

### From the President's Desk

Hi All

Here we go into another year, and winter is definitely coming, with a noticeable change in the air. Luckily the engine shed extension is now closed in, with still a couple of things to finish but essentially it is complete and ready for us to argue over what goes where. A big vote of thanks to those members who have been putting in the hard yards to complete the various jobs associated with this project ... it is looking fantastic and will be of benefit to all members. Next challenge in the planning is the proposed track extension ... however this is going to be a longer process, owing to red tape and processes within the council ... we are still leaning on people in various places and it's hoped that sooner rather than later something will give.

Planning is under way for the upcoming CANMOD. This will arrive much quicker than we expect and we need to be ready as these events seem to have grown bigger and bigger each time they occur. We are very fortunate that we have excellent facilities already and we need only a minimum amount of outside support to run this event. Information will be starting to appear over the next several months as we nail down key items and information.

Also not far away is our AGM ... time to start thinking about whether you would like to put your hand up for one of the many roles, either on the committee or outside of it. This society is for us, the members, and we are the ones that need to make the decisions on how to best guide it. If you would like to help in this area then I encourage you to put your hand up and give it a go. If you are unsure, then talk to one of the current committee members or myself and we will gladly explain the process of nomination for a position.

In the meantime, stay safe, have fun, and do not get cold in the workshop!!!

Cheers

Alex Cowdell

Vol. 56 March 2020



Annual General Meeting Annual General Meeting

### Annual General Meeting is coming !

Tuesday, 5 May, 7.30pm

Nomination forms for Committee may be obtained from Rob Wilson or from the club noticeboard

# LOOKING BACK

Recently awarded Life Membership of CSMEE, **Mike Harrison** recounts some key moments in a life-time of model engineering

My model engineering career started in 1957, when I was about 17 - 18 years old, as a result of reading an article, complete with plan, about an American Wild West stage-coach, in a condensed model-making book published by "Popular Mechanics" I built this stage coach, which was about 15cm (6 inches) long, entirely out of balsa wood, using a Valet brand razor blade and balsa cement, sandpaper, a small file and sewing pins. The most difficult items were the construction of the 4 wheels, - again all made out of balsa, with leather straps for the suspension. Construction of the stage- coach took around 3 to 4 months. Alas, it was rather delicate, so it had a very short life.

My next project was in early 1959 when I was a young airman in the RNZAF at Ohakea. After seeing a movie "The Ship that Died of Shame", a story about a WW2 Motor Torpedo Boat and its crew, during and after the war, I developed a long-lasting interest in building British MTBs and Fast Attack Craft. My first was a 3 foot model of a Vospers 532 series MTB. Drawings were purchased from Vospers UK. The model was built in my bed space in the dormitory where I was placed. Some years later I discovered that

the MTB depicted in the movie

I built my open runabout The

was of the "Gay" Class, which was a post war MTB having similar lines to the model I had built.

In 1962 I managed to get an exchange posting to Wigram and married Wendy in

February, 1963. I made contact with the Christchurch Model Boat Group who met at Lake Victoria every Sunday morning. Often the group sailed at Lake Bryndwr, which no longer exists, but which was located adjacent to the corners of Wairakei Rd and Roydvale Ave. The then President of CSMEE, Mr Jim Harrison (no relation) invited the group to join The Model Engineers at our old premises at Andrews Crescent. As I remember, it was later in 1963 that the Boat Group moved to Andrews Crescent and helped with the construction of the boat pond, the station / shop / boat shelter building and the foot-bridge that crossed the railway track. During the next 10 years I built four attack craft, one destroyer, and



523MTB in bed-space, RNZAF Ohakea



Open runabout Paul M. aka Bathtub

*Bathtub*. I also spent many hours repairing attack craft boat *Ferocity* and a cabin cruiser that came to grief when the roof rack separated itself from the car at 50 mph. while returning to Christchurch after attending a model boat regatta hosted by the Blenheim Model Engineers.

1976 saw the whole family move to Singapore to 41 Squadron RNZAF, based at Tengah. All our household effects, including the model boats, were all stored in Wellington. After settling in on Tengah I met an aircrew member of the squadron who had a model Jet Ranger helicopter, and who advised me on the merits of purchasing the same kitset model. This was a game changer for me as I had never flown a model aircraft before, and had no experience or knowledge in the principles of rotary wing aircraft. Fortunately, the Squadron was equipped with four Iroquois helicopters. The pilots were most helpful regarding my questions on the operation of their machines. Building my helicopter was quite an engineering challenge as I had no basic workshop tooling to assist me. The helicopter took some four months to build. Balancing the rotor blades was no easy

feat. Ground-running, with the machine tethered by a weighted plank placed between the body and the skids, allowed me to move the machine sideways while enabling me to co-ordinate the collective and tail-rotor controls. On its first flight I crashed, due to my over-controlling the helicopter. After repairs were completed, my aircrew friend flew the test flight and trimmed the helicopter to stabilise it in all flight aspects. Through his help I began to master the hover, then, progressing with small movements, the stop-and-hover. The secret. I discovered was to use slow movements to master the hover before advancing to greater movements. In the next 16 months my logged flying time increased to 23 hours with no mishaps. I was lucky to have some "pole time" in the Iroquois where I was able, with assistance, to fly the aircraft for about 15 minutes or so. It was a rewarding experience for me and gave me so much confidence in operating my model helicopter.

We returned to New Zealand in May 1978, being posted to Ohakea. Flying there was not easy, as Ohakea is a windy place and my machine was very prone to "weathercocking".

One could fit an aid in the

In August 1979 I received my terminal posting notice, and duly

moved back to Wigram, as I was due to leave the RNZAF in 1982. We purchased our current home and after settling in, I began setting up the workshop, keen to learning curve for me. I had to renew the worn-out cast-iron



Hunslet loco and trolley, No.2 hangar, Air Force Museum, Wigram

get back into modelling and sailing boats. The CSMEE was in the process of building its new clubroom and building a major extension to its track, at Andrews Crescent. The pond was undergoing major changes as well, plus the building of the boat-shed and shop. After assisting with the completion of the new buildings and boat pond etc., my boating activities resumed and I gradually made up for my six-year absence from Christchurch.

wheels on my Hunslet and fit new steel wheels. I then had to modify the back-to-back spacing to achieve the correct gauge. It was about 1985 that I upgraded my 3 <sup>1/2</sup> inch Drummond lathe to a Myford Super 7 lathe, to be followed, in 2005, by a medium sized mill. I had never operated a mill before and my first milling task was to machine two sword blades for a pair of Scottish basket-hilt swords that I had begun in 1980. This all began after being asked to repair the hilt

> grip wire on a ceremonial sword for NZ Scots Unit at Burnham Military Camp.

My current project is a 5 foot model of *HMS Brave Swordsman*. The hull is complete, and the two 40 mm. Bofor guns are 95% finished, (apart from painting). I plan to start making the torpedo launching cradles, ammunition

lockers and other deck fittings, followed by the bridge. I hope to complete these items over the next 2 years, ready to run on the pond. When completed this model will be the third *Brave* Class Fast Attack Craft I have built. The first was a 3 foot model (*HMS Brave Borderer*), the second was a 6 foot model (*HMS Brave Swordsman*). The third, a more fine-scale model, *HMS Brave* 



Mike flying Jet Ranger (on r.) at 42 Squadron Hangar, RNZAF Ohakea

form of a gyro, to afford some control against weather-cocking. It did help, but wasn't 100% successful. I was able to fly inside 75 Squadron's (Skyhawk) hangar while they were deployed overseas. This was magic, as there was no wind to contend with. As a result my flying skills increased remarkably!

The move of the Club to Halswell Domain was most welcome. Being introduced to the Club F7 and operating it, opened up a new world to me and eventually led to my purchasing a 7<sup>1/4</sup> inch Hunslet loco for which I also built a trolley. Assisting with the construction of the F45 locomotive at Graeme Chisnall's workshop was another major *Swordsman* is the one currently under construction.

During the last 20 years I have been able to serve on the Club Committee both as a committee member and as Loco Foreman. I have witnessed the wonderful growth of membership and facilities, first in the old Club location, and now in its continuation at Halswell. My model engineering journey has been most rewarding. Over the past 57 years, I have received guidance and learnt so much from so many people, - both in my service career and, especially, from my model engineering colleagues.

I thank you all and hope that you will allow me a little pride in calling myself a "Model Engineer."

Mike Harrison



40mm Bofors gun nearing completion for HMS Brave Swordsman



Scottish basket-hilt swords, made over a 30 year period

### John Begg's 3" Fowler A7 resumes operations

The hornplates have been laser cut (including all the holes) and temporarily fitted to the boiler.



The bearing housings described last time were all machined and mounted on the hornplates. That ended up being the easy bit and the final location for the hornplates on the boiler was established late 2019 after what seemed a never ending process of trying to get all the bearings and shafts lined up and running freely. I figured it was worth the time to get this right otherwise worse problems would result down the track.

<image>



Next up was the dummy throat plate on the front of the firebox. That is now mounted with just the dummy mud lids to be completed.

There are still a lot of dummy rivets to install onto the hornplates and after that I next plan to tackle the steering shaft and its support brackets (which also mount on the hornplates) and that should see the middle section of the Fowler largely complete.



Once the hornplates and bearing housings were mounted then the spectacle plates (2x) and bearing housing stays (2x) were made and mounted which really make the whole assembly very rigid, which I guess is the way it is supposed to be. Thankfully all the shafts (crankshaft, 2<sup>nd</sup> shaft, 3<sup>rd</sup> shaft and rear axle) all still turn freely.

## **Peter Grounds**

Those of you who frequent the New Zealand Model Engineering Facebook page will have seen a couple of these photos. I'm a reluctant photographer, so now that I actually have taken some photos, I may as well get some mileage out of them!

The third photo shows the cylinder casting with the saddle successfully fly-cut. The casting has been turned around, the mill head set on an angle, and the steam pipe holes drilled and tapped M18 x 1.5mm thread. Of course, now that I've tilted the head, I need to return it perfectly square to the table for subsequent work. You may have noticed a somewhat unusual arrangement for the rear cylinder covers - they are cast integral with the cylinders, making the cylinders blind. They bored out without trouble. One bronze stuffing box has been fitted, the second one has been made, but I forgot to fit it prior to taking the photo.

Not much more to do with the cylinder casting. I'll drill and tap 4 valve setting holes. I also need to drill four rings of holes around the valve chests. I'll make a jig to do that.

I've made the cast iron cylinder and valve liners, also cast iron pistons and valves. I should photograph them, but that means taking the camera back out to the workshop, so next time!







# The Hamilton Convention

The MEANZ National Convention was held at the Hamilton Model Engineers facility in Minogue Park, Hamilton from 9 -15 January this year. At least a dozen CSMEE members and their wives attended, with many bringing their mechanical pride and joys with them.

The list of winners from CSMEE is outstanding, with the following members winning their category: **Graeme Chisnall** – Best 7 ¼" steam loco and Most Popular 7 ¼" Loco, with his Shay. **Rob Wilson** won Best non-steam with his 7 ¼" gauge German Kof. **Dave Campbell** won best 5" loco with his CFM Dubs loco. **Jonathan Grueber** won Best Road Engine.

The Hamilton track is a delightful mix of several configurations with a combination of all-welded and grooved sleeper track. A new signalling system had been installed by the club prior to the Convention and this, while excellent, took some time to bed in at the station. The weather over the course of the convention was wonderful and the public turned out in force to take many rides. Overall a very friendly Convention and much credit to the Hamilton club for putting on an excellent event.

Rob Wilson

CSMEE Loco Foreman.



Graeme Chisnall's "Shay"



Rob Wilson's "Kof"



Dave Campbell's "Dubs"



Jonathan Grueber



John Herd won the Canterbury Award at the Hamilton Convention.



Rob Wilson, full frontal

From the Dockside

Well, we had only a couple of nice windless day to sail on the pond before Christmas until about a week before we shut for the Christmas break. We got a leak and all the pond water came out. When we came back in mid January, 2020, the Wednesday Crew got into doing the repairs to the pond. But after three different attempts the leak is still there. Not only have they been working on the pond, they have also installed new boards in the harbour to replace the missing ones in order to stop the water getting out. In the meantime some of the guys have been sailing at Ferrymead. Lots of new boats are getting built and will be running on the pond when it's fixed. I would like to thank all of the Wednesday Crew for all the hard work they have put in to try & solve the problem.

Andrew Willis

Commodore

### The Wednesday Crew at work









# DAVE PRINGLE'S LATEST ...

At his invitation, I recently visited Dave's workshop to see what he's been up to. Dave is currently working on a 2":1 foot model The boiler, with the assistance of John Hamilton has been fitted with extra tubes, a modification which permits boiling in only 8 - Photo 1: early progress Photo 2: the finished article Photo 3: some fine detail

of a 1920s clinker-built river launch, based on an English prototype, - a pleasure craft originally for the well-to-do. but still to be seen in the UK Lake District in one form or another. The hull planking is cut from rimu or



birch, and the deck planking is white oak.. Each plank is separate, the black lines being achieved by the application of marker pen before joining and sanding. As with the *Colin Archer*, these are glued to a sub-deck. The fittings are all fabricated from brass, using jigs where appropriate; no castings or 3D printing! The ship's wheel consists of a mahogany rim, faced with brass plates attached by tiny screws



10 minutes. The boiler is fed from twin saddle-tanks (see below),



enabling a run-time of about 20 minutes. These will be fitted with an electronically controlled pump in due course.

Readers may recall a brief article on Dave's model of a 1893 Norwegian salvage cutter, *Colin Archer.* (Vol.52). Masts and sails have been added and she is now completely finished and awaiting launching, once the pond is ready. Also ready & waiting is Dave's Americas Cup entry,- his version of the Starlet design, the agreed standard model for CSMEE's competition. Blenheim, apparently run their own version. The competition has very few rules Our 10 -12 entrants will have to race three times round the marker buoys and whoever is first past the post is the winner. (provided no sin has been committed on the way)

As all boats are built to identical specifications, the race will test the morals and seamanship of all concerned!

John Pattinson





### Membership

### Subscriptions 2019/20

Member	\$30
Family Membership	\$45
Junior Member	\$10

**Reminder** The subscription period matches the CSMEE financial year which is 1 April to 31 March. **Subscriptions are due each year from 1 April**.

Canterbury Society of Model and Experimental Engineers Bank account for on-line transactions is **03 1703 0032951 00** <u>Note</u> - please ensure you enter your name in the

transaction for identification

# My Semi-scale 1913 Bearcat Stutz Roadster

The idea for this model was born through chatting with three or four other boating members. I hunted the internet to find plans for an easy-build car to carry children.

This is wooden framed with 26in. diameter motorcycle wheels .The motive power is an electric-start 6.5hp Honda look-alike motor with a 2-1 reduction chain drive and a torque converter .The left side rear wheel is chain driven from the motor in the front, with a hydraulic disc brake on the right rear wheel, plus a mechanical rear hand brake.

For lighting, I am making two front large headlights out of S/S mixing bowls, which will have a high and low beam operated by switches on the dashboard. The false speedo is a converted large pressure gauge The rear light is a motorcycle tail light with STOP engraved into the lens.

Many thanks to Dave Pringle, Rob Wilson, and Keith Schroder for helping with the welding, machining, painting, etc.

Malcolm Cowie







# CSMEE Officers for 2019 - 20

### Patron: Glen Martin

President	Alex Cowdell	03 318 1908	
Vice President	Graeme Chisnall	024 731 1979	
Past President	John Howie	328 7459	
Secretary	Rob Wilson	960 4305	
Treasurer	Mike James	321 7051	
Loco Foreman	Rob Wilson	960 4305	
Commodore	Andrew Willis	0274 509334	
<b>Clerk of Works</b>	John Howie	328 7459	
Librarian	Dave Markham	322 7524	
<b>Boiler Committee Chair</b>	Mike James	321 7051	
Safety	Committee Members		

#### **Committee Members**

#### **Boiler Committee**

Peter Grounds 324 3662

Robin Shand	021 217 3601	Jock Miller	332 1614
John Crampton	322 4915	Ian Fanshawe	942 2937
Barrie Doublesin	383 3827	Mike James	321 7051
Neale Craighead	960 8796	John Hamilton	322 4574
Mike Harrison	349 6946	George Johnson	337 1137 or
John Blanchard	359 4053	C	338 5928
		George Hodges	323 5019
		Dave Campbell	326 5585

#### **Constitution and Rules Committee**

John Hamilton	322 4574
John Howie	328 7549
John Pattinson	329 4441

#### **Volunteer Positions**

Awards Night Convener	Dave Campbell	326 5585	Visiting Speakers	John Begg	339 8448
Asst. Librarian	John Crampton	322 4915	Asst.V. Speakers		
Asst. Loco Foremen	Dave Markham	322 7524	Membership	John Blanchard	359 4053
	Phil Bellaney	03 312 5659	<b>Canterbury Tales</b>	John Pattinson	329 4441
Asst. Clerk of Works	John Hamilton	322 4574	Shed Foreman	Alan Barlow	344 0244
<b>Projects Manager</b>	John Hamilton	322 4574	Asst. Shed Foreman	Ben Sewell	322 4219
Archivist			Mech. Maintenance	Peter Grounds	343 1443
Webmaster	John Begg	339 8448	<b>Roster Reminder</b>	George Maylam	324 3469
Publicity	Glen Batchelor	359 5411	Facebook	Patrick Whillis	382 6452
	Nicky Tily	03 318 4785	Ticket Box	Jim Rosanowski	332 1370