

The Squeaky Wheel



ISSN 2350-2940 (Print)
ISSN 2350-2959 (Online)

Issue 13 – February 2014

In this issue:

- Avenger Launch
- Road Transport Update
- Berlin Technical Museum
- Committee Meetings 2014
- Steam Section Changes
- Board Profile – Hon Judith Tizard
- Membership Renewals
- MOTAT 50th Logo
- Karaka Vintage day
- Matakoho Kauri Museum Visit

MOTAT Society CONTACTS

Website: www.motatsociety.org.nz

Postal: PO Box 44 430, Pt Chevalier,
Auckland 1246

General Society Queries &

Squeaky Wheel Editor: Tessa Phillips,
admin@motatsociety.org.nz
phone (09)3909160 or mobile / txt 021-0479973

Driving Wheel Magazine:

Andre Pointon - drivingwheeleditor@gmail.com

Events: Frances Young - francey@kiwilink.co.nz

Message from the Chair

Greetings and happy new year to all. 2014 marks 50 years since the opening of MOTAT to the public, so the Society is planning a number of events to mark the occasion. First up is a trip to The Kauri Museum at Matakoho on the 22nd of February. The Kauri Museum and MOTAT have a common heritage, as both have their foundations in the Old Time Transport Preservation League. If you haven't been recently, or not at all, The Kauri Museum is a must see destination and a personal favourite of mine; check out our notice on the back of this Squeaky Wheel and members will also receive a copy of *The Kauri Museum's* brochure.

The Committee has already been hard at work this year making a submission to the MOTAT Board on the DRAFT 2014-15 MOTAT Annual Plan. For those wishing to view the plan itself, it can be viewed online on the museum's website. The Society's written submission was followed with a verbal presentation on 30th January at the invitation of the Board.

We have been honoured to have recently been able to present Life Membership Awards and Certificates of Appreciation to some very deserving recipients. With regret we must acknowledge the passing of Mr Ken Ramsay, a Life Member since 2004, and recent recipient of an appreciation award for his services to the Road Transport Section. Read further for details.

A reminder once again to all our members that we always welcome feedback, articles and notices from anybody willing to contribute. If you have a story from the early days of MOTAT that you'd like to share, we are planning a special MOTAT 50th commemorative issue of the Driving Wheel to be published later in the year. So please dig out those old photos and help us celebrate the museum's golden anniversary!

Looking to the future, let us pose the question: what do you think the museum will be like 50 years from now?

Leyton Chan - *MOTAT Society Committee Chair*

Magazine Update

Hopefully you have all been enjoying Issue 6, thanks for all the positive feedback.



Production of Issue 7 of *The Driving Wheel* magazine is well underway with distribution planned for April 2014. However as always we are actively seeking contributors or ideas for articles, photos, interesting stories or experiences for future publication in *The Driving Wheel* magazine & *The Squeaky Wheel* newsletter. In addition we are seeking advertisers and relevant events to promote. If you would like to help with sourcing images or advertising, please let us know.

Contact Tessa or Andre as above for more information.

On December 11, 2013 at the MOTAT 2 Belfast Hangar, the MOTAT aviation section held an informal event to mark the completion of the Avenger restoration and recognize those involved, Henry tells us a little more....

Grumman Avenger Launch

– by Henry Swan, Photos Peter Kelly

Fortunately the pre-flight checks went perfectly, the huge swinging wing folding movement perfect, bomb doors moved in and out smoothly as if it to expose the lethal bomb load or a sinister torpedo. The complexities of the hydraulic system all behaving as they should. Grumman TBF-1c Avenger NZ2527, was ready for the launch, this time not off an aircraft carrier but in the Belfast Hangar at MOTAT's Meola Road site.

The Grumman TBF Avenger first flew on 1st August 1941, barely four months before the Pearl Harbor attack that drew the USA into actively fighting the Second World War. Legend has it that the name was bestowed immediately after the Japanese attack but although it was so apt, in fact

it was bestowed before the Japanese attack occurred. Entering service in 1942, six were flown by volunteers to Midway Island, in theory beyond their range, to assist in the Battle of Midway. By radio intercepts, the USA knew the Japanese intended to invade Midway Island and reinforcements were vital. Against the odds, all made it to Midway; five of the six were lost in the fighting, but the tide of war was turned against Japan.

Even our launch day dawned clear, bright and warm encouraging an unexpectedly large attendance to witness the formal completion of the Grumman Avenger ready now after over twenty years of stop/start work.

The event also included the recognition of the Aviation Manager's huge input since his arrival in 1995 to bring the Aviation Section chaos under control and bring a level of expertise only found through the years of experience he has had in the aviation industry. Norman McKelvey, joining into the spirit of the event took us through a progressive photo presentation of the work carried out on a number of the aircraft completed and on display in MOTAT 2's Aviation Display Hall (ADH), including the Avenger.



Left to right: Those members of the MOTAT Aviation Section that were involved with the Avenger restoration and present at the 'launch'. Chris Hammond, Norm McKelvey, Keith White, Bob Deacon, John Wilding, Peter Butterworth, Jonathan Pote, Albert Parrington, David Harvey, Graham Choat, CS Shum/Clive Lye (in wheelchair), Owen Reeve, Henry Swan (yellow), John Dykes, Rex Hurley, Les Graham, Frank Hannay, Rex Stanner. Missing: Peter Kelly, taking the photo!

MOTAT CEO, Michael Frawley, joining in the spirit of the occasion thanked Norm for his years of work for MOTAT, his speech exposing some of the lighter facets of Norm's career as well as the highly respected and invaluable expertise that he shared to raise the standards of workmanship via ongoing training of volunteers in many of



the old aircraft building skills including wood and fabric work as well as the metal works of current usage. Michael has proposed that the Aviation Volunteer crew-room will from

now be renamed the Norman Mckelvey crew-room recognising the man and our appreciation. A door label made of the aircraft alloy Duralumin is proposed for the door! [and has since been installed as above.]

We were also fortunate to have had in attendance several senior staff and board members including Dr. Lesley McTurk, our MOTAT Board chairperson who presented Certificates of Appreciation on behalf of MOTAT, the Society, and Board, to Albert Parrington and Ken Newland for their long service. The opportunity was also taken to present MOTAT Society Life membership certificates to Bill Rayner and Len Ellison (who was unable to attend), as well as John Dyke receiving a certificate from the Society for the prestigious Lush Award for his work.

Afterward Lesley said that it was an excellent opportunity for her to learn more of the expert and valuable input that the volunteers continue to have at MOTAT. We are grateful that we have a person of Lesley's experience and background who is prepared to come out and meet the volunteers in their environment and absorb some of the motivation that drives us. *

For more on the MOTAT Avenger restoration and history see Driving Wheel issue 2, page 29. This is available online under the magazine archive page of our website at www.motatsociety.org.nz



Left to right: MOTAT CEO Michael Frawley, Albert Parrington receiving his certificate from Dr McTurk (MOTAT Board Chair), and Henry Swan (MOTAT Aviation volunteer and MOTAT Society committee Deputy Chair)

In the back ground, behind Michael, lurks the Hastings flight deck within the nose assembly. This project is already underway as a very rare opportunity/ visitor experience to view a ninety fifties, five man walk in flight deck complete with instruments and controls.

The Handley Page "Hastings" main wheel (undercarriage and engine mounting) is almost ready for display with the expert volunteers having successfully completed the hydraulic lift and retract system ready for display. Safety screens are yet to be built! So lots more is going on in Aviation land



Some of the eighty attendees at the Avenger Launch showing a forward view of the aircraft with the wings in "fold" position, with Norm McKelvey speaking in the foreground. The Avenger was the biggest single engine aircraft of that era weighing eight point one tons A.U.W. This was made possible by the Wright Cyclone R-2600-20 twin bank radial engine with 1900 HP available at take off RPM.

An update from MOTAT's Road Transport section

- text and photos by Kim Heppner

On December 18th, 2013 a group of around 15 Road Transport section members and friends met at Hillsborough Hospital for the celebration of two of our members who are no longer able to take an active part at MOTAT.

Austin King and Ken Ramsay each received a Certificate of Appreciation, for their contributions as volunteers in the Road Transport Section at MOTAT. Society Administrator Tessa Phillips presented the certificates and letters of appreciation on behalf of the MOTAT Society, Board and Museum and thanked them for their dedication since joining and for the good works which they had done so competently. Thanks and recognition were also offered to all those in the road transport team for their efforts.

Earlier in December 2013 a group of Volunteers and some MET Team personnel accompanied our **NEW MANAGER, MURRAY WILSON**, to Ken Ramsay's house to empty out a treasure trove of neatly labelled nuts, bolts, electrical components and test gear which Ken had set aside for MOTAT as his house had been sold. What with some metal scrap, lubricants, paint etc the MOTAT truck and van did several trips to and from the house. Suffice it to say that Road Transport section won't ever need to purchase any fasteners again!!



Austin King and Ken Ramsay

Thank you Ken!

Ken Ramsay: Ken, a MOTAT volunteer for at least 30 years and a Society Life Member since 2004, rewired many vehicles in the Road Transport workshop, but did most of his complete restoration work in the home garage where he had all his own gear. Among the innumerable projects he undertook were; the Lansing Bagnall Jitney, a motorised luggage trailer, (now with rail), the blue orchard trailer, the Brush car, the Trekka, and the Reliant 3 wheeler delivery van. He also



Current and former MOTAT Road Transport team members gathered at the Hillsborough Hospital presentation.
Back Row: Ray Smith; Dave Blundell; John Triggs; Ken Fleet; Ian Hambly; Brian Hambly; Austin King; Murray Wilson; Kim Heppner.
Front Row: Bill Fox; Ken Ramsay; John Holland.

reconditioned carbs, magnetos, starter motors etc for MOTAT vehicles.

Ken's photo albums documenting his MOTAT restoration work will be an invaluable tool for those that follow in his footsteps and will be available from the MOTAT library. The Library has also been working to record some oral histories from Ken.

Unfortunately Ken passed away, on 30th January 2014. He will be fondly remembered with his legacy living on through his work for MOTAT.

Austin King: Austin, spent most of his time at MOTAT being the mechanic. Always helpful & courteous, he helped everyone with mechanical problems they were having with restorations, got vehicles running for parades, displays etc. and was a general source of solutions for things engineering and mechanical. He made all sorts of needed things up on his lathe, which he had brought into the workshop.

Some of his restoration projects were, the 1930's Farmall Tractor, the ex Rangitoto White bus and the Desoto and Dodge gearboxes

"Austin was a very much needed member of the Road Section as he was the 'Go to guy' to sort out and advise all the other members on their restoration projects. He kept the restorations flowing!"

Their Citations state: "The museum is indebted to volunteers such as yourself who give their time and skills freely for the privilege of being active custodians of its collections".

In the workshop: the finishing touches have been put to the Bedford Tow Truck (**below**) which a team have worked on for many months and it will be going on display outside the workshop in the next week or so. The aim of the project was to get it finished as a "working shop vehicle" rather than a concours restoration and it really looks the part.



The excitement of the New Year has been the arrival from Germany of a box containing a new "bubble" Perspex dome and the many parts which were missing from our Messerschmitt KR200 Bubblecar (**pictured below, and above the new dome with Ken Fleet and Kim Heppner**). We have been fortunate to have had a huge amount of help and guidance from the Messerschmitt Club of Germany and two of their members gathered up the various parts which we had identified as missing from internet catalogues. They then packed them all in a case and arranged to have them sent to us in Auckland, truly a labour of love for which we are very grateful. As soon as the body parts are repaired and painted Ken Fleet and I will begin to assemble the jig-saw!!

Also during the next few weeks we need to get ready the vehicles which have been earmarked to go in the new "Stars & Cars" exhibition. Murray has begun to organise this in between all his other duties. He has had a hectic beginning in his new role! ✨



Society member William Irwin travelled to Europe in late 2013 and writes a little on his visit to the German Museum of technology in Berlin.

Deutsches Technikmuseum, Berlin

- Text and Photos by William Irwin

In Berlin I had the opportunity to visit the German Museum of Technology (Deutsches Technikmuseum) in Kreuzberg south of Potsdamerplatz. This museum is very similar in concept to the MOTAT museum in Auckland but not as big in ground area. Nevertheless they have very impressive railway history and Aeronautical displays. My main interest here was to see their special display right near the entrance of Konrad Zuse's Z1 mechanical computer.



I was very impressed on entering the museum lobby that some of their unique items were immediately on display. Straight ahead was a magnificent Jacquard loom from the 1920s with the continuous punched program cards clearly to be seen above (*pictures above and below*). This



loom produced ribbons of different patterns as determined by the punched cards, as opposed to the Jacquard loom at MOTAT which is a carpet loom. Also in the foyer was a large workable street organ, a working striking clock mechanism and the Cessna 172 airplane suspended overhead in which the young German pilot Mathias Rust flew to Moscow and landed in Red square in May 1987.



Just up the stairs on the first floor level was the Konrad Zuse exhibition which displayed most of his computers from the early 1938 mechanical Z1 replica (*pictured above*) and the working 1943 electrical Z3, to the final 1962 Z31 which could not compete against the IBM 360 and led to the sale of the Zuse company to Siemens.

This revealed a side of computing history practically unknown to our American-British perspective of computer history. Konrad Zuse built the **first ever programmable mechanical computer based on binary arithmetic** (rather than decimal arithmetic), the Z1, in 1938 in his parents Berlin living room in Kreuzberg about 4 blocks away from the current Technical museum! Programming was on punched celluloid film (*below*) as paper tape was too expensive. Both the Z1 and Z3 computers were destroyed during the war, but Zuse rebuilt the



Z1 replica from memory in the 1980s.

We were privileged to be able to meet Hadwig Dorsch, director of the Department of Mathematics, Computer Sciences and Production Technologies of the museum, who gave us a personal tour of the Zuse exhibition. She had worked with Zuse when re-building the replica Z1 completed in 1989. It is no longer demonstrated since Konrad Zuse died, as it is temperamental and would halt when fine metal dust from wear of the metal parts would clog it up and only Konrad knew how to locate and fix it quickly depending on where the calculation had stopped. We had the opportunity to thoroughly study the Zuse computers as well as the comprehensive computer history timeline set up around the walls.

As a teenager Konrad Zuse used Metal construction systems (probably Marklin) and the display has a picture of a vending machine he built as a student that featured a dial for selecting among various products. The machine calculated the difference between the price of the item and the amount of money deposited and returned the correct change automatically! Also as part of the display there was a collection of loose parts (probably Eitech) in a hands on section for children (or adults) to build some models.

There is a large textile area on the 1st floor including more looms and a thread braiding machine combining different coloured threads into one thicker cord.

The telecommunications display included many telephones and teleprinters as well as a huge telephone exchange used in pre-war Berlin.

The very large railway collection is arranged in two roundhouses each with a turntable outside. It includes the first German built steam locomotive "Beuth" (**pictured below**), several huge German style steam engines, Kaiser Wilhelm's personal railway carriage, and a wooden cattle truck, complete with display material, which was used to convey Jews to Auschwitz concentration camp. It was very emotional standing inside this truck with only 2 small windows high up on each side.



There was also a working beam engine demonstration, but no live steam!

A brand new building houses the Aircraft collection of 26 aircraft including a complete Lufthansa Junkers JU52 tri-engined passenger plane from the 1930s with corrugated wings and fuselage. On the roof of the building outside one of the American aircraft used during the American Berlin airlift during 1948/49 is prominently suspended.



All in all this is a very well set out museum, fortunate enough to have significant historical material on hand for display. I did not get around to seeing the road and tramway displays which were located in a separate building complex nearby. *

For more info you can visit their English language website at <http://www.sdtb.de/Museum-of-Technology.547.0.html>

MOTAT Society committee news

The date for the MOTAT Society AGM has been set for the evening of Wed 24th September 2014, if you would like to pop this in your calendars.

Committee Meetings this year are currently planned from 6pm on the **SECOND TUESDAY of each month** at MOTAT. You can request to come along as a guest but as this is outside museum opening hours we need to arrange access so let us know in advance; also to confirm location, date, time, and catering.

Committee: Leyton Chan (Chair and Tram Rep), Henry Swan (Deputy Chair and Aviation rep), Bill Rayner, Chris Chitty, Frances Young, John Syme (Steam Rep), Kim Heppner (Road Transport Rep), Peter Cairncross, Philip Heath, Roger Curl (Rail Rep).

News from the Steam Section

- By Tessa Phillips (thanks to Mike Austin and Andre Pointon for additional information)

Photos © MOTAT

It is time to say farewell to one of MOTAT's most familiar and beloved public faces. For 13 years Mike Austin has operated the boiler and steam engines in the MOTAT pump house and shared his incredible knowledge with visitors (**pictures right and below**). If you ask people about their visits to MOTAT, invariably any interaction they've had with Mike will get an enthusiastic mention! The 10th January saw a low key farewell bbq breakfast on the Cropper House lawn for those of the MOTAT team able to attend, with stories shared and thanks given by MOTAT.

His enthusiasm, and what he has done in bringing the pump house to life on week days, will be greatly remembered and sorely missed but we wish him well in his future endeavours!

Mike has for over 30 years been involved with the Glenbrook Vintage Railway and is now moving on to pursue his rail interests. He is re-training as an engine driver (Locomotive Engineer Suburban) with TransDev, as part of the first class to train at their new Wiri Depot. He will start out on diesel multiple units then plans to move on to the new electric units due to start operating in Auckland later in the year (the mock up electric train currently in MOTAT's Energiser building gives an idea of what will be coming).

Mike has joined the MOTAT Society so he can keep in touch with people at MOTAT and we look forward to catching up with him at future events! Once his intense training period is over he also hopes to return as a Steam Section Volunteer.



Another change in the Steam section is that long-time MOTAT volunteer, Society member and former Society committee member Ken Pointon is stepping down as Steam section collection manager, but will still be returning on occasion as a steam section volunteer.

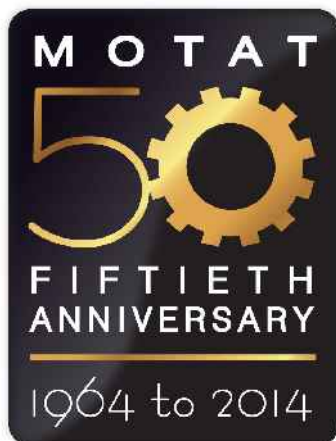
Ken has been involved with MOTAT since 2001 and took on the role of Steam section collection manager in 2002, recruiting suitably skilled new volunteers to grow and revitalise the section. Thanks Ken for all your efforts!!

With Ken at the helm, the MOTAT steam section has achieved a great deal including:

- Re-installing the pipework and returning the Pumphouse boiler and engines back to steam after the 2001 rebuild;
- Installing the McLaren traction engine at the front of the Pumphouse and setting it up as a working day to day display;
- Restoration of the Beam Engine back to steaming condition after a period of 80 years, with the work receiving the joint Engineering Heritage Australia & IPENZ 2009 Colin Crisp Award as well the 2009 UNESCO heritage award;
- Researching and putting together of the 260 page book "The Beam Engine and Western Springs Pumping Station";
- Setting up of a workshop for the restoration of the numerous steam artifacts that MOTAT has in its collection and as a display of vintage machine tools.

There are numerous other engines etc that have been or are in the process of being restored for a future steam and energy display.

We plan to have more on the Beam engine restoration in the mid-year edition of the Driving Wheel. *



Here is the 50th anniversary special edition MOTAT logo, which will be used as part of the promotion of MOTAT's 50th throughout 2014. The Museum has activities planned for later this year so keep an eye out on their website for information www.motat.org.nz

Board member profile – Hon. Judith Tizzard



I'm delighted to join MOTAT's Board at such an interesting time in the Museum's development. The MOTAT Act 2000 and the Auckland Council's generous funding, along with MOTAT's amazing collection and the talented and expert teams of volunteers, provide a solid base for a unique and innovative Museum. MOTAT is New Zealand's museum of the past, of the present and for the future. We all have a big job to do to get it to it's next stage.

I look forward to learning lots more about the people who built Auckland and New Zealand and of the technology they used to build our world. It's great to see my father who was a navigator on Lancaster bombers, showing his 6 year-old great grandson around MOTAT and watching them both getting excited about ideas that may change all our futures.

Much of my career in regional government, and as an MP and Minister has focussed on building Auckland's and New Zealand's physical infrastructure as well as on New Zealand's arts, culture and heritage. People at MOTAT have played vital parts in delivering these connections that make our lives possible and I hope to work with them to build MOTAT so it can tell their stories for the next 50 years. I'm delighted to finally have the time to bring these different parts of my life together and learning so many of the things I wish I'd known earlier!

Please don't hesitate to email or ring me about anything this new Board member needs to know.

judith.tizard@gmail.com 09 3606432, 021 461664



Membership Renewals for the 2014-2015 year: -Tessa Phillips, administrator.

Just to let you know that all members should receive by post a renewal letter outlining how to confirm your MOTAT Society membership for the 1st April 2014 to 31st March 2015 subscription year.

Please take the time to review the letter carefully and take appropriate action to ensure you continue to receive your MOTAT Society membership benefits. If you have not received the letter please let me know. Many thanks for your assistance in this. The Museum has kindly agreed to continue free individual entry for Society members.

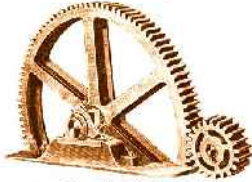
Note membership fees remain a very reasonable \$35 for general members and free for MOTAT volunteers/staff/life members. Note at the December 2013 committee meeting it was decided that the temporary discount of the general membership fee for members of affiliate groups (which was instigated during the rebuilding of affiliations) will not be continuing this year and further information will be forwarded to those few affected.

Karaka Vintage Day. 23rd March 2014

(See driving wheel issue 6 back cover for details or visit karakavintageday.co.nz)

The MOTAT Society has booked a stall for this day, and will be attending to promote the Society and Museum. We would love to have some displays from members to liven things up, so if you aren't involved through another group and would like to come and help, or display something small please get in touch with Frances or Tessa (see contacts page 1). We will be arranging details over the next month. Otherwise we hope to see you there anyway, should be a great day!

MOTAT



SOCIETY

**MOTAT Society Visit to the
The Kauri Museum, Matakoho**
www.kauri-museum.com

Family and Friends welcome

When: Saturday 22nd Feb 2014.

We are planning to be at Matakoho from about 11:30pm- 2:30pm
and planning to be back in Auckland by 5pm

Transport: we will arrange a bus/minivan leaving MOTAT at 9am
(\$10 contribution requested) or you can make your own way and meet us there.
Please let us know if you or someone you know might be willing to help with driving.

Discounted Kauri Museum Entry: \$10 per person
(normally \$25 adult, \$20 senior/student)

PAYMENTS: Please bring CASH or CHEQUE

BBQ lunch provided (incl sausages and salad): \$10 per person:

We will share lunch with some of the Kauri Museum team, with some informal speeches to mark the occasion and the historic link between the museums. There is also a cafe available on site. Before and after lunch there should be time to explore the museum. They are arranging some volunteers to be available to operate some of the engines and a couple of other options may be available to us if there is enough interest:

- Option 1) **textile collection** - if there is enough interest they will organise a volunteer to show these
- Option 2) if you want to see **Totara House** we need a minimum of 10 for a guided tour- extra \$10 cost per person

Please send final RSVP to Tessa by Friday 14th Feb on

ph (09)3909160, mobile/txt 021-0479973, or email admin@motatsociety.org.nz

I need to know:

- Name
- Number planning to attend
- Whether you would like to use the shared transport or make your own way
- Contact ph/email for final transport arrangements if needed
- Any special needs (eg wheelchairs, walkers, dietary etc),
- Whether you are interested to see the **Textile collection**
- Whether you'd like to visit **Totara house**.

This notice follows on from our Christmas 2013 update which notified of this event and the historical link between MOTAT and the Kauri Museum. Society Members and MOTAT Staff will also receive a copy of the Kauri Museum brochure with this newsletter, and hopefully you'll be inspired to come along. It should be a fun and informative day!

Many thanks to the Kauri Museum CEO, Betty Nelley, for helping arrange this and she also adds "*The Award Winning Kauri Museum at Matakoho is one of New Zealand's foremost theme museums. It celebrates the industries and cultures surrounding the giant kauri trees which once covered New Zealand. It has more than 4500 sq mtres of under cover attractions. The lives of the pioneer timbermen and gumdiggers are depicted in life-size displays that feature lifelike mannequins. It has the biggest Kauri Gum collection on display in the world. It also has a fantastic collection of antique Kauri furniture. This Museum offers something for everyone.*"