



MOTAT
Celebrating
1964-2024



The Squeaky Wheel

Issue #50 - April 2024

Welcome to the first of four Squeaky Wheel special issues to celebrate the 60th Anniversary of MOTAT and the MOTAT Society. The MOTAT Society is excited and honoured to join with MOTAT to celebrate six decades of camaraderie, achievement, and the enduring passion for heritage transport and technology, and ongoing kiwi innovation.

Over the course of 2024, we will embark on a nostalgic journey through time by remembering big events and little details, incredible people and their contributions; and some highlights and special interests in the MOTAT Collection. We'll include segments like 'I Remember When,' 'Biographies,' 'My Favourite Item,' and 'Collection Highlights' alongside our usual excursion and event updates.

If you have an idea for an article, a special MOTAT history memory, a favourite item you'd like to highlight, get in touch. We'd love to include your memories and ideas in the next issue!

Thank you for being an integral part of the Society's story and supporting the museum. Here's to 60 years of MOTAT and the MOTAT Society and our shared values and collective commitment. We hope you enjoy the 60th Anniversary special issues for 2024.

Makyla Curtis, MOTAT Society Chair

I REMEMBER WHEN - 16th DECEMBER 1967

I remember the opening of the Western Springs Tramway. It was a grey and overcast day and it turned to rain before the time came for cutting the ribbon. Everyone said it was a good omen and signalled a great future. Apparently, it had rained on the original opening day of the Auckland Tramway in 1902.

The team of volunteers had started to build the line in 1964. Engineers from the old Auckland Tramways were sceptical that a bunch of young and inexperienced people could build a tramway and get it to operate. However, those engineers were proved wrong and the youthful volunteers, under the watchful (very watchful) eye of Ian Stewart (then an Auckland Harbour Board engineer) pulled it off.

The Western Springs Tramway opened just over 65 years after the opening of the original Auckland Tramway and eleven years after the Auckland street tramways had ceased. It has now been running for over 56 years, two years longer than the trams ran in the streets of Auckland.

Today the tramway runs seven days a week, 364 days a year, and is a vital link between MOTAT's two main sites.

by Alan Curtis



Above: 17 Dec 1967. Opening of Western Springs Tramway, 1967, 05-1776. Walsh Memorial Library, The Museum of Transport and Technology (MOTAT).



Above: Tramway tracks inside MOTAT 1, 05-1791. Walsh Memorial Library, The Museum of Transport and Technology (MOTAT).



Above: 1960s. Portrait of Ron Richardson, 04-2242. Walsh Memorial Library, The Museum of Transport and Technology (MOTAT).

BIOGRAPHY: RON RICHARDSON

Ron Richardson was appointed as the first full-time director at the Museum of Transport and Technology in November 1970. He had come on a "secret shopper" visit before he started and was very concerned about the number of artefacts out in the weather. Dealing with this became one of his goals.

Ron was a larger than life figure. He was charismatic and convincing. He encouraged innovative and entrepreneurial ideas. People would arrive with the stuff they had cleared out of their basements and storerooms, and he began a major expansion of the collection.

He would encourage people to come and help and set up new sections within the museum. If someone turned up with a number of pushchairs and prams, he saw this as an opportunity for a new specialist collection.

Throughout the 1970s many well attended live days were held. Ron's focus was on getting the paying public through the gates at any cost so he sought out things he thought would attract visitors, such as double decker buses (very new to Kiwis in those days), live animals and live music and other activities in the grounds.

In June 1977 Ron arranged for Jean Batten to come to NZ to open the Pioneers of Aviation Building and got her to help with fundraising for MOTAT and the Keith Park Memorial Airfield at Meola Road. The story is that he invited her around to his and Loy's home for coffee – and she stayed for several months.

In April 1980 – Ron retired from MOTAT. He was a key player in the history of Motat and is fondly remembered.

By Alan Curtis



Below: 15 Nov 1973. Pearse No 3 airplane : opening ceremony, 03-683. Walsh Memorial Library, The Museum of Transport and Technology (MOTAT).



Below: 1972. Presentation of Pearse medallion to Smithsonian Institution., 03-1497. Walsh Memorial Library, The Museum of Transport and Technology (MOTAT).



B I O C O A L T R I A L A T M O T A T

MOTAT has partnered with SCION to test and roll out a new, low-carbon, artificial coal made from forestry slash. Slash is the woody debris waste product created during logging operations that is usually left on the ground. In dry weather slash can be a fire hazard and in wet weather can be washed away causing damage infrastructure and farmland. SCION wanted to find a way to tackle the concurrent issues of finding commercial slash removal, making use of a waste product, and helping find a sustainable replacement solution for coal.

Untreated and unprocessed wood material can be burned as-is but it is problematic because it has high bulk but low mass, and furnaces would require extensive modification to make it work. BioCoal can be substituted within existing fire grates without needing remodelling. Additionally, BioCoal is a theoretically carbon neutral process if the trees are replanted. By using leftover/waste products, BioCoal means burning no additional carbon or other materials than the trees originally contained.

The slash is not just a simple pressed wood pellet but undergoes a torrefaction process – like pyrolysis but at lower temperatures. The slash is first dried in a kiln, with the heat coming from steps later in the process. Torrefaction then occurs in a closed reactor vessel in an oxygen-free environment, at around 200-300°C. The resulting dark powder is then pressed into brickettes with similar energy density to coal.

Presently, production of BioCoal is at quite a small scale. A couple of tests have happened at MOTAT in steam tram No. 100 under the supervision of Tony Messenger. The results so far are good. At the Tram Live Day 2023 passengers and other tram crew reported a more pleasant smoke, and the No. 100 crew reported less ash at the end of the day. Further, the ash wasn't toxic like it would be with coal.

The next step for SCION will be to increase the production scale and extend testing. For MOTAT, this creates an opportunity to embrace innovative science and technology, as well as securing a low-carbon or carbon-neutral future fuel source for our steam-powered collections.

by Scott Pilkington and Tony Messenger



Above: Tony at the COTMA conference in Oct 2023 with his presentation on BioCoal.

MOTSOC RETURNS TO FORT STONY BATTER

MOTAT Society returned to one of our favourite excursions, Fort Stony Batter, a World War 2 tunnel network and gun emplacement on Waiheke Island in the Waitematā Harbour. Guided by archaeologist Tim Moon, we explored the tunnels and gun emplacements built as part of the defence complex to protect Tāmaki Makaurau from foreign invasion.

Our tour was followed with a great lunch at Wild on Waiheke. Thank you to Tim and the DoC team at Fort Stony Batter for an interesting tour and thank you also to our wonderful (and patient) driver Rohit from Waiheke Bus Co, our transport for the day.

by Scott Pilkington
Photos by Scott Pilkington,
David Kannu, Karen Triggs



MY FAVOURITE ITEM IN THE COLLECTION...

One of my favourite collection items at MOTAT is the Farley Proofing Press located in the Print Shop at MOTAT Great North Road. *Proofing Press [Farley], T12801. Museum of Transport and Technology (MOTAT)*

What is it?

It is a table top proofing press with a flat bed, and an adjustable cylinder which is driven by bearers alongside tracks. The press is designed to be adjusted to run at type high or with an added galley height. That means there is a gap of 0.918 inches / 2.33cm between the bed and the cylinder. That's standard type height in the UK and New Zealand (and many other places). But because it is a proofing press, you can add some height if you are placing a galley, or a metal tray, where set type projects are kept.

It is hand-inked, which means the operator uses a separate hand roller to ink up type of picture blocks in the bed. And it is hand-fed, which means once inked, the operator lines up and places the paper over the type, before rolling the cylinder across.

Where and when was it made?

The Farley Model No 11 was introduced in 1955 and manufactured in Croydon by Farley Engineering Ltd

What's its NZ story?

Whether this press was purchased through the Farley sole agents in New Zealand, Morrison Printing Inks & Machinery Ltd, or if it was brought to New Zealand from the UK, is unknown.

The press's provenance is unknown, but since it has been part of the Print Shop Collection it has had a rich history of printing Christmas cards and letters at MOTAT Christmas lights. Thousands of hands have gripped the roller handle and pulled the cylinder to create their very own print. Day to day, the press's primary job is to pull quick proofs to check how a picture block might look, or to check handset type before it goes on one of the bigger presses for final printing. But the proofing press is also used for final prints when printing something a little more bespoke. It works well with experimental materials and has printed on silk, cotton and tapa cloth.

Why is it important to you?

Because it is hand-fed, hand-inked, and can safely work with experimental materials, this press is an ideal companion to innovative printing methods and suits my art practice to a T. In 2020 the Farley Proofing Press went on loan to the Corban Estate, where an exhibition titled *Ground Work* was on at The Barrell Store. The opening event had an interactive element where I printed a collectors fern cards based on the historical pteridomania, or fern craze of the 1800s, for everyone to take home. Fern collecting was a very popular hobby, and at its peak people would buy pressed ferns from vendors at train stations all around Britain. Similar activities occurred here in Aotearoa. I was printing directly from a fern specimen: this is called nature printing. The specimen was bracken / aruhe, collected at Corban Estate a month earlier. As I printed, the Western Line train rumbled past. The Farley printed numerous prints for people to take away. One of those prints is now housed at the Angela Morton Room, the Takapuna Library.

By Makyla Curtis



Above: The Farley Proofing Press in use at Corban Estate, The Barrell Store, February 2020. Photos by Richard Kearney. *Proofing Press [Farley], T12801. Museum of Transport and Technology. (MOTAT)*

If you would like to share your favourite item in the MOTAT collection, send in a contribution - 200 words, and a link to the item on MOTAT's collections online.

Items can be viewed at <https://collection.motat.nz/explore> or contact the collections team on collections@motat.org.nz

MOTAT SOCIETY

MOTAT Celebrating 60 Years 1964-2024

T-SHIRT DESIGN COMPETITION

THE DESIGNS ARE IN.

IT'S TIME TO VOTE FOR YOUR FAVOURITE TEE

HEAD ON OVER NOW TO...

www.motatsociety.org.nz/competition

VOTING CLOSSES 27/05/2024

MOTAT SOCIETY/TRAMWAYS DOCKLINE BBQ

On Saturday 9th March, James and his team at Dockline Tramway hosted MOTAT Society for the tram social BBQ. We had a bunch of rides on their two (Melbourne) trams, X1 class No. 466 and SW6 class No. 881. Those who wandered into the shed also got a tour of 881's sister, No. 852 currently under restoration.

Thanks to Jodie and Alan for putting it all together, to Liz at HeartsContent for the great delicious food and to James and his team for hosting us.

Words and Photos by Scott Pilkington



MOTSOC TAKES FLIGHT - VISIT TO ARDMORE

26 intrepid MOTAT Society aviators travelled to Ardmore airfield for the Fly DC3 flight and a visit to the Warbirds Museum in March.

First up was refreshments including champagne at the Fly DC3 hangar then all aboard for a half hour flight across Auckland in Betsy, a 1944 vintage DC3 from the US, repainted to represent one of the last two DC3s in service with the RNZAF, aircraft NZ3546 of 42 Squadron.

In typical heritage aviation style, we were all out of the plane again after 15 minutes and the engine runup as a leak had developed in the starboard engine. Once attended to, the flight in slightly "bumpy" weather took us out across to the CBD, around to MOTAT, and then across Auckland International Airport to Ardmore. A wonderful experience.

Fly DC3 were very appreciative of the Society's support.

continued overleaf...



The Warbirds Museum was very interesting with two hangars, one for WW II aircraft and the other for WW I, all aircraft in flying condition, with the WW I aircraft being replicas with modern additions for flight. Of particular interest was a Ryan WW II trainer aircraft once owned by MOTAT, and donated with the condition it be kept flying, which Warbirds handle, and a 1917 American Field Service ambulance previously maintained by the MOTAT Military Section.

*by Bill Rayner
Photos courtesy of Karen Triggs, Bill Rayner,
Richard and Robyn Brown, and Michael Smith*





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