Whispers from the depot

Newsletter of The Rail Motor Society Incorporated
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From the Editor's desk

Aside from Operations and Rolling Stock updates, with a general lack of general news to warrant standalone reports from the Secretary, Infrastructure Manager and other regular segments, the following collection of general news items has been compiled to update members on recent events, as well as the current situation.

Firstly, the Board sincerely hopes that all members and their families have remained safe and well, both physically and mentally, during the current COVID-19 resurgence and prolonged lockdown by NSW Health.

On 5 August, members were advised that the Board directed that the Depot be closed until further notice, due to COVID-19 lockdown restrictions. After much research on the Services NSW website and consultation with the executive, the Depot partially reopened on 24 August, but only to allow a maximum of 10 workers onsite to conduct essential work, subject to strict Depot COVID-19 Work Conditions. During this period, the only essential work being carried out at the Depot has been the repair of 621, the removal of a failed transmission from CPH 3, and ongoing battery charging. All are discussed by the Engineering Manager in his report.

As you read this newsletter, following lifting of Health Orders in some local areas, particularly Upper Hunter and Dungog, the decision has been made to amend the TRMS Depot COVID-19 Work Conditions such that persons residing in areas not in lockdown may now return to work at the Depot.

But as before, no more than 10 people from a 'Lockdown Area' will be allowed in the Depot Precinct at any one time, and then only to perform essential work. In all cases, preference will be given to Double Vaccinated workers. All other conditions remain unaltered. If in doubt, please contact your line manager, or the Secretary, before returning.

From the number of enquiries, many of our volunteers are eager to resume work at the Depot. As soon as lockdown restrictions are lifted from the area in which people reside, they will be very welcome to return to the Depot.

It still remains uncertain when our tour operations can re-commence, along with reopening the Depot to the public, and any conditions that may be imposed. We can only be guided by NSW Health Orders as restrictions begin to ease. Greater liberties appear likely for those Double Vaccinated.

The Society is pleased to welcome the following new members: Greg Robertson, Mark Linnett, Phillip Meyer, Mark Lawford, Simon Hall, Ben Small and Clifton Baker.

At this stage it is unlikely that our annual Member's Christmas Luncheon at Club Macquarie will be held this year. Even when stay-at-home restrictions are lifted, it is unlikely we will be allowed to have the desired number of people in attendance due to social distancing limitations. If the situation should change, members will be advised.

On a more positive note, the Society is extremely grateful to Society member Warwick Erwin for his very generous donation of two new desktop computers, display monitors and accessories for use at our Depot. One computer has been set up in the MHO ex-Guard's Van for use by the Engineering Manager and Rolling Stock maintainers for electronic storage of inspection and maintenance records, along with parts and supplier listings, and on-line storage of other technical data. The other computer has been set up in the Station Master's Cottage to handle administrative tasks.

Seizing the initiative following a recent trip travelling on our rail motors, Warwick is presently working on a system whereby passenger luggage may be tagged with its set-down station. This will help our train crew to quickly identify and unload the appropriate luggage when setting passengers down within the busy Sydney Trains network.

We welcome back Secretary, Mick Walsh, after his and wife Bev's extended round-Australia holiday.

Greg Duncan is seen here constructing the memorial wall (Graeme Holloway)

Our rolling stock now proudly displays new Depot plates

Operations Report

The Society's operations have been curtailed by COVID-19 restrictions and the NSW Government lockdowns since July 2021. In light of this, my report will be necessarily brief for this quarter.

The Society had an inspection by the Office of the National Rail Safety Regulator in mid-June. Following the accident with 621/721 at Griffith in April, the inspection focussed on emergency management and train preparation. One minor non-conformance was recorded and this has been addressed with the Regulator.

Our primary public liability insurance policy was renewed on 30 June with a minor increase in premium over last year. This increase was not unexpected as our insurer was generous in not applying an increase in last year's premium because of the impact of COVID-19 on our business. We expect the Transport NSW 'Crown Indemnity' policy to be renewed from 1 October.

The impact of the NSW COVID-19 lockdown has seen a regular stream of tour cancellations and postponements. Many of the postponements have been pushed into 2022 and our calendar is filling quickly, with the first six months being almost completely booked out. 2022 promises to be a busy year, subject always to the ever-present prospect of further lockdowns.

The John Holland Rail 10-year contract for operational management of the Country Regional Network expires in January 2022. Unfortunately, Hollands were unsuccessful in renewing the contract and the Society has been working with UGL Regional Linx (UGLRL), the winning tenderer, to transition all relevant documentation over to their management from 30 January 2022. A key feature of the UGLRL proposal was the relocation of the network control centre to Orange.

The scheduled Overhead Wiring Measurement project for Sydney Trains has been pushed back to February-March 2022. This is the latest that we can successfully operate before daylight savings time ends on 3 April. Daylight saving means that dawn comes later in the morning and facilitates the survey as it needs to be conducted in complete darkness. It is hoped that an updated pantograph from Germany will be available, allowing the survey to operate at 40 kph instead of the current 25 kph. If this comes to fruition, it will hopefully enable more of the overhead to be surveyed in the available time for the project. Due to some administrative issues within Sydney Trains in 2019, the contract for the full five years was not signed off and we have had to re-tender for the project services.

On 12 July, we had a Depot visit from Nicola Alcock, recreation co-ordinator for 'Headstart', a support group to help strengthen and enrich of the lives of people with acquired brain injury. Nicola was accompanied by 12 of their clients and carers for a day out in the community. We look forward to the group joining with us again, next time for a trip on our CPHs.

It is pleasing to welcome back Secretary, Mick Walsh, from his holiday in the west and to be able to hand back the acting Secretary's duties to him.

Bruce Agland – Operations Manager

All available hands set to work to repair 621, prior to lockdown (Jon Derry)

Rolling Stock Report

CPHs

With 621/721 depot-bound whilst its accident damage is repaired, our venerable CPHs have had to up their workload and have generally been performing well. However, on its last trip before tour operations ceased due to COVID-19 restrictions, CPH 3's torque-converter (transmission) failed whilst returning from the North Coast. Its maintenance history revealed that the transmission was last overhauled in 2013.

Optimistic hopes there might be a quick fix back at the Depot were quickly dashed. The torque-converter, which had been leaking fuel-oil, had to come out! But before work could commence, all maintenance activity ceased due to NSW Health due to COVID-19 lockdown restrictions.

Once essential work was allowed to restart, and with COVID-19 Work Conditions in place, work resumed on CPH 3. The torque-converter was removed and placed aside to await offsite repair. Our spare transmission was retrieved from storage and installed, but not without unexpected difficulty. A circular bearing retainer, bolted to the engine flywheel, would not admit the bearing mounted on the front of the torque converter – it was fraction too small. After some 'head scratching', the retainer was simply removed, allowing the torque-converter to be bolted to the engine. It was a situation not encountered previously whilst installing other transmissions.

Out with the old and in with the new, as Mick, Kevin and Mehdi prepare to install our recently overhauled spare transmission in CPH 3

Whilst replumbing pipework for the new transmission, the solid intercooler pipes were replaced by less troublesome shielded flexible hydraulic hosing, consistent with improvements made to other rolling stock.

With an overhauled transmission now installed, CPH 3 paired with CPH 1 ran a test trip to Stroud Road in mid-September. To the consternation of all who had worked so hard, the torque-converter failed to function in converter mode – it would not develop the fluid pressure necessary to transfer engine power via the fluid coupling to the drive system. To the great disappointment of all involved, CPH 3 was once more placed out of traffic, and with thoughts that the transmission would most likely have to be removed to be fixed, work effort was instead redirected to HPC 402. Returning to CPH 3 a week and a half later, and perhaps with the benefit of a fresh state of mind, the problem with the torque-converter was eventually tracked to an air-lock that had unexpectedly formed within the fluid coupling system. This had prevented the converter from pressurising and thus operating correctly. Much to the great relief of all concerned, CPH 3's converter performed faultlessly when tested out and back along the Depot departure road.

A crack in CPH 7's buffer mount was discovered and repaired by our boilermakers before the Depot was shut-down. Les reported CPH 1 could have a weeping engine gasket which will need attention. Also, ingress of rain water into the passenger saloon in CPH 1, we believe through a roof ventilator and along the ceiling, is another matter yet to be attended to. So, more work to be done!

HPC 402

In early September, after shunting rolling stock to reposition 621/721 beside the Goods Shed, 402 found itself over the inspection pit. This provided the opportunity needed to attend to outstanding tasks, including fitting a new air service unit to control magnet valves and altering pipework to suit, fitting a new data logger/vigilance control, and replacement of two 75-amp alternators with two having 140-amp capacity. The larger alternators should have little difficulty meeting the power-hungry demands of testing and monitoring equipment, extra lighting, air services, etcetera, when 402 next operates in an inspection role. With all mechanical tasks now completed, this now leaves Bruce Agland to finish installing wiring to connect up the data logger.

Graeme and Noel attach new side cladding around the window frames of 621

621/721

Repair of accident damage to 621 has continued. As you read this newsletter, repairs to the bodywork should be complete, with outstanding painting tasks not far behind. I wish to acknowledge the many weeks of dedicated hard

work by Rod, Graeme and Tony in assisting Noel Price to undertake the body repairs. As reported in the last edition of Paterson Points, Noel was willing to reorganise his business affairs in order to expedite 621's repairs, for which the Society is especially grateful. I also thank Peter Macfarlane for his work painting the repaired bodywork.

Turning to an unresolved task on our 'to-do' list, maintenance personnel have replaced the exhaust manifold that had previously developed a coolant water leak and been temporarily patched, awaiting permanent repair. One of our old manifolds was retrieved, checked and hydrostatically tested, before being given the okay to install. We are confident the cracked manifold can be successfully repaired and then retained as our spare. Whilst changing the manifold, it was discovered that some bolts securing the turbocharger had slackened, and on closer inspection after removal, the turbine impeller was discovered to have become damaged at some stage. Fortunately, we had a spare on hand to install. It was just as well this fault was discovered before 621/721 re-enters service.

The only work still to be done is to adjust the brake gear when 621/721 is next over the inspection pit.

7344

The drivers reported the handbrake wheel in the cabin of 7344 had become extremely difficult to turn and apply the brakes by hand. The seemingly simple task of freeing it ended up taking quite a while to determine the cause of the problem and then to get access to the mechanism. Following several unsatisfactory repair attempts, once our '73-class guru' Kevin returned from his holiday, the handbrake wheel was no match. But it took some doing; removing the horizontal shaft attached to the wheel, reaming out the bushes, and placing packing under vertical housing to properly align the bushes.

Volunteers dismantle one of the bogie frames removed from CPH 19 under the watchful eye of Bruce Agland

We were also pleased to receive 24 PDF files of scanned 73-class workshop manuals, along with wiring diagrams, plus Caterpillar and Westinghouse workshop manuals and parts lists relating to engine and air compressor respectively.

CPH Bogies

The bogie frames recovered from CPH 19 are currently with Kings Engineering for inspection, non-destructive testing, measurement, and remediation as needed. The coil and leaf springs are currently with Lovells Springs for inspection, testing and recertification. The coil springs were found to be too badly pitted and subsequently condemned. Lovells will obtain new springs for which we must bear the extra cost. Depot staff are currently cleaning and inspecting other key components, and conducting crack detection tests.

A crack was discovered in the drive selector (forward/reverse) on the drive bogie. The selector was sent offsite for repair.

Battery Charging

With the suspension of train tour operations, members may not have considered the consequences for our rail motor batteries, as well as those mounted in ancillary depot equipment such as forklifts. When not used, lead acid batteries self-discharge. If not recharged before the battery voltage drops below 10-volts in a 12-volt battery, their chemical reaction becomes irreversible and the battery needs replacing. This is the major reason for ongoing battery maintenance during the Depot closure.

To maximise battery life, prevent premature failures and hence contain costs, computerised chargers are used on rolling stock batteries as they charge at a slower rate and prevent gassing which can cause explosions. To reduce the risk of fire, chargers are used only when the Depot is attended.

The five railmotors use a total of eighteen 12-volt 1150Ah batteries, each costing around $750. Locomotive 7344 has a bank of sixteen 8-volt batteries costing close to $5000. Each battery has a life of around four years, if treated well.

Batteries are obviously a big-ticket cost item for the Society, hence why battery maintenance was deemed an essential activity during the Depot closure. My thanks go to Paul and Trevor for attending to the rail motor batteries.

Robert Spencer – Engineering Manager (Rolling Stock)

Off the Rails

At the time of preparing this newsletter, the Society is mindful that Geoff Murray, Carol Rostrom and Arthur Burgess were 'off the rails'. We wish them well on their path back to good health. To any other members who also may not be in the best of health, the Society extends its wishes for a return to your normal wellbeing.

Bruce Gehrig – Welfare Officer