that I intend to fully recover from my present condition and I have no plans to absent myself next time.

Thank you for the flowers 🌸 which I received from the club, and for the visits, 👤 cards, 📧 flowers, 🌺 chocolates, and other assorted goodies 📦 I received from individuals. A special thank you to Chris and Pam Rogers ❤️ who collected me from the hospital and took care of me in lavish style.

I'm still smiling 😊 and laughing - it takes a lot to get me down - and my current medical situation is sure not going to do that. 🚫 So, see you all at the next club night, at our Sunday run days, and all the other great things that we do.

Cynthia Cooper

A New Locomotive

The EMD F 7 started by the late Jim Curtis, completed by Doug Chambers, Roger Corlett and Dave Signal. It is now owned by the PNME has entered revenue service after a short trial the previous Saturday.



Model of the Month

This month's model is the 'Phantom' of Ted Barnes. Ted handed the locomotive over to Doug Chambers for completion and it is seen here with Ted at the controls during its acceptance run.

Mike Barnes was involved in the initial trials and is a cousin of Ted's so you could say Mike was performing a 'duty', which he enjoyed. There were some minor problems to be sorted out and after a further run the engine was handed over to Ted Barnes who will be keen to run it on the track he has around his property near Inglewood.

THE TALYLLYN RAILWAY

By Doug Chambers.

The Talyllyn Railway owes its existence to the Bryn Eglwys slate quarry, which at its peak employed 300 men and mining operations saw 300,000 tons of slate and slabs produced.

Mining commenced during the 1840s and the product was carried to Aberdyfi by pack animals or on carts or sledges.

The American Civil War was the indirect cause of the construction of the railway to serve the quarry. In 1864 William McConnell formed the Aberdovey Slate Company Ltd and leased the quarry with the rights to open it up on a large scale. McConnell, the owner of a cotton mill and due to the Civil War in America and the consequent shortage of raw cotton was looking to diversify his interests.

Powers to build the railway line from Tywyn to Abergynolwyn were obtained in 1865 when Parliament passed The Talyllyn Railway Act. The railway was already under construction but Parliament approval was required to allow the running of passenger services.

James Swinton Spooner was the engineer in charge of construction. His younger brother Charles Easton Spooner had been the engineer on the construction of the Festiniog Railway. The Talyllyn Railway was much easier to construct with little earthwork and an grade of 1 : 60. While the statutory railway finished at Abergynolwyn, the tracks continued over private land into the Nant Gwernol Valley. Passenger trains were not officially allowed over this 'mineral only' section. Beyond what is now known as Nant Gwernol station, the line continued into the hills being worked by a series of rope-worked inclines where loaded wagons descending pulled empty wagons up. Then there was a half mile tramway worked by horses, two further rope-worked inclines and a further horse drawn tramway. Nant Gwernol station is 270 feet above sea-level and the quarries are at 700 feet.

Captain Henry Tyler of the Board of Trade inspected the completed line in September 1866. He was unhappy with the narrow width of the overbridges which restricted the clearance either side of the carriages. This was overcome by barring the doors on one side of the carriages, that side away from the platforms, and slewing the track under the bridges. Today the bars are gone and the track runs in the middle course under the bridges but the carriages only have doors on the one side.

After a reinspection Captain Tyler was satisfied and the Talyllyn Railway was allowed to open on the 11 November 1866. However an unofficial passenger

service had been running since October.

The two locomotives were built by Fletcher Jennings of Whitehaven but were of different design. The passenger cars (four wheeled) were built by Brown Marshalls (three) and one by Lancaster Carriage and Wagon Company. A guards van was built by Brown Marshall's and there was a variety of wagons mainly for slate.

The Talyllyn Railway never really made money. William McConnel died in 1902 and his son took over. In 1911 the recently elected MP Mr Henry Haydn Jones bought the railway, quarry and the Abergynolwyn village and formed the Abergynolwyn Slate and Slab Company to operate the quarry. The Talyllyn Railway was not affected by the 1921 Railways Grouping Act and slate mining continued until 1946 when there was a serious collapse on Boxing Day. The collapse was due to a mining technique known as 'pillaring'. This method had been going on for years and the collapse saw the end of slate mining.

The Talyllyn Railway carried on becoming more and more run down. It escaped Nationalisation in 1948 as officials thought it too run down and uneconomic to be worth taking over. Sir Haydn had promised that he would keep the railway going as long as he lived and although the locomotive 'Talyllyn' was laid up with a worn boiler and cracked valve chest, the other locomotive 'Dolgoch' continued on after an overhaul in Shrewsbury. Derailments became common and 'Dolgoch's' frames cracked and were repaired by welding.

Sir Hadyn died in July 1950 and his widow kept the service running until the end of the summer season on 6th October when it looked as if the Talyllyn Railway was to be closed for good.

However a group of enthusiasts led by engineer and author Tom Rolt, called a public meeting in Birmingham and the result was the forming of the Talyllyn Railway Preservation Society.

Sir Haydn's widow, Lady Barbar agreed to assist the Society and work began. The railway was still operating with the original equipment bought in 1865. The track, locomotives and carriages were in a very bad state of repair.

By chance there were two locomotives of the correct gauge nearby at Machynlleth, out of use since 1948 when the Corris railway closed. British Rail wanted sixty-five pounds each for them but after hard negotiations they parted with them for fifty pounds for the pair. The locomotives were named 'Sir Hadyn' and 'Edward Thomas' who had joined the



railway in 1897 and retired in 1950 as manager. He returned after the preservation of the line and served as a director of the Company until 1967 by which time he was 87. He died in 1972.

Another engine was the ex Royal Air Force 0-4-0 WT which was presented by Mr. Douglas Abelson of Abelson and Co (Engineers) Ltd. After regauging from 2' to 2'3" it entered service named 'Douglas'. Territorial Army units greatly assisted the work on the track during 1953 and 1954. Large quantities of second-hand rail were obtained from various industrial sources. Ex British Rail sleepers cut in half were used to replace worn and rotten sleepers. The last of the wrought iron rail was replaced in 1968.

In 1957 the BBC did outside live broadcasts on two consecutive days. The effect was remarkable. Passenger numbers doubled in two years, but this also placed great pressure on the Railway. More carriages had to be built and more trains run to cope. Passenger facilities had to be improved. Wharf Station was extensively rebuilt in 1964 and the old waiting shelter at Abergynolwyn was replaced with a new building providing waiting, refreshment and a booking office in 1969.

In 1972 a Light Railway Order was obtained to allow the Talyllyn Railway to use the mineral line extension to Nant Gwernol station. Before the extension could be used there was a lot of earthwork to be done. Cuttings had to be widened, gradients reduced, curves eased and the loop re-sited. The 'mineral section' was reopened on 22.5.1976.

A further locomotive was built at Pendre using components from a locomotive supplied to Bord na Mona (the Irish Turf Board) This locomotive had been built by Andrew Barclay Ltd. Construction was started in 1971 but through delays it did not enter service until 6th May 1991 when it was named 'Tom Rolt' by Tom's widow Sonia. A fitting recognition for the man who had for so long been the driving force behind the Talyllyn Railway.

One four wheel and two bogie carriages have been converted to allow wheelchair access and a major re-work saw air compressors fitted to the locomotives and air brakes fitted to the carriages. Much of the braking equipment was obtained through contacts with the 2' 6" 'Puffing Billy' Railway in Melbourne, Australia with whom Talyllyn Railway formed a 'Twinning' arrangement on 1992.

In 2001 the Talyllyn Railway celebrated 50 years of operation under the Preservation Society, and at that time it was noted that the Railway has spent more than a third of its time operating in preservation.

LETTER FROM ENGLAND

From Stan Compton

Doug Chambers sent me a newspaper article about Tauranga's Memorial Park activities. Paul Newton driving his 7 ¼" gauge NZR C class built in 18 months!!!! Also Ron Salisbury getting one of the best write ups I have seen about his Western Maryland J1.

The 7 ¼" gauge Shay built by Dave Giles was in steam at the Birmingham track recently, some of our members saw it and were most impressed. A lot of people here have no idea of just what gets built in New Zealand.

Such a pity that whoever built the doubled up 'Maisie' in Australia and exported it to the UK (see the photograph taken at a sale in 'Model Engineer') did not realise that he had made the Briggs boiler with a grate that is too large for the tube area. The long thin blast pipe is bad news as well. One of our members bought it off the internet and has found it a very shy steamer. The ratchet wheels on the two oil pumps are very soft and worn so I have lent the man a home made milling cutter and basic dividing head to cut new ones. It is a handsome looking engine but it is not easy to modify the lack of tube area in the boiler.

As the years slip by memory fails me, (you have not got that on your own Ed.) . I had completely forgotten that the Don Young Hunslet was drawn with a valve rod that carries the expansion link, 5/16 too long. Evidently I had noted this when I built my first Hunslet many years ago, the one now owned by Clive Walton of New Plymouth, but I forgot the error on the one I am building now. I should have made new valve rods, or should I say spindles, as the rods are in the valve chests. Instead I was advised to reduce the offset of the bar to the small valve rod. This worked but now the valve gear fouls the brake hanger.

So Hunslet builders note 6 5/16" not 6 5/8".

The owner of the other Hunslet, who advised me to modify the offset has had his engine in steam. Only a minor problem with the steam pipe to the injector. Steam was raised, an oil up and away it went with your writer on the throttle. It brought back memories of long ago. I will tell the owner to balance the engine between the driving wheels, adding weight behind the front buffer beam like my first Hunslet was modified in New Plymouth.

Someone wrote to 'Model Engineer' about reducing the size of the cylinders on his Hunslet, why I don't know as they steam very well and a lot of them have been built.

I was approached recently at our club about testing a

new boiler for a 'Springbok'. The man had bought a commercially made one 15 years ago and at last has the engine running on air. Although a member of our club I had never met him before!!!!

November Meeting

November Meeting. Thursday 23rd

This will be our Annual Dinner.

The venue this year will be 'Club Palmerston' which is at 20 -24 Linton Street.

Would members wishing to attend please advise Chris Rogers 3561759 or Cynthia Cooper 3547100.

ATTENTION

Members requiring name badges should contact Richard Lockett.

NEW MEMBERS

The club wishes to welcome the following new members, and hopes that they will enjoy their association with fellow model engineers.

Chris Saunders,
Brian Pickett,
Robert Edwards,
Graham Toms, and
Ted Barnes.

Running January 7th 2007.

It is intended to have a BBQ at Marriner Reserve prior to the afternoon track running.

January Monthly Meeting

This will be on 25th January 2007.

It is to be a BBQ held in Chris and Pam Rogers' garden.