



# The Squeaky Wheel



Issue #41 – December 2021



## - SEASON'S GREETINGS - FROM THE MOTAT SOCIETY

Your MOTAT Society Committee wishes all our wonderful Volunteers and Supporters a very Merry Christmas and very good wishes for a Happy New Year. We hope that 2022 will be a good Covid-free year for you all. Our wish for you is to keep safe and healthy during these difficult times.

Enjoy the holiday period with your family and friends and at the same time relax and enjoy the break. We have so many involved in various areas and capacities within MOTAT – volunteers, staff, general members and life members alike – that it is impossible to individually greet each of you, but you all deserve a good rest with time to recharge your batteries.

We also wish to take this opportunity to thank you all for the wonderful work you have done and do that adds up to making our MOTAT such a success. Final thought.....I know that I am getting really old now, even Santa is looking younger than me this year...

- From Henry Swan -



Checking the split pins....

As the season warms and we move outdoors it's timely to check the fixings and connections.

Think of building bridges – the importance of, as painted by Colin McCahon, the harbour bridge and the human connections made possible over this and other such structures.

The trains, planes and written material that have an expressed purpose and heritage of connection, taking people to people.

Think of Vincent van Gogh's connection to his brother Theo (a letter 1874) ...let us simply go on quietly each their own way always following the light and let us remember that it is good to have love, one to another, namely of the best kind that believeth in all things endureth all things and never faileth...

Safe travels - Merry Christmas and Happy New Year from the MOTAT Society.

- From Bruce Wild -



## JIM SAVAGE - RAILWAY LOCOMOTIVE ENGINEER RETIRES FROM MOTAT RAIL WORKSHOPS

With great respect for his mechanical expertise, experience and 40 plus years of service to MOTAT, the Society wish to acknowledge the retirement of Jim Savage, Rail Workshop Engineer.

Throughout the 80's and 90's Jim was an integral part of the volunteer team, both in the workshops and as a locomotive driver after achieving his driver's qualification in November 1977. He was involved with the original restoration of L507, and after taking on the paid workshop engineer's position in 2004, a role he has held for 17 years, he was heavily involved in L507's third overhaul in 2007/8.

Jim's reputation and legacy remain within the workshop and award-winning restoration of locomotive



Jim with Meg under steam test.



Jim on the first running day with Meg.

F180 Meg Merrilies, a project Jim started in 1982 which continued at a slow pace and with limited funding for many years. Ultimately Jim saw this project to completion in August 2018 and his role has transitioned to Meg's "live day" driver.

Jim made the decision to retire in June, but whilst MOTAT is losing Jim as a staff member he will be staying on as a volunteer. The MOTAT Society wish Jim many happy years of retirement and continued volunteer contributions to the Museum and the Society. Jim is a life member of the MOTAT Society.

- Notice and photos by Bruce Wild -

# WORK IN PROGRESS – THE PRINT SHOP

Although being a difficult and stressful time for many, reaching level 3 of lockdown presented a special opportunity for some works to be carried out in MOTAT's Print Shop. Stephen Penney, MOTAT's new Print Shop Operator, had been assessing previous issues that the Print Shop team had been having with its Heidelberg KSD Cylinder. Over the years the various users of the machine had noticed a clunking noise when the machine was in use and it couldn't be operated much faster than its minimal operating speeds.

After analysing the problem and a call to a friend at Heidelberg in Germany, the issue appeared not to be with the machine itself but with the way the machine had been mounted – in an area of the print shop that traversed the veranda that was formerly there. As such the machine had been mounted across brick remains and a rather large dip in the floor. It had been placed on chocks to account for this and although fine as a temporary solution this isn't ideal for the longevity of the machine or operating at maximum efficiency. The ideal solution to this would be to mount the print machine on a new concrete pad sufficiently strong and large enough to take this 4.5 tonne machine.



*Above: Heidelberg Cylinder mounted in its former position with Linograph machine moved out from corner of room.*

In non-Covid times it would have been very difficult to justify the closure of this area for the works to be undertaken but the lockdown meant that the opportunity was available. Enabling these works would mean moving a large number of items within the Print Shop just to make room enough to move this large machine. Stephen was keen, and with the help of his manager, Collection Operations Coordinator - Louis Eaton, they set about doing the work.

The first item that needed to be moved was the 1908 Linograph machine, a Linotype style print machine that had been sitting in the corner of the Print Shop for a long time. Moving this item would free up a lot of space within the Print Shop area and, as it wasn't used by the team the best place to keep this item would be to rehouse it at M3.



*Above: 1908 Linograph palletised ready for storage at M3.*

Another item that would be palletised and returned to its owners would be a large wooden common press made by a former volunteer, Frank Brough.

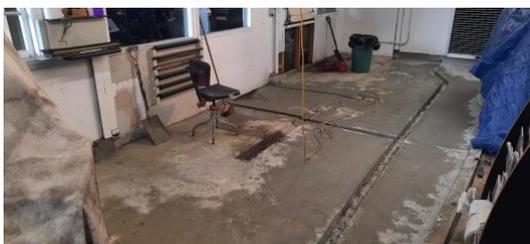
Next, we set about placing a number of the other non-used or lesser-used type cabinets into the overflow storage we had available for Print items. A number of items were already stored in this area but these needed re-arranging to make the space easier to place more items. A lot of time was spent shuffling all of these items to and fro but eventually a home was found for everything we needed to move.

After we managed to create the space to allow us to move the Heidelberg Cylinder, we were left with a large amount of room with which to set the new concrete pad. The old concrete floor then needed to be cut to provide a new foundation for the new concrete pad to sit on to successfully take the weight of the Heidelberg.

Next, we boxed the area off and prepared the floor for pouring the concrete. This involved installing metal mesh and anchors into the ground.



*Above: Type cabinets stacked and stored in depot storage.*



*From top to bottom: Fig#1. Items rearranged into a much tighter configuration to create more room in depot storage. Fig#2. The problem area where the Heidelberg Cylinder had formerly been installed. Fig#3. Channels cut into the old concrete floor.*

For the concrete pour we drafted in the help of two of the Print Shop volunteer team, Willy Coenradi and Denis

Wadsworth, as this would require considerable manpower to move and pour the 3 or so tonnes of concrete necessary for the job.

Now the hardest part of the job is done we are ready for the final phases of the work. This shall involve the following tasks:

- Paint the floor and give some of the walls a paint ready to receive the machines back.
- Get the room rewired with new triple-phase and single-phase outlets where required along the side of the room with the large print machines.
- Re-install the Heidelberg Cylinder and move the Heidelberg platen alongside.
- Install handrail along the new concrete pad.



Above: Half-way through the concrete pour.



Above: Concrete pad - boxing removed, ready for a clean and a paint

- Rationalise the ink supply and create necessary hazardous goods storage for the inks and any chemicals in the print shop.

We hope to have all of this achieved before Christmas so we can start afresh in the new year.

Below: Anticlockwise from left - Stephen Penney, Louis Eaton, Denis Wadsworth & Willy Coenradi after successfully pouring 2-3 tonnes of concrete.



-Photos and article by Louis Eaton, Collection Operations Coordinator-

## FAREWELL TO KEN NEWLAND & OTHERS

I don't believe that any of us at the time had any realisation of the hugeness of the contribution that MOTAT and co-ordinator KEN NEWLAND were making to the lives of the young people who attended MOTAT Aviation Gateway Programme. Ken's hands-on training empowered so many young adults for a future in an engineering world and in particular took these school-aged teen students on a path that revealed skills that they themselves had no idea they had. Ken's light manner of delivery and his ability to impart the knowledge required, allied with his own demonstrations of personal manual dexterity (honed through years of working experience) inspired and encouraged all of the Gateway attendees.

I do remember Ken telling me, with no small degree of justified pride, of one young lady who achieved an engineering apprenticeship with Air New Zealand as a direct result of the Gateway Programme. She beat several boys to that competitive entry apprenticeship and credited her success to Ken by his awakening her dormant skills to an understanding of the art and craft metal work. I'm certain there are many similar stories and we at MOTAT Aviation would be most pleased to hear them. Ken really enjoyed his work and donated priceless input into the future of those Gateway attendee successes.

There are also many anonymous examples of Ken's skills in the ADH. Skills which have contributed to and directly saved aeroplanes from disappearing into a pile of corrosive aluminium oxide.



This very highly skilled work will always remain anonymous, known only to the persons themselves and perhaps a few who worked alongside them on a particular project during that essential era of restoration. An era which was so necessary to save the often vandalised, time weary and weather ravaged aeroplanes from the scrap dealers.

Ken, along with the many other ADH Aviation Engineers, many of whom have also since died, contributed to the restoration of most of the aeroplanes now on display in the ADH bringing them back to their visual magnificence and donating an availability for others to share in their beauty of form and function.

There are the other MOTAT sections with equally devoted volunteers who have worked with their alternative skills of equal value and importance to the success of MOTAT over the last sixty or so years, some have also died this year. We mourn their passing also and honour their legacy in the artefacts that they have helped to save for the benefit of the generations to come. They may remain anonymous, becoming but grey ghosts who are fading slowly from memory - but their contribution, their legacy will live on forever.

- By Henry Swan -

The MOTAT Society would like to acknowledge the passing of MOTAT Society members Ken Newland, David Martin, Tom Cotter, Derek Albrechtson, and Roy Montrowe and recognise their contribution to the Museum.

# THE RESTORATION HISTORY OF SHORTS SUNDERLAND RNZAF S/N NZ 4115



NZ 4115 Hobsonville

## A short history of Shorts Sunderland NZ 4115

- 1945 - Manufactured by Short Brothers in Northern Ireland for the RAF.
- Manufacturer's airframe serial number 1552.
- RAF serial number SZ 584.
- 2/5/1946 to 16/4/1948 - Relocated to BOAC as a training boat Reg G-AHJR. Then to Shorts Belfast for refurbishment for the RNZAF.  
*NB. After WW2 there were 100s of Sunderlands decommissioned sitting on the water as they were deemed obsolete.*
- 17/11/1953 - Left UK for Hobsonville, Auckland NZ.
- 4/9/1953 - Arrived Hobsonville.
- Flight time 90.5 hours (including flight to NZ - 15,865 miles)
- 1956 - Into storage Hobsonville, made airworthy and flown to Lauthala Bay Fiji.
- Coded KN-A, then KN-Q, finally Q.
- 9/12/1966 - Struck off charge RNZAF Hobsonville and signed over to MOTAT.
- 25/2/1967 - Towed up Meola Creek and across Meola Road to old tip site.



Above: NZ 4115 just out of Meola Creek on its way to cross Meola Road onto old tip site. Below: NZ 4115 arriving at site 25/2/1967.



On 9 November 2017, after braving the outside elements for a good 50 years (not good for aircraft) NZ 4115, having been fully exterior painted (including fuel tank

removal and storage and a full inspection of the wing interiors and main spar), was brought inside and began her journey towards internal restoration. The interior paint in the rear fuselage is in very poor shape and since her relocation my main job has been sanding, scraping and treating the many hundreds of oblongs between the ribs and intercostals before paint can be applied. *NB Any metal bits and intercostals (horizontal strengtheners) etc that require replacement are manufactured by our restoration manager and metal expert Steve Subritzky.*

Although the paintwork in the photos might look ok, believe me it's not! I have found a lot of paint is peeling and flaked - particularly on the top of the fuselage - and while at a glance it looks okay, under the paint it's a completely different story.

I would estimate that each oblong takes about 15 minutes to prepare to paint. Some take longer as they vary in size. I also have to hand a compressed air medium blasting unit (grit, sand or glass medium of various size) but this is only good on flat surfaces. It has a brush on the end and a recovery of product vacuum.

I have had help from another volunteer, Richard Cornwell, but to date I have been mainly on my own and with each oblong having to be treated separately it's going to take hundreds of hours of treatment before painting can be started. Of course, the restrictions of Covid19 are costing us a huge number of hours as we can't go back until Level 1, which isn't looking promising any time soon.

### SPECIFICATIONS FOR SUNDERLAND MK V (5) NZ 4115

Wingspan: 112 ft 9½ in (34.41 m)
Length: 88 ft 3½ in (26 m)
Height: 34 ft 6 in (10.5 m)
Wing Area: 1,687 sq ft (156.7 sq m)
Max Speed @ sea level 207 mph (333 kph)
Max Speed @ 5,000 ft (1,524 m) 213 mph (214 kph)
Economical cruising speed: @ 2,000 ft 241 kph
Initial rate climb: 840 ft per min (256 m per min)
Service ceiling: 17,900 ft (5,456 m) Only with oxygen as Sunderlands were not pressurised
Range with 1,668 lb (757 kg) bomb load @ 2,000 ft (610 m) 2,690 miles (4,329 km)
Normal loaded weight: 60,000 lb (27,216 kg)
Max loaded weight: 65,000 lb (28,484 kg)



Above: NZ 4115 on Lake Wakatipu Queenstown South Island NZ 1963



Interior 17/8/2019



Interior 17/8/2019

**Process required for each oblong section:**

1. Scrape down surface for flaking paint and corrosion.
2. Clean off surfaces using sandpaper and power tools with discs and wire wheels.
3. Finish off surface by hand sanding hard to get to areas and any ribs around area.
4. Vacuum out loose dirt blow down with compressed air.
5. Treat any bare metal with two-pot etch primer with brush.
6. Once a reasonable area is done and ready, spray with undercoat grey so you can see where you have been.
7. Then, when a large area is ready, spray with two coats of topcoat.



Above: The last interior photo is a view looking forward to the nose of the aircraft. Paint looks good but it's not.

- Photos and article provided by Mike Smith -

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 and coming Society Excursions and other  
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# SOCIETY TRIP TO HORTON MEDIA

*Lockdowns have put almost everything on the back burner, and three of our MOTAT Society excursions have had to be put on a backburner until 2022. However, our last excursion to Horton Media was very much enjoyed by all who attended. Henry Swan paints us a picture of the day's experience back in July. Congratulations also go to Scott Pilkington, winner of the much-coveted award for the MOTAT Society Chairman's Excursion Bus Quiz.*

Imagine that you had booked a flight to Paris to explore the Louvre and admire the amazing Mona Lisa and told that the flight was diverted to Amsterdam, annoyance and initial disappointment. This lasts only until you discover the Rembrandt Museum and the masterpieces that it has to offer. You discover that it is just as absorbing as the Louvre, not necessarily better but certainly as good in its own way. Well, that was a bit how it was for the Society visit to Horton Media. The word was that we were going to see the Herald being printed on their giant high speed computerised systems only to find that it was to be Horton Media which was more modest in size but equally as interesting AND had a greater variety of print media in a greater variety of languages and interests.

After a fairly arduous drive down the southern motorway and being met by the print manager at Horton Media we were given a briefing by the General Manager about the plant and its variety of throughput newspapers printed in English, Chinese, Hindi and several others thus requiring a most versatile team at Horton Media some of whom we had the pleasure of meeting. Two of the biggest personalities that we could wish to meet were the chief engineer and the print machine manager, both long term employees and both full of relevant knowledge and amusing anecdotes. These two characters entertained and informed us of the sophisticated process from start to finish. But first a little about the company.

Horton Media was established in 1997 by one of the families that founded New Zealand's largest daily newspaper, the New Zealand Herald, way back in 1863 so it has a very long tradition with newspapers and of high speed newspaper printing which is the most demanding of the print world with its pressured deadlines. Today Horton Media is Australasia's largest independent cold-set web printer with modern plants in Auckland and Queensland, Australia.

Our main guides, between them, explained the process of producing a newspaper from beginning to end. Firstly there is the receipt into Hortons of the print file which is usually received from the originating editors in digital format, this is downloaded onto the Horton computers, converted and used for making the print plates of shiny flexible aluminium about 45cm square (recycled high quality aluminium). The plates are then taken to the print towers and fitted onto the four colour offset machines. Following the process through right to the end with the folding, trimming and bundling ready for delivery to the end user. The process used is the cold-set process which is mostly used

to print newspapers and paperbacks, with the printing ink drying purely by absorption.

To say this visit was interesting would be an understatement, it was truly fascinating to see the four metre tall print towers thundering away with the newsprint travelling through at 15 kilometres per hour pulled from the enormous 450 kilogram rolls. Inevitably there was noise - a lot of it - but putting up with that for the privileged insight into how we get our newspapers was no problem, even for a non-printing background person.

In the heat-set process, the paper is passed through a large dryer and a chill roll unit after the last printing unit. The length of the printing press is almost doubled by these two units. To ensure that the ink dries optimally, special heat-drying inks are used mostly producing the higher glossy magazines.

The Horton Media company caters for independent publishers of high-frequency news publications – a segment that has grown rapidly with the variety and range of requirements of ethnicities in New Zealand increasing the size and diversity of its markets. Horton Media Limited's focus on quality and environmental stewardship is demonstrated through its sensitivity to recycling unrequired papers and aluminium. It was explained to us with appropriate pride that this has given it clear leadership of its industry segment with no less than 21 Pride in Print citations in New Zealand and two second placings at the Australasian Single Width Users Group conference.

It is said that printers are the barometer of an economy, if the busyness of the Horton Media plant is anything to measure by our economy is stable and rising...

Horton Media is privately held and managed by Matthew Horton the son of the well-known Sir Michael, (that's Sir Michael and Dame Rosemary, the NZ renowned philanthropists) who, we are assured by the current staff at Horton Media, still visits the plant regularly and by chatting to the staff demonstrates that Sir Michael has lost none of his generosity of spirit, a tradition clearly evidenced by the warmth and generosity of the staff at Horton Media who gave up most of an afternoon to guide us through their plant and topped it off by providing us with generous afternoon tea of cakes and savouries.

Once again, thank you all for the privilege of access to a most interesting and enlightening part of our society.

- By Henry Swan -

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# RETROSPECTIVE OF AN EARLY AUCKLAND TRAMLINE

Not far from MOTAT, some things haven't changed much in Kingsland over 100 years. Here we have a set of photographs of A.W. Page's Store – Established 1885. Page's Store is on the corner of New North Road and what used to be Edendale Road which was later rerouted across the railway bridge that joins New North Road at Bond Street. This avoided the level crossing at Kingsland, partially for motor vehicles, but more importantly for extending the tram service along Sandringham Road.

The road on the left is Kingsland Road, later renamed Edendale Road, and it used to come up and over the western railway line and join New North Road here. However, when it was decided to take trams down Edendale Road to the new housing development there, the City Council and the tramway were both adamant that the tramline and the railway should never make contact. They deemed that trams could go over or under, but never across a railway track. So Edendale Road was redesigned, removing the level crossing and then curving the road round to the right, taking it parallel to the railway line, until the road level matched the height of New North Road, where it then crossed a newly installed railway bridge, and joined New North Road. Trams were then extended down to Edendale in the early 1920s, the suburb later renamed Sandringham, and the road renamed Sandringham Road.

All photographs are from the collection of or are copyright of Graham Stewart.

Our first photo shows Combination tram no. 15 outside Page's Store at what in 1903 was the terminus of the line. A horse bus which was able to take passengers further can be seen behind the tram.



It was from here in on Christmas Eve in 1903 that Combination tram no. 32 set off on its fateful journey colliding with runaway double decker no. 39 just around the corner past Bond Street. The story of this disastrous event has been well chronicled by our own James Duncan in *The Controller* – the Western Springs Tramway publication. Fifty years later, in 1955 Big Car no. 237 can be seen passing Page's Store on its way to Avondale to where the line was finally extended.



Not long after, in 1956, the Auckland tramways were closing and here outside Page's Store the tramway overhead is being removed, in readiness for trolley bus overhead to be erected.



In October 1956 the trolley buses replaced the diesel buses that were just "filling-in" for the trams and here we have Park Royal bodied bus no. 132 heading back to the city past Page's Store sometime later in 1970.



Today, it is a quite different scene – or is it?



- by Alan Curtis -

# RNZAF RABAUL INCIDENT

An early MOTAT Society project was the joint venture with the NZ Fighter Pilots Assn to provide the memorial to eight RNZAF pilots lost in January 1945, World War II, as part of an air raid on the Japanese base in Rabaul, New Guinea. It now stands adjacent to the Sir Keith Park memorial Hurricane in the front of MOTAT Aviation Hall.

The key organiser was the noted Auckland aviation identity Brian Cox, President of the NZ Fighter Pilots Assn and well known to most of the MOTAT Aviation volunteers. Notably at the blessing of the memorial, along with a large number of old wartime fighter colleagues, was Mrs. Francis McConnell, the wife of F/L Frank Keefe whose parachuting into Rabaul Harbour from his burning Corsair aircraft initiated the action.



Above: Brian Cox and Mrs Francis O'Connell at the memorial unveiling.

The Society co-ordinated the function at MOTAT and donated the rock slab on which the memorial plaques are mounted.

A display related to the incident was part of the museum at the time. Family members of the lost aircrew still place flowers on the memorial each ANZAC Day.

The text on the memorial reads:

*"This memorial is for the memory of eight young New Zealand pilots lost on 15<sup>th</sup> January 1945 F/L Frank Keefe bailed out from his burning Corsair over Rabaul Harbour in the morning, and later in the day after an unsuccessful rescue attempt, another seven pilots crashed whilst returning to Green Island after flying into a tropical storm in darkness. Five pilots were from No 14 Squadron and three from No 15 Squadron.*

They were:

F/L FG Keefe	F/I BS May
F/O AN Seward	F/Sgt LJ Munro
F/Sgt JS McArthur	F/L RF Johnson
F/O G Randell	F/Sgt RW Albrecht

*F/L Frank Keefe was captured, but died whilst prisoner two weeks later, from injuries suffered when his Corsair was hit by ACK ACK during a dive-bombing attack and caught fire.*



## WE WILL REMEMBER THEM

*This Memorial was sponsored by Marvin Birk of Brooklyn N.Y. who was based on Green Island in the US Navy at the time of this loss and also by members of the NZ Fighter Pilots Assn."*

- by Bill Rayner -

## VOLUNTEER AWARDS JUNE 2021

The MOTAT Society offers a very belated congratulations to all the recipients of the MOTAT Volunteer Awards in June 2021

- Ross Goldsworthy – "Handle With Care" Award for best demonstration of stewardship.
- Makyla Curtis and Willy Coenradi – Joint winners of the "Big Impact" Award for volunteer who has made the biggest impact over the past year.
- Tony Messenger – "In It Together" Award for best demonstration of collaboration.
- Albert Chan – "Good Sort" Award for best demonstration of integrity.
- Rich Schreuder – "Do It Different" Award for best demonstration of innovation.
- Joshua Garratt – "CEO's Choice" Award.
- Special Mention in Dispatches for Martyn Radford.



Above: Graham Anderson, Henry Swan, John Tutchin (Chairman) and David Kannu at the MOTAT Volunteer Awards.