June 2017
No 434

THE GENERATOR

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 difficult. We may even offer you a cuppa.

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.

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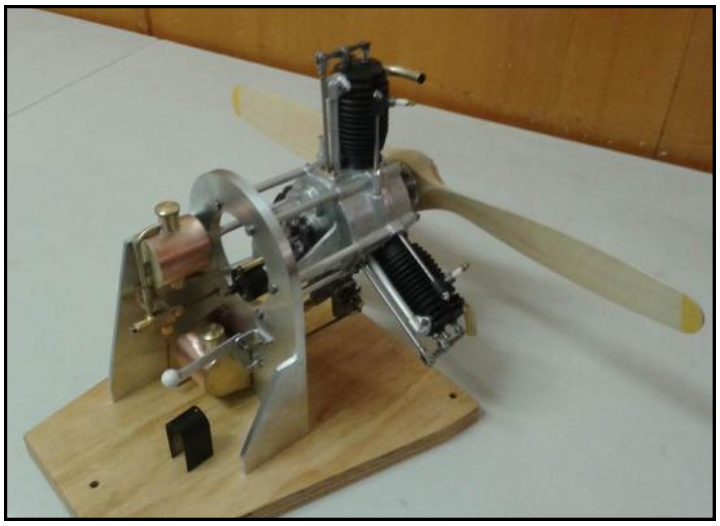
Your 2017-18 Committee

Report on the May Meeting.

Richard Lockett showed us a power-point slide-show of some more of **Albert Percy Godber's** photos. He explained where they were taken and with an estimated date. These were most interesting to the attending members.

Graeme Hall had the near completed three cylinder engine he has been building. He explained how he made the parts that did not have plans available.



Robert Edwards had a wheel puller he had made out of workshop parts.

June Meeting

This will be held at 7.30pm on the 22nd of June in the Hearing Association Rooms, Church Street, Palmerston North.

This months subject will be

Screw cutting

By Richard Lockett

SUBS are Now Overdue

Please pay asap. $30.00
Internet payments accepted to account **06-0996-0831663-00**
Please add Name as reference.

COMING EVENTS

Track running at Marriner Reserve Railway

June	18th	1pm-3pm
July	2nd	1pm-3pm
July	16th	1pm-3pm

New Librarian

Merv George is the new club librarian and has the library set up at his house.
To view or request books or magazines go to the club Web site http://pnmec.org.nz/ and click on Member Database. Log in and select Library. Search to find the book required and then click on info / reserve to request the book. You will be emailed a confirmation and Merv's phone number (06 323 2509) to organise delivery or pick up of the book. Merv works from home so can often be contacted during the day, especially early

The closing date for the next issue of The Generator is Friday 14th July

in the week. Book pick ups are welcomed or Club nights are a good contact point. House address is 277 Reid Line East but please phone before visiting.

Did you know . . . . . .?

Some of the early windmills had perfectly horizontal shafts supporting the sails. The design was changed so the shaft was angled up slightly.
Do you know why?

Answer: The "front" bearing just behind the sails wore out rapidly. By angling the shaft upwards slightly some of the load was shifted to the "rear" bearing which was much more substantial and lasted longer. That was somewhere around 1200 – 1400AD.

OHAKEA AERODROME

Building New Zealand's First Garrison Town

A realisation of the potentialities of the air arm in both defence and attack has led the Government to revise the whole method of the organisation of New Zealand's defences, and today a programme of expansion of the Royal New Zealand Air Force is being vigorously pushed to a conclusion.
Probably the most important aspect of the new programme is the decision to establish operational bases. The first of these, at Ohakea, near Palmerston North, is well under way, and a second will be built north of Auckland.
The choice of Ohakea as the site of an Air Force station has not been made without due consideration to a variety of factors. The suitability of the area has long been recognised, and as far back as 1927 it was selected as a possible airship supply base. Observations over a period of years disclose that meteorological conditions in which flying may be undertaken are more generally prevalent there than in most other parts of New Zealand. Good visibility, freedom from winds which have been rendered turbulent by adjoining hills, the absence of high-tension electric power lines, closeness to communications, level and drainable land landing surfaces are all factors in considering the location of any flying field. At Ohakea they are all favourable.
The unit to be stationed at Ohakea will be one squadron of medium bombers, which will consist of headquarters and two flights totalling 35 officers, 188 airmen and 12 first-line machines. The aircraft are to be Vickers Wellington I's, a thoroughly modern aircraft with high speed, a large bomb capacity and a wide range of operation.

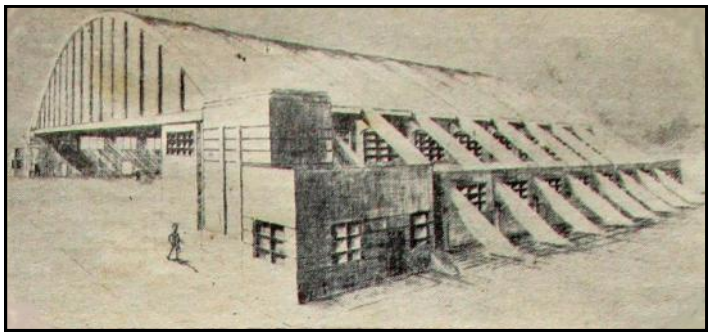
Officers' Quarters

The station will be self-contained with barracks for single officers and men and married men's quarters, its own water supply and sanitation and facilities for games and amusements. New Zealand is going to have something which is familiar in older countries-or in very new ones-a garrison town or cantonment.
One thing in the strategic importance of Ohakea is its suitability for taking off and landing, but there are other factors which affect the role of the fighting forces.
Air defence at any place falls into two main divisions-a semi-passive defence and a defence by attack. Recent statements in the English press disclose that London, for instance, depends to a large extent upon searchlights, guns and fighter aircraft.
This form of defence is demanded by the closeness of possible hostile bases and the mass of aircraft which can be employed against it.
It is nevertheless closely linked with bombing units whose aim will be the 'destruction of enemy bases and vital points of communications, transport and supply.
How then is New Zealand to be defended by air? There are no bases from which large numbers of bombers may arrive and destroy the shipping and rail facilities at Wellington. In other words, the attacks must come from the sea. They are likely to be concerned mainly with shipping and with transit of supplies. An air unit from near Palmerston North can operate against both lines of

approach to Wellington. A glance at the map discloses that the selected position flanks Cook Strait as far as Farewell Spit, the first landfall coming from the west. Ships usually pick up the light at Castlepoint as their first mark on the New Zealand coast. An air course from Ohakea to Castlepoint passes over the Manawatu Gorge. The station is therefore in touch with the east coast.
If the need arose, the Auckland area could be reinforced in a short time by a flight northward.

Size of Station

The progress that has been made at Ohakea gives a good indication of the size of the station. The immense proportions of the hangars are immediately apparent from an



examination of the foundations and partially completed walls. Novel in design, they will be on a scale that will draw exclamations of surprise from anyone fortunate enough to see over the construction work. The hangars, two in number are 270ft in length and 230ft in depth, built entirely of ferro-concrete with the roofs supported by ten massive concrete arched ribs, which replace the steel framework usually seen in this type of structure. The sliding concrete doors will be in contrast to the veranda type in use at Hobsonville and Wigram.
At the sides and ends will be complete accommodation in the way of workshops, offices and facilities for aeroplane crews.
A few of the multitude of activities provided for are instrument repairs, tool workshop, blacksmith shop, fabric and dope shop, parachute room, gymnasium, camera and photograph developing rooms, flight armoury, wireless telegraph workroom, navigation rooms, flight commander's office, A.M.L. teacher, engine rooms and lecture spaces.

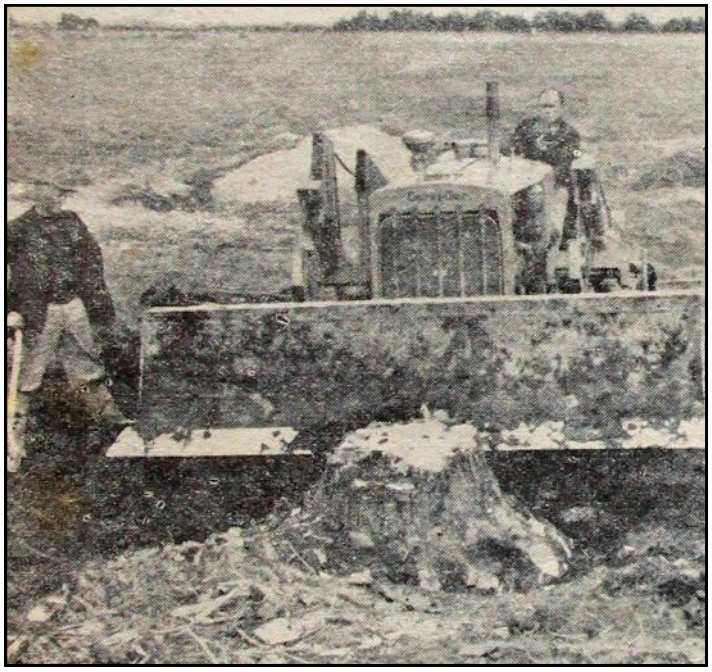
Room for Progress

There are two hangars in the present contract, which is to cost over 100,000 pounds and, while these are more or less identical, No1 hangar has certain features not to be found in the second. Room has also been left in the layout of the station for the provision of three further hangars as the base grows in importance.
The storage of large quantities of fuel for aircraft has not been overlooked and the housing of bombs and other dangerous material is to be underground at a safe distance from the main station.
The contractors are pushing the building ahead and the walls of No1 hangar are slowly rising. At the sides of these are the beginnings of the concrete arches to carry the roof. In order to take the strain that will be imposed on them, the arches are connected beneath the floors by strong

steel beams 300ft in length. These are laid down with a small gap in the centre and then they are brought together and a big steel pin is inserted to hold them in this position. After the steel has cooled there is a load on the steel beams equivalent to about 130 tons.
These really represent the strings to the bows formed by the arches and increase their efficiency as supports for the heavy

roof. When the stage is reached where the roof is to be added a special steel tower and two fabricated steel beams will be used to hold the concrete while it is setting.
The curved roof will act as a protective agency somewhat like a gun turret and, the doors being of concrete, will stop any bomb splinters.
The field has to be levelled before it can be drained, which in itself is a tremendous task, involving no less than 24 miles of tile drains of varying dimensions, but a specially imported mechanical digger that can construct a drain 8ft deep and 2ft wide at a rate of two miles an hour should simplify matters a good deal.

For Recreation
To the north of the hangars will be accommodation and recreation amenities for the station personnel. Here there will be 32 residences for married men and it is estimated that when Ohakea is in full commission there will be well over 250 people living there, including dependants of the men. A noticeable feature of the landscape is the almost complete absence



of trees or even stumps. Previously, there were six belts of trees on the properties that were taken over from the previous occupiers. Now only an odd one or two remain out of about 400. These have all been felled or knocked down by bulldozers.

Situated only a few hundred yards from the main Wellington-Auckland highway immediately on the south side of the Bulls Bridge over the Rangitikei River the station covers 490 acres, and the flying field has dimensions allowing for runways of 1000 yards in all directions and 1500 yards if a diagonal take-off is used.

This article is a reprint from
"The Weekly News" July 1938

Letter from England

Stan Compton

I was watching a documentary about a Canadian woman who had bought a plot of land with a substantial cabin in the outback 30 miles from Dawson City in the Yukon. She was the driving force in the partnership with a man who was new to life in the bush. I think the intention was to take paying guests to live a rough life for a short spell. It was rough, their water came from the river and you shot a moose, if you could find one, to provide plenty of meat for the winter. Civilisation was not too far away. She had a dish setup and a Honda generator to power her transmitter to contact her mother in the UK. When she felt the need, their boat with outboard motor was moored near her camp, to fetch supplies. Timber had to be cut, enough to last the winter using a chainsaw. This was her job and when asked "What do you do if you have an accident"? The answer was "You don't have accidents.
I saw no protective gear being worn, that was for "softies." I do hope she can cope. A very practical woman in the world she chose to live in. Bears were a problem. One got into her site and tore the seat to bits of her scooter she used in the snow. This meant a trip for a replacement. This life was no comparison to a book I had read in the fifties called "Wilderness Wife". Her husband had contacted TB so they chose to live in the bush as a cure, even sleeping in a lean-to at thirty below zero. They ran a trap line to catch animals for their fur and I don't recall the mention of a chain saw.

This reminds me of a library book I read as a

lad describing how a boy living in the USA in probably the twenties. Wearing knicker-bocker trousers he would be out in the bush camping with a friend, learning how to make a lean-to shelter with branches off a certain pine tree, that would form a roof facing the north, with the campfire close to the opening. It even showed how to build a flat bottomed boat to carry two boys out on the lake. Instructions and drawings were provided with a cutting list of timber to take to the local sawmill.

To a boy like me living in the City of Birmingham this was another world. All I could do was take two school mates camping in my tent in a field with the river Blyth running through. I knew how to pitch a tent, incidentally being war time it had to be stained in camouflage colours, and how to make sleeping bags out of two army blankets with blanket-pins. We were about sixteen and I suppose I was the leader having learnt camping skills from the scouting movement. When I asked if they had sleeping bags , I was assured they had. Waiting for an English winter to pass so at Easter with a couple of sunny days forecast, we were off on our bikes to a spot I knew of to pitch the tent and to light a fire, after removing a square of turf to be replaced when we left. Not being summertime, my mistake was to camp close to the river. It was only a small one easy to wade across but a source of water to boil for our tea in my billy-can, the fact that it tasted smoky was part of the fun. In those days we carried a sheath knife, just for show and now called an offensive weapon. After sitting around our campfire it was time to turn in and now I discovered the other boys had brought cotton sleeping bags so my two blankets had to cover all of us. That was the coldest night for us when the mist descended to cover our tent. The next day we returned home.

If you would like an email when this newsletter is published, send us an email with **"Generator Please"** in the subject line with your **Name, Club** and **Email** address to **pnmec@trains.org.nz**

Profile of the Month

by Kerry Puklowski

Karen and I have been married for 38 years and we have a teenage son Liam.

I have worked for the Palmerston North City Council for the last 45 years having worked in various divisions over this time. For quite a few years I have worked in City Enterprises as a Projects Engineer overseeing city maintenance.

I am currently the clubs' treasurer and this is my first year serving on committee.

My teenage son Liam has been interested in trains all his childhood and has now developed an interest in "Live Steam" and hence our involvement in the club. He has been kindly leant a 3.5" steam train and Doug Chambers has been teaching him how to operate this model. In the two years, we have been involved in the club Liam has been supported and encouraged by a group of club members for which we are very grateful.

I have an interest in machinery and have a small workshop where I enjoy turning up parts for pieces of equipment needing repair.

As Liam's interest in trains has grown I find most of my recreational time is spent supporting his interests. We particularly enjoy visiting Steam Incorporated at Paekakariki and spending time in their workshops keeping up to date with the restoration projects currently underway.

My other favourite past time is fishing and I really enjoy spending a relaxing day surfcasting at the beach.