LIGHT RAILWAYS

Australia's Magazine of Industrial & Narrow Gauge Railways



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Australia's Magazine of Industrial and Narrow Gauge Railways

No 198 December 2007 ISSN 0 727 8101 PP 342588/00002

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Distributor:

GORDON AND GOTCH LIMITED. Printed by IntoPrint.



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Subscriptions: \$48.00 for year ending 30 June 2008, providing six issues of Light Railways magazine, information on Society activities, 25% discount on LRRSA publications, etc. Overseas: \$A72.00 economy airmail. Payment by cheque, money order, Mastercard or Visa. Contact the Membership Officer, PO Box 21, Surrey Hills, Vic. 3127. Fax (03) 5968 2484. Email: Irrsa@Irrsa.org.au

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Conversions:

1 inch (in) 25.40 millimetres 1 foot (ft) 0.30 metre 1 yard (yd) 0.91 metre 1 chain 20.11 metres 1 mile 1.60 kilometres 1 super foot 0.00236 cubic metre 1.01 tonnes 1 ton 1 pound (lb) 0.454 kilogram 0.4 hectare 1 acre 1 horsepower (hp) 746 Watts 1 gallon 4.536 litres 1 cubic yard 0.765 cubic metres

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Comment

Those of you who've been with us for a while, or have a good collection of back issues, may be aware that the last of the old format Light Railways magazines was number 138 of October 1997. From the following issue, LR 139 of February 1998, the magazine became a 32-page A4 format. And it acquired a team of three new editors; Bob McKillop, John Browning and myself.

I was the novice of the troika, as Bob had previously edited Light Railways for 12 years, from 1980 to 1992, while John was editor of its companion magazine, Light Railway News, for twenty years, from 1977 to 1997.

Anyway, the point is that 198 minus 138 equals 60, so this issue marks our first decade and our 60th Light Railways. We hope you've enjoyed them. Bruce Belbin

The Light Railway Research Society of Australia Inc. was formed in 1961 and caters for those interested in all facets of industrial, private, tourist and narrow gauge railways in this country and its offshore territories, past and present.

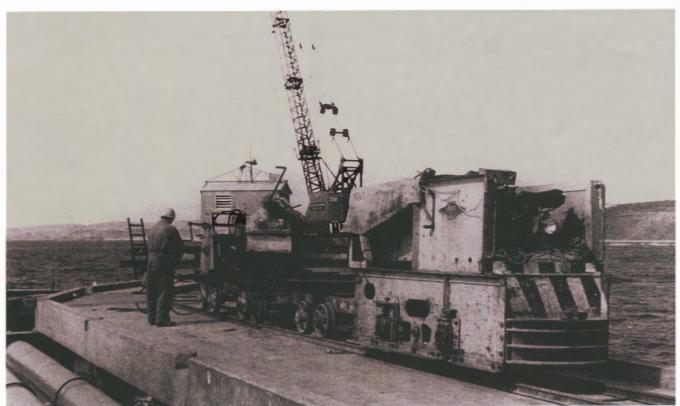
Members are actively involved in researching light railways in libraries and archives, interviewing knowledgeable first-hand participants and undertaking field work at industrial sites and in the forests.

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Articles, letters and photographs of historical and current interest are welcome. Contributions should be double spaced if typed or written. Electronic formats accepted in the common standards.

Material is accepted for publication in Light Railways on the proviso that the Society has the right to reprint, with acknowledgement, any material published in Light Railways, or include this material in other Society publications.

Front Cover: Celebrating a century and an official return to steam on 17 November 2007 was the immaculately-presented John Fowler 0-6-2T INVICTA (11277 of 1907). This restoration to the very last nut and bolt is a fantastic achievement for the Bundaberg Tourist Tramway Preservation Society, whose Australian Sugar Cane Railway at the North Bundaberg Botanical Gardens operates every Sunday. More details in the next issue. Photo: John Browning. Upper Back Cover: The Bennett Brook Railway's Whiteman Village Junction Station in Perth was a hive of activity during the Friends of Thomas the Tank Engine (FOTTE) Day held on 23 September 2007. On the left 0-4-2T BT1 BETTY THOMPSON (Perry Eng 8967.39.1 of 1939) has just arrived on a train from Mussel Pool, running in top-and-tail formation with 0-6-0DM ROSALIE (John Fowler 411019/1950). On the adjacent track the ex-PWD Gemco 4wDM WYNDHAM heads the shuttle train operating to Zamia, with the 2-8-2 NG15 steam locomotive No 123 (Anglo Franco Belge 2670 of 1951) in evidence at the other end. Across the island platform, and the ex-Lake View & Star 4wDM Planet No. 1 (FC Hibberd 2150 of 1938) stands at the head of the train to Kangaroo Flats. Photo: Rob Baker. Lower Back Cover: The driver of ex-Melbourne tram 1017, PETS President Mike Stukely, has made a halt to allow passengers to watch 2-8-2 NG 123 FREMANTLE (Anglo Franco Belge 2670 of 1951) pass with a train on the 610mm gauge Bennett Brook Railway on Saturday 6 October 2007. Photo: Lindsay Watson



On 2 November 1962, a works train, powered by the Malcolm Moore 4wPM locomotive, is seen near the end of the jetty, at the point where the jetty turned to run parallel to the shore. The crane in the background is unloading and positioning the concrete decking sections, which have been brought out on the four-wheeled bogies seen in front of the loco.

Photo: AD Lockyer

Port Stanvac Refinery railways

by Arnold Lockyer

With the Port Stanvac Oil Refinery now officially 'mothballed' and its future uncertain, it may be appropriate to record something of the two light railways that operated there, albeit for short periods, and the broad gauge sidings that served the refinery.

Background history

Prior to the 1960s, South Australia had no oil refinery. All of the state's flammable liquids, such as petrol, distillate, avgas and kerosene, came by sea in tankers, most of which berthed and discharged their cargoes at the Port River Oil Berths, Birkenhead. Here, a large tank farm served each of the major oil companies.

In the late 1950s, the Mobil Oil Company (then a division of the Standard Vacuum Oil Co.), working in cooperation with the State Government, decided to build an oil refinery on what was then open land on the top of the cliffs at Curlew Point, on Gulf St Vincent, just north of O'Sullivans Beach. This site was chosen because, not only was it a large expanse of open land, but the water close to shore was deep enough to accommodate the largest oil tankers. The area became known as the Port Stanvac Refinery site and the port as Port Stanvac.

The Government surveyed and acquired the land for a branch line running from the Willunga line to the refinery site. This left the Willunga line at the north (or Adelaide) end of Hallett Cove station yard. Ironically, the Willunga line was later abandoned and lifted beyond the junction, but the refinery branch was extended to what is now Noarlunga Centre, as part of the Adelaide suburban rail system.

The jetty railway

To enable the ships'cargoes to be transferred to the refinery, it was decided to lay a pipeline from the refinery site, down the face of the cliffs, across an 850ft causeway, then along a short 1320ft jetty. From this point, it would continue along the seabed a further 1850 feet to the point where the tankers would be moored. The pipeline would consist of gumited (concrete coated) 34in diameter steel pipe, connected to two 16in flexible lines at the loading end and discharging into four large 320,000 bbl (11,200,000 imp gals) capacity storage tanks at the refinery.

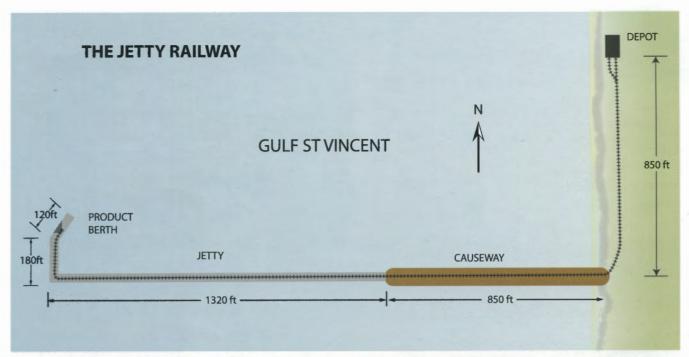
Construction of the pipeline and associated infrastructure was a joint venture project of Netherlands Harbour Works (Koninklijke Nederlandsche Maatschappij Voor Havenwerken N.V.) and Wilkins and Davies Construction Co. Pty Ltd, Melbourne.¹

To facilitate construction of the jetty and associated equipment, a 2ft gauge light railway was employed. This greatly assisted the construction of the jetty, as the concrete walkway, which ran out beside the pipelines, was only just wide enough to accommodate the mobile road cranes used in the construction. The decking was precast in sections, which were carried out on bogies and lifted into position on the piles.

In addition to the main 34in pipeline, the jetty carried two 16in, two 14in, two 12in and several smaller pipelines, plus four loading booms and ancillary equipment.

The railway track on the walkway was not secured in any way. The 30lb rails were welded to steel 'sleepers' (small, flat pieces of steel bar) in rail-length sections, like toy 'tin-plate' track. Off the jetty, on the causeway and on the shoreline, the track was of more conventional construction, with the rail spiked to wooden sleepers. ²

To provide motive power for the line, a 4-ton Malcolm Moore 4wPM locomotive was purchased "for a very reasonable price" from the Zinc Corporation at Broken Hill. Said to have been



built in 1954 (though the builder's number is not known) it was powered by a Fordson Major 4-cylinder petrol engine, of 32 bhp at 1200 rpm. Apart from the transporter bogies previously mentioned, 20 4-wheel side-tipping wagons, of one cubic yard capacity, were also acquired.¹

The railway seems to have led a reasonably uneventful existence, apart from one occasion when the loco derailed on the causeway, prompting its driver to 'join the birds' and another when it finished up 'in the drink' and had to be fished out. No injuries resulted from either incident, however. ²

At the completion of the work on the jetty, the railway equipment was offered for sale, with the locomotive being offered to the author for £300.³ This was regrettably declined, and the ultimate fate of the railway equipment used on the project is not known.

The second light railway

In 1991, it was decided to move the berth to a point a further two kilometres off shore, to improve safety and efficiency, and to permit larger tankers (up to 150,000 tonnes) to unload at the port. Here, the depth of the water was 24 metres, three metres deeper than at the original berth.

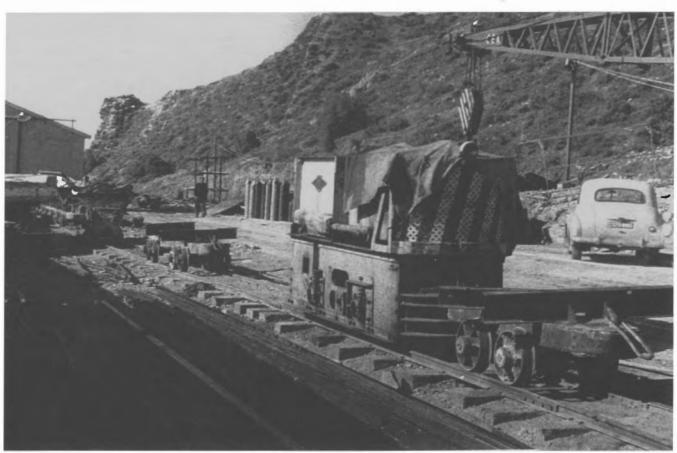
This meant that the undersea pipeline would have to be extended. Transfield Engineering contracted to fabricate the extension, which would comprise six lengths of 36in (914mm) diameter concrete coated pipeline, each length consisting of 28 x 12.2 metre sections. Fabricated at the top of the cliff, these sections would be joined to a string of pipe, moved down the cliff face and moved out to sea, there to be attached to the existing pipeline, 1.3 kilometres off shore.

To accomplish this, an interesting railway came into being.



Looking back along the jetty towards the shoreline and depot area. The Malcolm Moore locomotive is about to take its train of empty bogies along the prefabricated track to collect another load of decking sections.

Photo: AD Lockyer



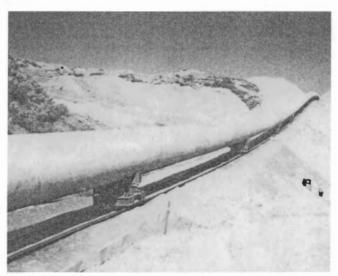
The Malcolm Moore locomotive stabled in the depot area, with transporter bogies and side-tipping trucks both in evidence. 2 November 1962.

Photo: AD Lockyer



The second light railway, built to deliver a 2050 metre long extension to the existing undersea pipeline, is seen under construction in early 1992.

Photo: Transfield Ltd



At the cliff-top end of the railway, a section of pipeline sits on its 4-wheeled trucks, waiting to be lowered down the escarpment. Photo: P Dwyer

It had no locomotives and had to be dead straight throughout its length. As each individual pipe weighed in at 12 tonnes, the railway had to be well engineered. The gauge chosen was 600mm and the track was 764 metres in length. 40kg/m rail was fastened to 1.2m long sleepers which were spaced 300mm apart. At the top of the cliff a cutting was excavated to ease the grade to 1 in 4. The track bed was graded and laid on a compacted base of 150mm, with 150mm of dolomite sand as ballast.

Two large winches were employed to lower the 2km pipeline into the sea. Rolling stock comprised of 60 specially constructed 4-wheeled trucks to support the pipe. As there were no curves on the line, the tyres on the trucks were machined to a flat profile. The axle load was 9 tonnes.

The pipeline was launched into the Gulf in early April 1992, and once it had served its purpose, the railway was quickly demolished and the cliff face returned to its original state. Thus ended the story of one of South Australia's shortest-lived and least seen railways, and one of its most unique.4

The Whiting Trackmobile

For many years, product was moved out of the refinery by rail, by way of the previously mentioned SAR branch line, and within the refinery was a network of 5ft 3in gauge sidings. Tank cars were moved around these sidings by an interesting hybrid road/rail shunting unit. Known as a Whiting Trackmobile, it had been built by Whiting Corporation of Harvey, Illinois, USA (serial No. 3TM 3369) and featured an 0-4-0 wheel arrangement, with outside connecting rods. When not in use, the road wheels were positioned at a 90 degree angle to the rail wheels.5

In the 1960s, this machine was kept reasonably busy as trains of up to 13 cars left the refinery daily, running to many country destinations. The building of an underground pipeline through the suburbs from Pt Stanvac to Birkenhead tank farm saw much of this traffic diminish, and the gradual closure, or conversion to standard gauge, of many of the SAR's country lines, saw it diminish further. Eventually, traffic became nonexistent, and, in January 2004, the refinery sidings were removed.

Sources

- 1. Letter, and enclosures, from Works Foreman J Smal, dated 24 October 1962.
- 2. Site visit and interviews with Mr Smal and other staff, 2 November 1962. 3. Telephone call to Mr D King, December 1962.
- 4. 'New narrow gauge railway for South Australia', P Dwyer, The Recorder, February and April 1992, ARHS (SA Division)
- 5. Site inspection, 1964.



A pipeline 'train' makes its way cautiously through the cutting and down the 1 in 4 gradient towards the ocean, in February 1992.

Photo: Transfield Ltd



Retouched builder's photograph of the completed locomotive at Caldwell Vale's Auburn works. The starting crank handle, fabricated frame, tall and dainty canopy supported on four spindly columns, the skinny brake handle, exposed pipes, and extremely long exhaust pipe gave the locomotive a somewhat Emett-like appearance

Photo: Bruce Macdonald collection

Quarantine Station, North Head, Sydney

by Jim Longworth

Background

Twenty years ago, on 6 December 1987, the LRRSA NSW Division held a tour to inspect the light railway at the North Head Quarantine Station at the mouth of Sydney Harbour.¹ The late Paul Simpson, a founding convenor of the NSW Division, compiled the tour notes.² This short article is to update Paul's research, and share it with a wider audience.

European history

North Head at the entry to Sydney Harbour was used for quarantine purposes from 1828, following the death of Governor Darling's son from whooping cough. He ordered the infected ship *Busserah Merchant* to anchor at Spring Cove and required the convicts and their guards to be housed in tents on the shore. More permanent buildings were erected on the site in 1837–38.

An outbreak of smallpox in the colony during 1881 generated a lot of criticism of the quarantine station. Dr C. MacKellar was appointed as Health Officer to Port Jackson, under the newly formed Board of Health. MacKellar recommended that cleansing facilities at the wharf be improved, and that a light tramway be introduced. The wharf precinct was totally

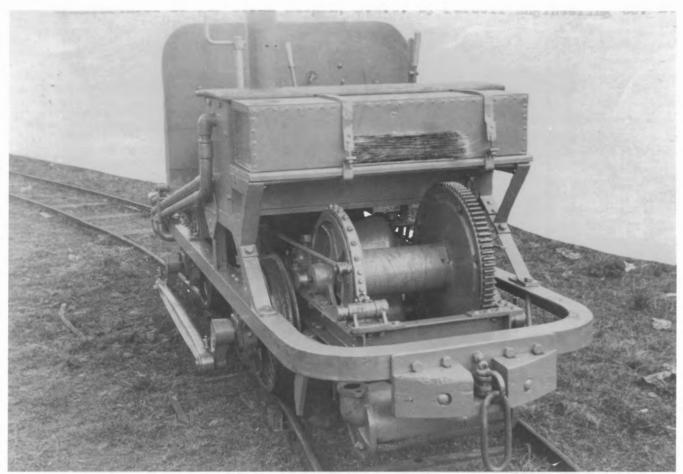
remodelled. The tramway was not introduced at the time because of the high cost involved.

By the turn of the century, smallpox was to be found everywhere in the world, and plague and yellow fever were even more common. Australia was in regular contact with the rest of the world via shipping, but was poorly protected against imported diseases. The wharf precinct was crucial to redeveloping the station. Immigrants were introduced to the quarantine process and disinfected, as was their luggage, before moving on to the accommodation sections. Work on improving the station began at the wharf with demolition of the old buildings and reclaiming land in 1912.

Redevelopment of the site over the 1912-1915 period seems to have been seen as a major development in quarantine administration for Australia. The redeveloped site at North Head was apparently adopted as a standardized model for quarantine stations across Australia.³

Light railway

The light railway that was finally built had its genesis in the transfer of the station from the state Public Health Board to federal control under the newly formed Australian Quarantine Service. The new Federal Director of Quarantine, Dr WP Norris, recommended that the Sydney site be developed as a major quarantine station. His recommendations included installing a cable tramway from the jetty to store room as part of a tramway system connecting all the main buildings. The tramway was intended to replace the Clydesdale draught-horses and carts



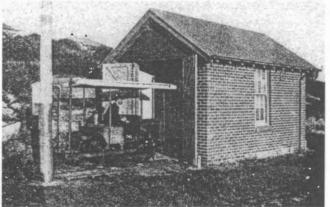
Retouched builder's photograph of the locomotive while under construction. The geared drive for the winch drum and band brake are clearly shown

Photo: Bruce Macdonald collection

that had previously been used to transport luggage around the site.

The cost of the line had been estimated at £1,015 for 1,000ft of track, a locomotive, hauling winch, points and crossings. Rails etc were supplied by the Australian Metal Co. for £813. Work was completed on 19 February 1913. Despite what was to become a recommended 'standard' gauge of 2ft 4ins, the line was actually built to 2ft 3ins gauge (as measured on site).

Facilities directly connected to the railway on the lower level included the wharf, luggage shed, disinfection block, the coal stage for the boiler house, the 3rd class bath house, laundry, and on the upper level the store. Much of the track around the wharf precinct was laid with the rails set flush in concrete, so as not to present a trip hazard. The funicular section up the escarpment was laid partly on a stone ramp and partly in a cutting.



A poor quality, but historically interesting, image of the locomotive outside its purpose built shed.

Paul Simpson collection

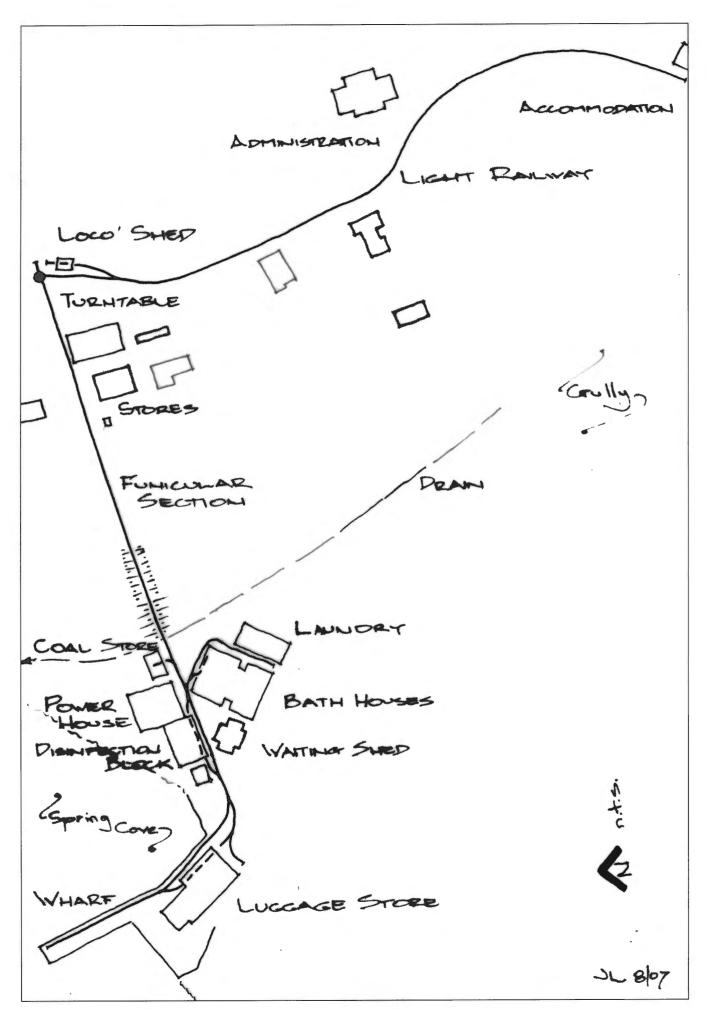
The top and lower level railways were joined by a section of funicular (incline) railway up the intervening steep slope. Locomotive traction was provided on the top level while wagons seem to have been pushed around by hand on the lower level.

The locomotive was built by Caldwell Vale of Auburn. A removable canopy was fitted with drop sides and ends affording complete protection from severe coastal weather. A power-driven drum winch was fitted across the rear holding 1,000ft of ½ inch wire rope. Weighing 2½ tons, it could haul 25cwt. (1.25 tons) up a grade of 1 in 3.

The ever inventive firm of T Purcell & Co., Manufacturing Engineers (successors to Caldwell Vale), went on to market the design to the forestry industry as a 'Rail Tractor'. The winch was to be used for hauling felled trees to the track. At the time, much logging in NSW was in rough mountainous terrain, so the locomotive would possibly have been too light for such a task, and may well have been pulled off the track attempting to haul any sizeable tree trunk. Another potential market was the sugar industry, where horses, rail mounted drum winches, and agricultural tractors were used to haul loaded cane trucks along temporary harvesting lines in the fields, to the main permanent lines.

The locomotive was trialled on 12 May 1913. A year later, on 18 April 1914, the final tests were carried out. Both railway and locomotive were handed over to the Officer in Charge at the quarantine station on 13 May 1914.

The locomotive was housed in its own purpose built locomotive shed near the top of the incline. The small brick building was originally roofed with corrugated iron, since replaced with concrete tiles. Windows were double hung and glazed with 12 small panes. Double doors at each end of the



shed allowed the locomotive to run through to serve both as a portable winch for the incline, and as motive power to haul loaded wagons along the line to the accommodation areas. At an unknown date one set of the doors was replaced with a roller shutter. The building is signposted 'A18'. Remains of a stand and fuel tank are nearby.

Railway operation

The line hauled luggage between the wharf and luggage shed, and to the 'infected' end of the disinfection block where luggage was treated in two long disinfection chambers. The large brick building consisted of two rooms separated by an internal wall which was pierced by the two chambers. The line ran inside the building where luggage was transferred to wheeled carriers for transfer via a traverser into the chamber for disinfection. Seven sets of rails provided storage for the wheeled carriers, both before and after disinfecting. A separate branch ran out of the disinfection block from the 'disinfected' end of the chamber via another traverser. The 'in' and 'out' branches were entirely separate lines, with no run through possibility.

Inside the building the chamber door at the disinfected end of the chamber would be closed and locked. The wagon or a similar wheeled carrier would be run on rails into the 'foul' end of the chamber. The foul end door would be closed, and the operator notified his counterpart at the disinfected end, who then charged the chamber with disinfectant. After treatment, the door at the disinfected end would be opened and the wagon or carrier removed. The door would be re-closed and locked ready for the next charge, and the operator at the foul end advised.

The luggage shed was also divided internally into two sections, one for 'unclean' luggage, and the other for 'clean' luggage. Both compartments were connected to the railway. Unclean luggage could be brought from the wharf into the store prior to disinfection. Clean luggage could be brought from the disinfection block back into the store after disinfection. The internal wall kept the unclean and clean luggage separate to prevent re-infection of already disinfected luggage.

A branch line behind the wharf ran to the bath houses and laundry. The 3rd class bath house was connected to the tramway by a siding that ran into the building and then divided into two. One siding ran into the women's section, the other into the men's section. Thus while the people were washing, their clothes could be disinfected and later returned in a clean condition.

The laundry was also connected with the clean luggage end of the disinfection block and the rest of the station for handling bulky items of fabric and linen for laundering. Door thresholds along the southern side of the laundry, alongside the railway siding, were elevated above ground level and there were no external steps. The height of the door thresholds suggests that they were level with the floors of the railway rolling stock, to allow loading and unloading of material direct from the wagons.

Another branch ran in underneath a coal storage bin made of timber. As well as fuelling boilers in the power house, coal could be railed from the bin to the wharf for use by steampowered support vessels.

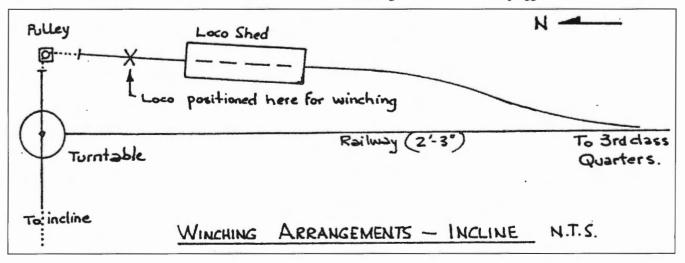
Finally the mainline ascended to the upper accommodation level by a funicular (cable hauled) railway.

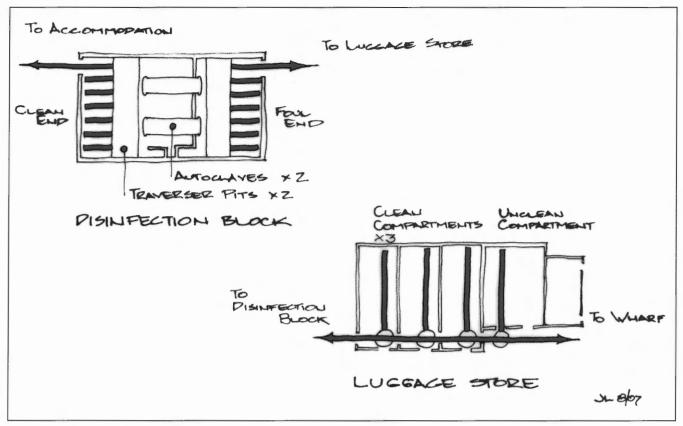
After rising up the ramp to the level of the administration area, the line passed by the end of a large hardware & linen store, which was accessed via a doorway at rolling stock floor level

At the Accommodation level the line passed through the 1st and 2nd class accommodation and ran further on to terminate at the 3rd class accommodation.

In the absence of records of the operation of the funicular section, the following scenario has been suggested: ⁶

- 1. At the top of the incline, the locomotive would be reversed through the Locomotive Shed and anchored, possibly by being chained to the track.
- 2. The wire rope would be unwound off the winch drum, run around the horizontal pulley, and attached to a 4-wheel flat top wagon. The pulley rotated horizontally on a 3ft x 3ft x 8in high concrete block footing. Two grooves at right angles to each other seem to have been formed by the wire rope wearing away the concrete where it passed in and out of the pulley wheel groove.
- 3. The wagon would be allowed to descend the incline under its own weight, thus uncoiling the wire rope off the winch drum as it descended. The winch would be used to control the descent of the wagon.
- 4. Once at the base of the incline, the wagon was uncoupled from the haulage rope and pushed by hand around the wharf precinct to wherever it was required.
- 5. On the lower (wharf) level, wagons loaded with disinfected luggage or stores would be pushed by hand to the base of the incline and attached to the loose end of the haul rope.
- 6. The locomotive would winch loaded wagons up the incline. Loaded wagons were probably hauled up one at a time.
- 7. If the wagon was carrying stores for the top hardware & linen store, the winch would be stopped once the wagon was opposite the loading bay at the end of that building. For safety the wagon wheels would be spragged or chocked. There is no





evidence that the wagons had brakes. Alternately the wagon could be winched further up the incline until it was in position standing on the turntable beyond the top of the incline.

- 8. Once on the turntable, the wagon could be turned through about 90 degrees onto the track leading to the accommodation facilities, pushed off the turntable by hand, and parked on the main line near the locomotive shed.
- 9. Once all the wagons had been hauled up and formed into a rake on the main line, the locomotive would be uncoupled from the anchor, run through its shed, and reversed back to couple onto the front of the rake of wagons. It would then haul them to their desired destinations along the upper level.
- 10. Returning wagons would have followed the reverse procedure, except that empty wagons may have been lowered down the incline in rakes.

Elkington's recommended design

Of particular light railway interest was the prominent position Elkington accorded to providing light railway facilities for transportation. As noted above, the Sydney station seems to have been adopted as a model design for quarantine stations around Australia. Specifically he stated: The most convenient and economic method for large Stations is narrow-gauge rail transport, with mechanical traction. The amount of material which requires handling is very considerable, and the first cost of a tramway line will certainly justify itself against upkeep of carts, horses, and traffic roads, which will have only occasional use, but which require constant maintenance and upkeep.

Elkington recommended that Australian quarantine stations adopt a so-called 'standard' gauge of 2ft 4ins. Horse traction was recommended as economic and effective for small stations where gradients were suitable. Otherwise a petrol-driven motor was to be preferred. He considered that the line should be laid out by a railway engineer to allow for super-elevation on curves, technical detailing, safety, and convenient working.

The railway should be laid between the receiving jetty and all main groups of buildings. If goods were to be delivered by

road, then a siding should be connected to the receiving block beside the main road entrance. Track was to be laid along the jetty so bulk supplies could be landed directly onto the wagons. The jetty line should preferably have direct connection with the station tramway, which should lead to all parts of the facility. When not used for transporting immigrants' luggage, the line could be used for ordinary operations to minimise the manual handling of supplies.

Running the tramway motor at least monthly and overhauling rolling stock were to be seen as part of the care and maintenance of the station machinery.

Conclusion

The NSW National Parks & Wildlife Service was given care of the station in 1984 when the Commonwealth government handed back the site to the state. The station has been undergoing slow, and highly political, conservation since.

NP&WS records indicate that the locomotive was sold in 1956 to a person in Wollongong for use as an amusement train. It was reputedly still extant there in 1968.8

Remains of the tramway abound along its route, from rails on the wharf to the locomotive shed and pulley block, and can be observed by those who partake in a tour of the station.

References

- 1. Light Railway News, No.66, October 1988.
- 2. Simpson P, 1987, LRRSA NSW Division Annual Tour, Quarantine Station Manly, 6th December 1987, unpublished.
- 3. Elkington JSC, 1919, The Design and Construction of Quarantine Stations, *Maritime Quarantine Administration*, Part III, Commonwealth of Australia Quarantine Service, Publication No.16, Government Printer, Melbourne.
- 4. Foley JD, 1995, In Quarantine: a history of Sydney's Quarantine Station 1828-1984, Kangaroo Press, Kenthurst.
- 5. Davies P, 2000, Sydney Harbour National Park, North Head Quarantine Station, Conservation Management Plan, NP&WS, Sydney.
- 6. Light Railway News, No.57, April 1987.
- 7. Simpson P, 1987.
- 8. Elkington JSC, 1919.
- 9. Light Railway News, No.55, December 1986.

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G.& C. Hoskins and its predecessors used twenty locomotives at Lithgow steel works and associated plants. The works railways, and those of the limestone quarries, iron ore mines, and collieries which supplied the raw materials, are described and illustrated in the book.

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The new workshop at Kellogg Road Rooty Hill was impressive, especially to any familiar with the Castle Hill premises previously occupied.

The section added by Baldwin was on the far side of the building.

Photo: Craig Wilson

At Rooty Hill EM Baldwin & Sons Pty Ltd, 1984-5

by Craig Wilson

This is the first of a series of articles in which the late Craig Wilson took up the Baldwin story from where he left off in his book Built by Baldwin [Ed].

The need to move

The 1980's saw a decrease in the number of orders for rail equipment, with canefield locomotive orders slowly drying up and colliery orders barely better. Balancing this, however, was the work flowing from constructing agricultural tractors that had been undertaken with a shortfall of rail work in mind.

While the tractors were constructed at Castle Hill, their size brought home the inadequacy of even the fabrication shop, only built in 1978, for producing these vehicles on a production line basis. In 1984 the search commenced for suitable premises. By June, a property in Kellogg Road, Rooty Hill, had been purchased and was being expanded to accommodate the firm's Castle Hill operation. These additions resulted in a doubling of the workshop area together with extra office space. Castle Hill staff were informed of the move in June 1984. The first employees to move were a half dozen Assembly Department staff. They took possession of an area in the existing structure and commenced the assembly of a number of tractors while in the balance of the new shops the expansion and fit out continued. Equipment and staff moved progressively with most relocating in December and January around the normal Christmas closedown. The last area to relocate was the flameproof shop early in the new year. Apart from the gantry cranes, equipment was transferred wholly from Castle Hill.

While some of the staff chose not to transfer across because of

travel difficulties or their closeness to retirement, for most of the approximately forty staff who transferred the reaction was similar. "It was just sensational. It was everything you'd ever dreamed of for a workshop. It was this sprawling acreage under roof with overhead craneage and everything you'd ever hoped for."

However there was concern for those knowing the present and likely future flow of orders. "How the heck do we financially support this, when we're not building locomotives and we're not doing a lot of things we were doing and all we had to survive on (was) a few tractors?"

It was barely more than six months later when the cash ran out and Ferrier Hodgson & Co were appointed receivers and managers.

A quiet period

Given the short period of time in which so much happened, it is not surprising that staff recall little of the work undertaken during those months. Other than the agricultural tractors, there were no big jobs on the floor to give rise to manuals and memories. Then there was the inevitable dislocation of records and files when the receiver was appointed and started making decisions.

While there can be no clearly identified point of transfer of the work, Job 12225, on which Rooty Hill removal expenses were collected, serves as a point of general reference for the start of the transfer. At the other end of the period, Job 12595 was placed and invoiced in July 1985. Additionally, two further job series were introduced in April 1985. The first started with Job 40-0001 (a scrubber for Rhondda Colliery) and reached Job 40-0122 by July of that year. A second set commenced with Job 90-50001 and this series seems to have covered warranty and rework business. Of all the jobs in this period, less than eighty have been identified by the author, many of these from secondary sources, but even these show the diversity of rail work at this low point of the company's existence.

A few tractors

As already mentioned, even before the alterations to the new workshop were finished, work had started in a small section to the rear. This was for the assembly of four model DP400 tractors, serial 11949 to 11952. The material for these was largely fabricated on stock orders at Castle Hill and was transferred to Rooty Hill where a small group from the Assembly Shop erected them under foreman Don Plane. All were completed in December 1984 or January 1985. At this time sales were still brisk, with Warren Miller and Allan Brown concentrating on tractor sales. They were all sold between February and April 1985, giving the company a much needed cash boost.² Following this, stock orders for the fabrication of components for a further ten model DP400 and three of the new model DP & DM300 tractors were issued.3 Of these, construction was authorised and proceeded on three model DP400 tractors, Jobs 12341 to 123434 and a single DM300 tractor, serial 40.128 8.85.5

Rail warranty work

Despite the apparent quiet, there were a number of rail jobs in the period. Indeed, what little is known of the work undertaken in this period indicates the wide range of rail jobs still being received.

The most visible rail work undertaken were the warranty and spares jobs on the ten Newcom Collieries Pty Ltd Model 17BE battery man-cars built on Job 9981. These were delivered between October 1982 and August 1983. The first warranty costs on this job were recorded in December 1983 on Jobs 11697 and 11706 for the repair of axles and worm wheels. This was the weak point in the design though it was also a point of contention between builder and customer as to what caused their failure.

The builder's concern dated back to July 1983 when, during testing on site, it was indicated that the man-cars were being run in multiple with a driver in each car. There was a further

concern with the operation of the cars. At eleven tonnes in weight and with a fifty horsepower motor, the cars had greater potential haulage ability than the standard Jeffrey ten-ton battery locomotive that most miners were used to. As such there was the temptation for miners to use the cars as locomotives when something needed to be moved underground. The colliery management had issued instructions that this should not happen. As in their view neither undesirable activity was now occurring, they believed that the problem of broken axles and worm wheel failure lay with the design.

There were a number of meetings with the colliery management. Brian Watts tells of visiting the colliery in 1984 for an on-site conference. At a break in the meeting, he went outside to get some fresh air. There the discussion of blame was continued with one of the colliery staff, who forcefully put the view that it was a design fault. Brian responded that it was a shared responsibility because of the way the cars had been operated. At this point, into his field of vision came one of the cars shunting a flat-top trolley. Seeing his opportunity, he asked if it could be said with absolute certainty that management instructions on the cars' operation had not been ignored. The staff member concerned was strong in his reiteration of the Colliery's position. He was invited to turn around and witness what could not happen happening before his eyes.

Ultimately the axles were subject to expert analysis and a consultant's report, and a compromise suggested. Baldwins replaced the axles and worm wheels, reinforced the wheel hubs, and fitted a resilient coupling on the traction motor. The total cost of fitting these modifications to each car was \$7393, of which the Colliery would contribute \$2097.7 The work was proceeded with on Job 12190. There were also a number of minor repair jobs undertaken on the cars on Jobs 12208, 12340, 12516 and 12526; the latter two jobs involved alterations to the pneumatic system. All ten cars went through Rooty Hill with the last one being returned to Myuna Colliery on 16 July 1985.8



AIS 20 stored out of service at Eloura Colliery (Wongawilli portal) on 6 April 1998. Rebuilt on Job 12439 in 1985 it worked on long-wall changeouts at Appin till 1992. It was then transferred to Eloura Colliery (the combination of Wongawilli and Nebo Collieries) and worked there until taken out of service on 16 May 1997.

Photo: Craig Wilson



On 12 July 1997 D3 is pictured outside the locomotive servicing area at South Bulli Colliery. At Rooty Hill, it was rebuilt on Job 12522 by EM Baldwin and would visit the works subsequently on a further seven occasions by 1997.

Photo: Craig Wilson

Rail spares and repairs

Building and selling one-off locomotives is always an intermittent business. However, if enough are sold, a base load of spares sales and repair work is built up. There were eight known orders of this type during this period.

The end of the 1984 crushing season brought three jobs from the Queensland sugar mills. The first, Job 12406, was from South Johnstone Mill for the repair of the final drives on bogie locomotive number 4 (serial 5477.1 8.74). The major work done was the replacement of gears and input pinions. This was followed by an order from Proserpine Mill for the repair of a drop down gear box on Job 12529, and from Goondi Mill for the supply and assembly of a lead wheelset on Job 12586.

Four orders were received for flameproofed mining equipment. Huntley Colliery ordered a set of jackshaft rods (Job 12443) and leading side rods (Job 12445) for its number 2 locomotive (serial 2941.1 2.70).12 There was a further spares order from Teralba Colliery for a fully flameproofed Perkins model 4.182 engine together with a torque converter so they would have a spare available for their Baldwin man cars. This was completed on Job 12553.13 The remaining two orders were for repair work. On Job 12525 Wallarah Colliery had a reversing box repaired.14 This was almost certainly for their locomotive HELEN (serial 3811.2 6.73) as the other Wallarah locomotive, MARGARET (serial 3811.1 6.73), was on loan to Liddell Colliery and only returned to Wallarah on 12 November 1985.15 The final order was from Stockton Borehole Colliery. They had accident damage to man car BHP DT 7 (serial 10229.4 12.82) which required an amount of fabrication work. They were also concerned over possible damage to the motor and flameproof equipment. Maurice Baldwin inspected the man car on 26 February 1985 and quoted. On 2 April 1985 the work went ahead as Job 12544 and, like all jobs coming into a half-empty workshop, it was quickly completed and the car shipped on 5 July 1985. 16

The eighth job was for Sperry Rail Services, operator of the road/rail convertible bus (serial 11367.1 10.83), which had shock absorbers fitted on Job 12275.

Rail rebuild work

The most interesting work at Rooty Hill was a number of orders for locomotive rebuilding. The first, on Job 12439, was for AI&S's Appin Colliery.17 They had purchased three secondhand Fox locomotives to undertake longwall change-outs at the colliery but had found them unreliable. In the previous year the two they had purchased from Kandos Colliery had been sent to Castle Hill for the replacement of their Fox final drives with Baldwin AD6B final drives, together with an amount of related general refurbishment work. They were followed in January 1985 by the third Fox locomotive, AIS 20 (Fox 005 of 3/73 model F15).18 It had been purchased new by BHP for service at either their Leichhardt or Cook Collieries in Queensland. Like the previous rebuilds, 20 received a new AD6B final drive together with suspension and other general repairs. It was dispatched to Appin Colliery one week behind schedule on 19 April 1985.19

AI&S 20 was followed by a rebuild job about which more is known outside of the works than inside. On 15 November 1984, Marian Mill's Clyde 0-6-0DH *MELBA* 2 (serial 64-377) was



PC 11 (EMB serial 9981.1 10.82) stands under charge at Cooranbong Colliery pit top on 18 June 2000, fifteen years after its only visit to Rooty Hill. Since that time it has had its frame and body strengthened with additional welded supports in the battery bay, and strengthening steel also welded at the top of the doors. It will be noted that the cars also retain their Hexham heavy-duty haulage couplers. One wonders what stresses the cars were still undergoing especially as the sister cars at Myuna were not all converted in the same manner. Photo: Ray Graf, Craig Wilson Collection

proceeding to the mill light engine. When crossing a bridge on the Mt Jukes tramline it derailed, plunging into the creek bed and suffering serious structural damage.20 The damage was such that the insurers wrote off the locomotive and it was agreed that they would pay to salvage the equipment from MELBA and incorporate it into a new locomotive. These parts were sent south to Rooty Hill for incorporation into the new machine.21 It might have been thought that this order, as the only locomotive assembled from scratch in this period, would be well remembered. It wasn't, perhaps because it only involved a few staff from the assembly shop. There was just enough remembered to confirm its existence. With regard to records it turned out to be nearly as invisible. No file or job card has been located and it was unlikely any manuals were compiled as it followed Clyde practice. It was just a chance pay-off that in probably the last of the Baldwin records reviewed, a drawing register compiled during the receiver's time, the cutting diagram for the frame was listed. An unlikely event in itself, as it was a drawing not likely to be used again that had waited probably close to two years to be recorded. What was unusual was that the one-line entry recorded the job number as a cross reference, Job 12512.22 The resultant locomotive generally followed the Clyde model HG-3R with a number of detail differences apparent in layout and styling. It was delivered to Marian Mill on 5 July 1985.23

The third locomotive to arrive for modification and repair was from South Bulli Colliery, their D3 (serial 7750.1 3.78). On Job 12522 it had a number of upgrades to bring it closer to the current equipment installed on the Model DH25M Mk5.²⁴ The modifications included the upgrading of the safety circuit and engine stop system, the control system for the dump brakes, the hydraulic drive circuit for the radiator fans, the pneumatic brake circuit, the air start circuit, the fan belt arrangement, the parking brake arrangement, and the fitting of a Quell-Firetube automatic fire suppression system.²⁵

The length of the list is fairly typical of the work that was done in later years as colliery locomotives and man cars came back to the works. New layouts, equipment upgrades and Mines Department requirements were now included with repair work often at negligible additional cost because of the extent of other replacement work. Colliery managements, now faced with the reality that budgets generally did not exist for replacement equipment, had equipment upgraded as opportunity presented.

The final rebuild job was only known of through a job listing, enquiry of staff having revealed no memory of it at the works. On Job 12532, Waratah Wildlife Park at Terry Hills had a locomotive modified.²⁶ The motive power on their railway was the sole John Dunlop built bogie locomotive. Despite the unique nature of the equipment, it was not surprising that a job that arrived immediately before the receiver should escape notice and it may well be that the modification may only have required part of the locomotive (such as the bogies) to be brought to the workshop.

Subcontracted rail work

The Baldwin brothers maintained an approach to business of producing equipment and material to their own design and only doing work for third parties where it involved the sale of their original components. A good example of this was the tyre rims for their agricultural tractors. There was no Australian manufacturer for equipment of the size required, and difficulty with supply via importers. Rather than continuing to import them, Stan Baldwin had modified a machine to produce them as required and, when approached, Baldwin was happy to produce them for third parties.

Apart from the sale of flameproof equipment there was only one rail related customer that over time used them as a subcontractor. Plasser Australia Pty Ltd was a well-known supplier of rail maintenance equipment. The earliest known job for Plasser was in 1974 and from then onwards they were constant customers with fifty-five jobs being identified in the years up to the closure of the Castle Hill works. The jobs involved pressing wheels and gears on and off-axles, and the manufacture of brake shoe carriers, keepers and complete brake-shoe assemblies. The last job included in the pre-receiver range, Job 12595, was for 'one wheel pressed off axle assembly' and Plasser was billed the grand sum of \$49.75 at delivery on 16 July 1985.27

Tenders won too late

While Sales Manager Warren Miller had been concentrating on selling the tractor production, he had also been involved with further tenders for rail equipment.

Elcom Collieries Pty Ltd were in the midst of re-equipping their northern collieries and had sought quotations for the supply of three locomotives. Additionally they had sought Frank Baldwin's advice on what could be done with their existing three Moxon locomotives. These had been unreliable from the start and had become very unpopular. If forced to use them, drivers gave them an Out of Service tag at the first opportunity. As recounted by Frank Baldwin: 'I remember going up there at the request of the Group Engineer and he had all his pit supervisors and mechanics there. He fired off a lot of questions at me, most of which I don't remember. Finally he said, "Look Frank we want you to take these so and so locomotives and Baldwinise them. And for so and so's sake don't send them back looking like a Moxon or we'll get them blacked (black banned) straight away!" '28

There was good news on both projects. Elcom number 63 (Moxon serial B2200 of 1979) arrived at Rooty Hill and on Job 12556 was stripped and quoted on. Approval to go ahead was given on Job 12566.29 Even better news came with the acceptance of the tender for three DH 25M Mk 5 locomotives which were allocated Job 12567.

There was another quotation out for consideration. AI&S Corrimal Colliery had advanced from the coast to the point where shaft access was more economical. The new shaft access, Cordeaux Colliery, could not accommodate AIS 19, Corrimal's eight-metre long bogie locomotive, and quotations were sought for two smaller locomotives to replace it. Baldwin won this tender, allocating it Job 12593.30

The work to generate the much needed cash flow had arrived. But it was too late.

References

- Steve Lewry interview 15/7/03 Page 987.
- Listing: Tractors sold since 1984.
- For DP400 see stock job 12352 & DP300 stock job 12488.
- 4. Job cards 12341-12343 & Warren Miller Records.
- 5. Listing; Tractors sold since 1984 & tractor owners listing.
- 6. EMB letter to Newcom dated 14/7/83
- 7. EMB letter to Newcom dated 27/8/84
- 8. EMB letter to Newcom dated 16/7/85
- 9. EMB job card 12406
- 10. Job listing appended to job card 11904 11. EMB job card 12586 extracts
- 12. EMB job cards 12443 & 12445 extracts
- 13. EMB job card 12553 extracts
- 14. Job listing appended to job card 1190415. Liddell Colliery locomotive files extracts
- 16. Teralba Colliery Locomotive files & job cards 12544 extracts. 17. EMB job card 12439 extracts
- 18. C. Wilson observation 6/4/98
- 19. EMB job card 12439 extracts
- 20. Light Railway News 2/85 page 11
- 21. Light Railway News 10/85 page 7
 22. Drawing Register extracts 'Cutting Diag for 24 ton 0-6-0 frame dated 21/2/85 Job 12512'
- 23. Light Railway News 10/85 page 7 24. Steve Lewry interview 15/7/03 Page 988.
- 25. Parts manual amendment pages from Brian Hobbs, South Bulli Colliery.
- 26. Job listing appended to job card 11904
- EMB job card 12595 extracts
- 28. F Baldwin interview 10/10/93
- 29. EMB job card 12556 extracts
- 30. EMB Jobs 12566,12567 & 12593; details were noted on bundy cards at Rooty Hill on 28/11/85



MELBA brings in a load of cane to Marian Mill on 1 October 1995. The Baldwin replacement cab was different in design to those made at Castle Hill with the air conditioning fan located on the front of the cab rather than for all earlier Clyde replacement cabs at the rear. Photo: Craig Wilson



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Special thanks to contributors to the Cane Trains, Locoshed, Ausloco & LRRSA e-groups

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NEW SOUTH WALES

BLUESCOPE STEEL LTD, Port Kembla

(see LR 196 p.29) 1435mm gauge

The previously expected movement of preserved Clyde 0-6-0T *BRONZEWING* (457 of 1937) to the Rail Transport Museum, Thirlmere did not occur as scheduled. It finally departed on 26 September by road for Maldon cement Works where it was rerailed for towing to Thirlmere.

Pacific National took over steelworks operations on 23 September. Reports indicated that all locomotives passed to the ownership of PN with the possible exception of English Electric Australia Co-Co DE D34 (A.197 of 1969), and including Com-Eng Bo-Bo DE D6 (built 1950), which was generally regarded as 'preserved'. Chris Stratton 9/07; 'Bob' 9/07

QUEENSLAND

BSES LTD, Meringa Sugar Experiment Station 610mm gauge

The former Bureau of Sugar Experiment Stations site at Meringa near Gordonvale has a Photoperiod Facility, which allows control of the length of day for sugar cane being grown for breeding purposes. Artificial manipulation of the length of day allows the flower initiation response to be triggered and so allow the reliable cross-pollination of cane varieties. An existing facility, built in 1986, was duplicated to an improved design in 2000. The new facility consists of a building with three parallel chambers fitted with air-conditioning and artificial lighting, with roller doors at one end. The cane is grown in pots placed on rail trolleys, each trolley carrying 32 pots, with each chamber housing a train of four trolleys. A rail

track runs inside each chamber and each train is automatically winched outside each morning and returned in the evening, with the roller doors also operating automatically. Factors such as the time of dawn and dusk, external temperature, the possibility of track obstruction and wind speed are all taken into account in the operation of the facility, and irrigation also occurs automatically. The cane trolleys appear to be close coupled four-wheel vehicles based on cane bin chassis, and each set of trolleys is fitted with a steel framework superstructure to contain the cane plants, making each vehicle about 5 metres in height.

http://www.srdc.gov.au/ProjectReports/BSS21 8_Final_Report.pdf; http://www.jacksonjackson.com.au/project.html#bses;

http://www.innotech.com.au/html/main.asp?se ction=projectprofile&id=1

via Phil Rickard 9/07; Chris Stephens 11/07

BUNDABERG SUGAR LTD, Bingera Mill

(see LR 197 p.18)

610mm gauge

The allocation of locomotives at Fairymead depot remained the same as for the 2006 season. Bogie locomotives handled most of the rostered duties on cane haulage throughout the Bingera

system this year, with the exceptions being EM Baldwin 0-6-0DH PERRY (6/1576.1 8.66 of 1966) handling one shift per day at Fairymead, Com-Eng. 0-6-0DH WATTLE (FD4789 of 1965) on two shifts at Bingera, and Com-Eng 0-6-0DH INVICTA (A1513 of 1956 rebuilt Bundaberg Foundry 2001) on two shifts at Wallaville depot. As spare loco at Wallaville, EM Baldwin 0-6-0DH RUBYANNA (3406.1 7.70 of 1970) was used when cane needed to be worked back closer to the mill, as it can haul 35 bins up Drinan bank. The only non-bogie loco from Moreton Mill in use was Com-Eng 0-6-0DH DUNETHIN (A1922 of 1958 rebuilt QGR 1974). used for ballast or hauling the rail welding wagon around, a job it has taken over from Malcolm Moore 4wDH 'Hydro' (1025 of 1943 rebuilt Bingera 1969).

Geoff Driver 9/07

BUNDABERG SUGAR LTD, Millaquin Mill, Bundaberg

(see LR 197 p.18)

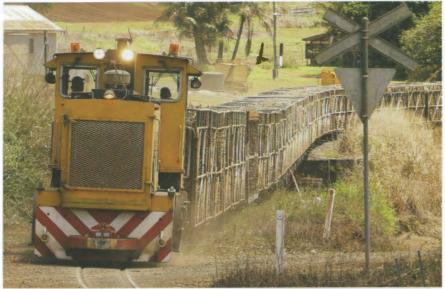
610mm gauge

The new Strathdee's line was not completed during the 2007 season, with some bridge construction yet to be undertaken. Only bogie locos are in regular rostered use at the mill for cane haulage this year. Geoff Driver 9/07; Lincoln Driver 10/07





Top: A visit to the largest flour mill in the southern hemisphere, at Manildra NSW, on 3 September found things relatively quiet on the rail front with Clyde Co-Co DE MM01 (62-257 of 1962) shut down in the yard at the head of a rake of bulk flour wagons, and Goninan centre-cab Bo-Bo DE MM03 (015 of 1961) nearby. Photo: Bob McKillop **Above:** South Johnstone Mill's Gemco rail jack R916-93 has been adapted by fitting it with buffers to enable it to haul small wagons. Here it rests on an isolated section of new line alongside the QR north coast line at Boogan at the start of September. Photo: Carl Millington







Top: Fisher's Creek on the old Innisfail Tramway Nerada line is the location as South Johnstone Mill's EM Baldwin B-B DH 24 (5477.1 8.74 of 1974) powers its rake towards the mill on 25 September 2007. Photo: Scott Jesser **Centre:** The fascinating "bridge over a bridge" scene at Currajong Creek, Wallaville, never ceases to interest. Here Bingera Mill's EM Baldwin B-B DH MIARA (8988.1 6.80 of 1980) crosses with a rake of empties as it approaches the Wallaville depot on 26 October 2007. Photo: Lincoln Driver **Above:** This impressive set of buffer stops at Dawlish 2/3 Siding on the Plane Creek Mill tramline looks like it could be a slight case of overkill, October 2007. Photo: Carl Millington

BUNDABERG SUGAR LTD, Innisfail

(see LR 197 p.18)

610mm gauge

Construction of the new link from the Mourilyan main line to **South Johnstone** Mill is continuing. By the start of September, the line had been built parallel to the QR on the east side from Ramlegh to the site of a diamond crossing about 400m south of the QR Boogan loop. Noted on the new section of line were Com-Eng 0-6-0DM 27 (Al57111 of 1975) and the Fairmont Tamper STM-XLC tamping machine (94962 of 1995).

On the western side of the QR, the new formation had been completed to a point about halfway along the Boogan loop, where it curves west through a banana plantation. About 500 metres of track had been completed on this side of the QR and the Gemco track jack (R916-93 of 1993) was working on this isolated section. It has been fitted with buffers so that it can haul wagons. Meanwhile, a new junction to the Goolboo line near Silkwood was under construction in September, facing Mourilyan.

On 4 September, Com-Eng 0-6-0DM B1111 of 1956 was noted being shunted into the shed at **Babinda** Mill, where it was stripped of remaining useful parts. By late October it had been taken from the mill as scrap by a dealer at Bilyana near Tully, and Com-Eng 0-6-0DH 36 (A1102 of 1955) had also gone, having undergone similar treatment. Meanwhile, the remains of Com-Eng 0-6-0DH 31 (C1125 of 1957) had been placed under a tree near the locoshed and were said to be destined for removal to a tourist resort.

At the start of September, EM Baldwin B-B DH 24 (5477.1 8.74 of 1974) was noted working out of Mourilyan hauling cane to Babinda, while Com-Eng 0-6-0DH 3 (AD1452 of 1961) - officially 23 - was also at Mourilyan.

Baguley 0-6-0DM 10 (3390 of 1954) and brake wagon RS0014 (built by South Johnstone Mill on the chassis of Baguley 2396) are out of use at Mourilyan. The plant at Mourilyan Mill is slowly being dismantled with the traffic office there being demolished on 29 September.

Ex-Moreton Mill bin bodies are being extended in height and mounted on new chassis, complete with new buffers, axleboxes and wheels, at Mourilyan. All bins in use can be tipped at either South Johnstone or Babinda.

Carl Millington 9/07; Scott Jesser 9/07; Shane Yore 10/07; Peter Lukey 10/07

CSR PLANE CREEK PTY LTD

(see LR 197 p.20)

610mm gauge

On 10 September, Mackay Sugar's Canron ballast regulator (1175577 of 1977) was noted near the Plane Creek locoshed. It is not known whether this was on loan or has been acquired.

Plasser 2-2wDMR *LINECAR* (built 1982) is believed to have last run in 2002 and is in deteriorating condition under a tree near the locoshed, but it is reported that it may be restored to service.

Unusually for a cane railway, a heavy sprung buffer stop was recently installed at Dawlish 2/3 siding.

Carl Millington 10/07; Peter Newett 10/07;

CSR SUGAR (HERBERT) PTY LTD, Herbert River Mills

(see LR 197 p.20) 610mm gauge

The **Victoria** Mill brake wagons that were renumbered earlier in the year have all reverted to their original numbers and were in process of having these reapplied in October. The two new Corradini Engineering bogie brake wagons had still not entered service by that time.

The experimental Victoria Mill brakewagon constructed from EM Baldwin 4wDH (8002.1 8.78 of 1978) is believed to have been tested but overheating problems were reported with the electro-magnetic retarder as a result of it being unsuited to lengthy continuous use.

Problems have been encountered with the small brake wagons that have had the middle axle removed, particularly with those that have been coupled together in pairs. The coupling connecting bolts have had to be replaced frequently and there have been tyre problems and an axle breakage as well as failing suspension rubbers.

With the fitting of a new engine during the slack season, Victoria Mill's Walkers B-B DH *HERBERT* // (612 of 1969 rebuilt Walkers 1993) now has a repositioned side-facing radiator.

On 2 September, the final drive gear on the rear axle of **Macknade** Mill's EM Baldwin B-B DH BRISBANE (5423.2 9.74 of 1974) was disconnected because of a component failure. It continued to run in this form, on decreased haulage capacity, and was not repaired until 27 September. On 30 September it was again out of service after the fan damaged the radiator at Hamleigh and it was hauled back to the mill by the mill's EM Baldwin B-B DH 20 (7070.4 4.77 of 1977).

Repairs to Clyde 0-6-0DH *LUCINDA* (65-436 of 1965) were completed at Macknade Mill by early October and the locomotive was transferred back to Victoria Mill. Clyde 0-6-0DH *CANBERRA* (65-433 of 1965) was sent from Victoria Mill to Macknade on 13 October when Macknade Mill's EM Baldwin 0-6-0DH 14 (6/2490.1 7.68 of 1968) suffered a broken connecting rod. *CANBERRA* returned to Victoria Mill around 24 October and Macknade Mill's EM Baldwin 0-6-0DH *HOBART* (4413.1 7.72 of 1972) also spent a few days at Victoria Mill about this time.

Following its return to Victoria Mill from filming duties in Bowen, Hudswell Clarke 0-6-0 HOMEBUSH (1067 of 1914) was used on passenger train duties for the annual Maraka Festival on Sunday 21 October.

Chris Hart 9/07, 10/07; Carl Millington 9/07, 10/07; Brett Geraghty 9/07; Steven Allan 10/07

CSR SUGAR (KALAMIA) PTY LTD, Kalamia Mill

(see LR 194 p.21) 610mm gauge

Com-Eng 4wDH IVANHOE (GA1042 of 1960), which has spent years quietly rusting under a tree in the navvy compound, has been acquired by the Illawarra Light Railway Museum Society and was transported to NSW in October, together with a bogie ballast wagon.

Carl Millington 9/07; Tony Madden 10/07







Top: View from the verandah. Victoria Mill's Walkers B-B DH HERBERT II (612 of 1969 rebuilt Walkers 1993) shows off its altered cooling arrangements as it eases a rake of empties down Burke Street, Ingham, on 20 October 2007. Photo: Steven Allan **Centre:** Isis Mill's EM Baldwin B-B DH 10 (7267.1 6.77 of 1977) passes Johnson's Points with Walkers B-B DH ISIS No.6 (610 of 1969 rebuilt Isis 2002) in tow following the crossing accident on 27 October. Photo: Lincoln Driver. **Above:** On a substantial road trailer, Fortescue Mineral Group's new General Electric Co-Co DE 010 (59187 of 2007) near Redbank Bridge on its journey from Port Hedland port to the commissioning site on the new iron ore railway. Good fortune was on the side of the photographer as the tarpaulin which was supposed to cover up the locomotive had blown off! Photo: Richard Montgomery

HAUGHTON SUGAR CO PTY LTD

(see LR 197 p.22) 610mm gauge

On 6 September, Westfalia B-B DH STRATHALBYN (13863.1 8.91 of 1991) was noted at Browns Road, Clare, hauling Walkers B-B DH GIRU (593 of 1968 rebuilt Tulk Goninan 1994) back to the mill, with the brake wagon from GIRU and about 30 full bins. The Walkers loco had failed and the brake wagon was being used to keep its brakes off.

Walkers B-B DH *CROMARTY* (708 of 1973 rebuilt Bundaberg Foundry 1996), fitted for RSU operation, appears to have a TV camera fitted at both ends. This locomotive was noted working with a two-person crew, as were two other RSU fitted locomotives. It appears that RSU working is not proving the financial saving that was first anticipated. Carl Millington 9/07

ISIS CENTRAL SUGAR MILL CO LTD

(see LR 197 p.22)

610mm gauge

At 10.15am on 27 October, Walkers B-B DH ISIS No.6 (610 of 1969 rebuilt Isis 2002) was hit by a road truck at the notorious Johnson's crossing on the Isis Highway east of Cordalba. It appears that the refrigerated truck, carrying 10 tonnes of tomatoes, was travelling south and failed to stop at the flashing lights. The truck hit the driver's side steps at the front of the cab and spun the loco around, which then rolled over into a ditch on the mill side of the level crossing. The locomotive was hauling at least 70 full bins and at least half of them derailed. A succession of similar incidents have occurred at this location. The media headline "Cane train collides with truck" reinforced public attitudes that blame trains for level crossing smashes.

Two 40-tonne cranes were needed to re-rail the loco, which suffered damage to headstocks, steps, handrails, fuel tank and cab. EM Baldwin 10 (7267.1 6.77 of 1977) was brought out from the mill to haul it back to the locoshed.

Bob Gough 10/07; Lincoln Driver 10/07; Brian Bouchardt 10/07; Ninemsm News 27/10/07; Isis Town & Country

MACKAY SUGAR CO-OPERATIVE ASSOCIATION LTD

(see LR 197 p.22)

610mm gauge

Following the head-on collision on the **Racecourse** Mill system last year, the Marwood Line has been renamed the Sunnyside Line. Sidings MAR01 to MAR07 are now SUN01 to SUN07 while the old SUN01 to SUN 03 sidings are now SUN08 to SUN10. Meanwhile, Morgans Loop has been renamed Chelona Loop. The major casualty of the accident, EM Baldwin B-B DH NORTH ETON (6780.1 8.76 of 1976), had still not returned to service in October.

Pleystowe Mill's Walkers B-B DH *BALBERRA* (657 of 1970 rebuilt Tulk Goninan 1994) was noted in late September with the whole radiator painted grey primer, presumably following a mishap.

A number of locomotive reallocations were noted on 24 September. EM Baldwin B-B DH *MIA MIA* (9815.1 10.81 of 1981) and EM Baldwin 0-6-0DH MELBA (12512.1 7.85 of 1985) had moved from Pleystowe to Marian while Clyde 0-6-0DH NELLIE (58-188 of 1958) had gone the opposite way. Walkers B-B DH TANNALO (705 of 1972 rebuilt Bundaberg Foundry 1995) had moved from Marian to Farleigh. Com-Eng 0-6-0DH CATTLE CREEK (B1724 of 1957) had been moved from Marian to Racecourse Mill in August and was noted stored out of use near the navvy shed there. Racecourse Mill's Clyde 0-6-0DH MUNBURA (67-570 of 1967) was undergoing repairs and had been temporarily replaced by Pleystowe Mill's Clyde 0-6-0DH CHELONA (59-201 of 1959). Carl Millington 9/07, 10/07

MOSSMAN CENTRAL MILL CO LTD

(see LR 192 p.19)

A report suggests that the 2007 season is the last one in which canetainers will be transhipped to multilift road transport at rail sidings. It appears that from the 2008 season, such road transport will run through to the mill to be tipped directly at the carrier, thereby reducing rail traffic.

On 31 August, the Ballyhooley Steam Railway's 0-6-2T *BUNDY* (Bundaberg Foundry 2 of 1952) was noted behind the loco shed.

The locomotive fleet numbers once carried on the cab sides are now displayed inside the loco cabs and these numbers are used for call sign identification over the two-way radio rather than the names.

Carl Millington 9/07, 10/07

THE MULGRAVE CENTRAL MILL CO LTD, Gordonvale

(see LR 196 p.30)

610mm gauge

The mill has approximately 460 10-tonne bins and approximately 1200 4-tonne bins. The 4-tonne bins are semi-permanently coupled together in pairs.

The merger proposal with Bundaberg Sugar's northern milling interests in a new company, TO Sugar, favoured by the Mulgrave Board, had still not been resolved by the end of October. This followed a last-minute counter offer by Maryborough Sugar Factory, and intervention by the Australian Securities & Investments Commission to ensure that both offers could receive sufficient consideration and that independent expert advice on the relative merits of the two offers could be obtained.

Interests in Maryborough Sugar Factory are known to have recently built up strategic interests in Isis Mill, CSR Ltd and Sugar Terminals Ltd.

Chris Stephens 9/07; *Courier-Mail* 1/10/07, 8/10/07; ABC Rural News 2/10/07; *The Australian* 4/10/07; *North Queensland Register* 9/10/07, 11/10/07, 15/10/07

PIONEER SUGAR MILLS PTY LTD, Inkerman Mill

(see LR 196 p.30)

610mm gauge

Com-Eng 0-6-0DH OSBORNE (AH2866 of 1963) has been repainted in yellow with thin red and black lining stripes at waist level. Com-Eng 0-6-0DH KEEBAH (C2231 of 1958) has been painted in the Burdekin mill's yellow livery with red and white

Industrial **NEWS**Railway

CSR Sugar logo. Com-Eng 0-6-0DH *ALMA* (FE56110 of 1975) remains out of use welded to the track at the navvy depot.

Substantial numbers of track panels with concrete sleepers were noted under construction in early September. Several panels are located beside the navvy yard fence to provide off-track rolling stock storage. However, because the sidings constructed to receive Pioneer Mill cane are no longer in use, the ballast hoppers are stored there.

Carl Millington 9/07

PROSERPINE CO-OPERATIVE SUGAR MILLING ASSOCIATION LTD

(see LR 189 p.21)

610mm gauge

Clyde 0-6-0DH 6 (62-272 of 1962) failed early in the crushing season because of engine problems and was still out of commission at the end of October. Tom Badger via Carl Millington 11/07

TULLY SUGAR LTD

(see LR 196 p.32)

610mm gauge

A new building has been put up on the site of the old navvy storage lines and it appears that most navvy rolling stock is now stored adjacent to the navvy shed. Brake wagons are only used on trains crossing the range to El Arish. Carl Millington 8/07

TASMANIA

HYDRO TASMANIA, Tarraleah

(see LRN 48 p.10)

610mm gauge

It appears that a service line built parallel to the hydro-electric pipelines may still see occasional use. It seems likely that a garage-type storage shed at the bottom of the incline houses a work car or trolley that can be winched up and down the line.

Brett Geraghty 11/07

WESTERN AUSTRALIA

AVKO MINING PTY LTD, Kalgoorlie West

(see LR 185 p.22)

narrow gauge

This mining contractor undertakes mine development work as noted previously. Equipment listed as available for use includes two Gemco 1.5 tonne battery locos and three Eimco Model 12B boggers. Phil Rickard 9/07;

http://www.kalgoorlie.com/avko/mining/equipment.asp

BHP BILLITON IRON ORE PTY LTD

(see LR 196 p.32)

1435mm gauge

BHP is reportedly exploring the idea of duplicating its 426km railway from Port Hedland to Newman in order to allow it to treble iron ore production.

Industrial NEWS Railway

Meanwhile, after a Federal Court appeal by BHP Billiton against a decision to allow Fortescue Mineral Group to pursue access to its rival's rail lines was rejected, the giant company lodged an appeal with the High Court of Australia against the Federal Court's decision.

The Advertiser (Adelaide) 28/9/07; West Australian 23/10/07

MT IDA GOLD OPERATIONS PTY LTD

610mm gauge?

In late October this company was seeking to source Gemco 1- or 2-tonne battery locomotives for its underground project mining the Baldock shoot at Mt Ida, situated about 200km north-west of Kalgoorlie.

Frank Stamford 10/07; http://www.monarch-gold.com.au/mtlda.asp

THE PILBARA INFRASTRUCTURE PTY LTD

(see LR 197 p.22)

1435mm gauge

The initial delivery of fifteen locomotives for the Fortescue Mineral group's iron ore railway were unloaded at Port Hedland commencing on 1 November. Numbered from 001 to 015, they are General Electric Co-Co DE locomotives of Model CM44-9W and the builder's numbers are 59178 to 58192. They are in a similar white and blue livery to the construction locomotives. Richard Montgomery 11/07

PILBARA RAIL

(see LR 197 p22) 1435mm gauge

The third locomotive damaged in the Maitland Siding collision in January has been returned from repairs at United Group, Bassendean. This is Com-Eng Co-Co DE 9410 (C6096-05 of 1975 rebuilt Goninan 202 of 1996) which was seen on road transport heading north at Geraldton on 4 October. The trial of driverless trains began late in 2006 and involves a dedicated test track at Dampier to be followed by trials on the main line near Paraburdoo. Apparently three locomotives have been fitted with special electronic equipment to allow remote control using radio signals.

Phil Melling 10/07; Toad Montgomery 10/07; The Australian 2/10/07

OVERSEAS

FIJI SUGAR CORPORATION

(see LR 197 p.22)

610mm gauge

A more positive mood was detected regarding the future of rail operations by visitors in 2007. The Chief Executive of Fiji Sugar, Abdul Shamsher, has claimed improvements in rail operations this year include better locomotive availability and improved turn round time for cane trucks. There is still concern over 'swingers' - trucks that mysteriously disappear from the rail system to be salted away by farmers as a contingency against a shortage of rolling stock deliveries during the harvest. The repaired Lautoka Mill railway bridge over the Teidamu River at Matawalu on the line from Lautoka to Rarawai was due to be reopened by the end

of October, having been out of use since 2005. Baguley-Drewry 0-6-0DH 18 (3770 of 1983) has been transferred back from Penang Mill to Lautoka and has been used mostly for recovering derailed and unserviceable cane trucks between the mill and Nadi.

The Fiji Sugar Corporation is proposing to go into cane growing, reopening land on the former Native Land Development Cooperation Estate in Seaqaqa on Vanua Levu. Cane from this area is currently crushed at Labasa Mill. This land could yield 70,000 tonnes of cane per year. As there is much additional land on Vanua Levu that could be used for growing cane, discussion is taking place around the feasibility of developing a new 600,000 tonne/annum mill at Seaqaqa. A 9 kilometre rail extension to Tabia was built to serve Seaqaqa famers in 1974, but it has long since been abandoned in favour of road transport. The European Union has not paid its \$US30m

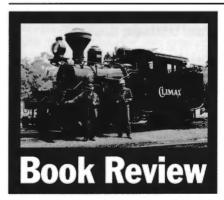
allocation to assist the Fijian sugar industry for 2007 and funding in future years will depend on an orderly return to democratic government. Lynn Zelmer 9/07; David Phillips via Brad Peadon 9/07; Radio Australia News 10/10/07; Fiji Times Online 11/10/07; 13/10/07; Fiji Broadcasting

MARENGO MINING LTD Yandera, Papua New Guinea

Commission 14/10/07; Fijilive 10/10/07

A 100km rail line from the Ramu Valley to a processing site near Madang is planned to convey ore from a proposed copper-molybdenum mine at Yandera. The line is expected to haul 40 million tonnes in the third year of operation.

The National 13/9/07 via Michael Pearson



Locomotives of Australia 1854 to 2007

by Leon Oberg

285 x 210 mm, 448 pages printed on art paper with hard cover and colour dust sheet. 414 black & white photos, 66 colour photos, three drawings. Published 2007 by Rosenberg Publishing Pty Ltd, PO Box 6125, DURAL DELIVERY CENTRE 2158. Recommended retail price \$69.95.

This is the revised and updated fourth edition of Leon Oberg's well-known book, first published in 1974 with subsequent editions appearing in 1984 and 1996. A change in the times is reflected in that while previous editions seemed intended for a mass market and were displayed in many popular bookshops, my copy of this edition, purchased from a well-known national bookseller, had to be ordered in specially. It would be a shame if such a lack of availability restricted sales, because this edition is a good one.

There are 308 separate locomotive entries, with more than a quarter of them being types delivered to Australian narrow gauge and industrial railways, and of course there are many other main-line types that were additionally used by industry, either second hand or in variant models. This means that any reader of *Light Railways* will find a feast of information in this book.

The layout and presentation will be familiar to those who have seen the previous edition, with the print less packed on the page, making for an easier read. Much of the text has been revised, if only superficially at times. As could be expected in a revised edition, many of the photos have been used before, and some are a little tired. The addition of colour photographs, mostly well reproduced, is a bonus when compared to previous editions.

Comments made to me over the years indicate that previous editions of this book have been met with a measure of scepticism from the purists. Oberg's idiosyncratic approach to the selection and classification of many industrial locomotive

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types remains. So does his rather journalistic style of writing and a sprinkling of inaccuracies. To more than balance this, the book contains a huge amount of factual material representing a generally comprehensive selection of Australian locomotives. The author manages to pack a lot of contextual information into his material, so that the reader is exposed to many facets of the history of Australian railways, and indeed of the country as a whole. The bibliography seems a little slight, and surprisingly does not contain any reference to Light Railways or Light Railway News.

I'd be happy to recommend purchasing a copy of this book to anyone, especially if they do not have a copy of an earlier edition. Even those of us who have enjoyed a previous edition will certainly enjoy this new one and find much of interest. The cost may seem high but it reflects the prevailing market for a book of this type.

The concern is sometimes expressed that the number of people taking an interest in railways in this country is in decline. Previous volumes of this book must surely have sparked the imagination and interest of many young people who are now adult readers of this magazine. In this, we need to recognise Leon Oberg's contribution.

Hopefully this new edition will soon be seen in many public and school libraries and will be a much-appreciated Christmas present for many of today's young people.

Recommended.

John Browning



Dear Sir.

Goondah to Burrinjuck Railway (LR 197)

It was a delight to see, in LR 197, the photograph of the former Fairymead mill Krauss locomotive, bearing the name *JACK*, newly restored for display in its original home at Burrinjuck. The staff of State Water there are to be commended for the work done.

Recently, a copy of JR Newland's book *The Goondah-Burrinjuck Railway* (ARHS 1994) was purchased. Observation of the photographs therein suggests that a case can be presented that the real *JACK* is not No.7 but, rather, the former Burrinjuck locomotive displaying the name *ARCHIE*, now in the Rail Transport Museum at Thirlmere. This engine was located at Farleigh sugar mill between its time at Burrinjuck and its current home.

The early photographs of the rear end of the real JACK show an open doorway in the centre of the rear cab wall. It would be logical, when this gap was permanently closed, for a sheet of metal to be welded, or otherwise affixed, in the gap. However, a rear view photograph of No.7 on shed at Fairymead shows no such arrangement. Indeed, the backsheet of No.7 is identical to that shown on the real ARCHIE in the Newland book, right down to the precise alignment of the porthole windows with the rivet (or fastener) pattern on the rear sheet.

Further, No.7 has the horizontal sill and vertical offset divider on the lower section, as on the real ARCHIE. Neither of these was on the real JACK. It is difficult to believe that a full replacement sheet would have been engineered to that precision. By contrast, a photograph of the Farleigh engine out of use, taken in the early 1960s, shows that the remaining left doorway jamb (in the little that is left of the rear cab) is very similar to that on the real JACK in one of the photographs in the Newland book, including the taper as it nears the cab roof. (It must be said, though, that a short section of a horizontal sill and a vertical divider are present.)

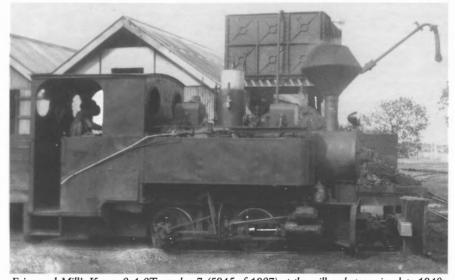
A further piece of evidence concerns the presence of two horizontal ridges on the rear buffer plate of the real *JACK*. These are not on No.7 and not on the real *ARCHIE*, but at least a similar top ridge is visible on the Farleigh engine, the undergrowth obscuring the bottom half of the plate.

If the Farleigh/Thirlmere locomotive is JACK, then the real identity of No.7 needs to be established. Of the two other Krauss locomotives that were originally at Burrinjuck, DULCE and ROBIN, John Newland records that ROBIN was sold, fitted with its nameplates, in 1926, leaving the Fairymead engine as either ARCHIE or DULCE. If there has not been a three-way swap of identities, then Fairymead No.7 would have to be ARCHIE.

When the photographs are studied, there are some other aspects that point to the same conclusion, but caution is needed as camera angles, quality of images and later alterations could explain the apparent differences between No.7 and the real *JACK*.

There is little doubt that the Fairymead engine is B/N 5945 of 1907 and that the Thirlmere locomotive is B/N 6063 of 1908, but John Newland's book is the only source sighted, on the limited investigation so far, that assigns *ARCHIE* to 5945 and *JACK* to 6063, all other references having it around the other way.

EJ (Ted) Flint Bundaberg, Qld



Fairymead Mill's Krauss 0-4-0T number 7 (5945 of 1907) at the mill coal stage, circa late 1940s. Although believed for many years to have been the former Goondah-Burrinjuck Railway locomotive JACK, may it in fact have been JACK's sibling ARCHIE? Photo courtesy George Bond



LRRSA NEWS

MEETINGS

ADELAIDE: "Christmas Film Show"

The 2007 Christmas Meeting will be a Film Evening at the Oaks Theatre. Please bring a plate of supper and a bottle of drink. **Location:** Contact Arnold Lockyer on (08) 8296 9488 for details.

Date: Thursday 6 December at 7.30pm.

BRISBANE: "Annual Photo Competition"

Christmas breakup night & photo competion for the Mike Loveday Trophy Members are requested to bring a plate of goodies. David Rollins will continue showing slides of his 2007 trips to various Countries.

Location: BCC Library, Garden City Shopping Centre, Mount Gravatt. After hours entrance (rear of library) opposite Mega Theatre complex, next to Toys'R'Us. Date: Friday 14 December at 7.30pm. Entry from 7pm.

MELBOURNE: "Gems from Lionel's Den"

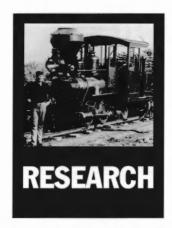
Phil Rickard will present a selection of his father's slides from LRRSA tours from 1967 to 1972. This will include "The Bump in a Bus" (Powelltown), Laverton and Geelong saltwoks, Lal Lal ironworks, "Whistle Stop" Frankston, Waranga etc. Some closed VR branchlines might be included, such as Wonthaggi and Heathcote.

Location: Ashburton Uniting Church Half, Ashburn Grove, Ashburton.

Date: Thursday, 13 December 2007 at 8.00pm

SYDNEY:

The NSW Division's next meeting will take place in February 2008. See the February issue of *Light Railways* for details, or contact Jeff Moonie, on (02) 4753 6302.



Uranium mining tramways, South Australia

Whilst clearing out our father's mountain of colour slides, we came across several hundred photos relating to a holiday in the northern Flinders Ranges in mid-June 1975. One photo is labelled 'Uranium tramway skip' and depicts a preserved mining skip of the deep U-shape type, once much in demand for narrow-vein mining. No specific location is mentioned but as he visited Mt Painter and Mt Gee on the same day I feel sure it relates to uranium-ore extraction at one of the many small workings in the area that are generally referred to as 'Mount Painter'.

I understand that following discovery of uranium-bearing minerals in 1910, several attempts were made to exploit the deposits. The initial deposit, on what became known as Radium Ridge, was worked by the Radium Extraction Company of South Australia Ltd for several years until c.1917. From 1923 until 1932 the Australian Radium Corporation NL operated the venture and in 1944 operations again resumed as part of the war effort and samples were provided to the USA in conjunction with the Manhattan Project. After the war, the South Australian Government continued underground development until abandoning Mt Painter in

There was further exploration by a consortium at the end of the 1960s but no mining. The deposits are considered small, of generally low grade and uneconomic to work.

Can readers add any further details – how many workings were there, were battery locomotives utilised (as they were at Radium Hill between 1954 to 1962), where was Dad's photo taken and to which period of mining does it relate?

Phil Rickard

Australian lighthouse tramways

From time to time readers will have noted in the pages of LR, references to tramways associated with lighthouses around the Australian coast. It has been an ongoing project of mine for some time to write a general article on this topic but I would like to be sure that I have "discovered" them all. Hence these short notes and list of the ones of which I'm aware. Hopefully readers will now deluge the editors with details of ones that I have omitted!

Due to their raison d'être lighthouses, apart from those adjacent to ports, were usually positioned along remote and inhospitable stretches of coastline at locations that were difficult to reach. This led to difficulties not only in getting workers and materials to the proposed site for the initial construction but also to problems with ongoing supplies for the lighthouse keepers and their families.

Sometimes, when the lighthouse was not too far from a town or village, a track of sorts could be cut to the site. More often they were on islands or on more remote stretches of coast and only accessible via boat. Usually a nearby sheltered bay was sought and a jetty constructed. If the distance was not great and the terrain favourable, a track might be cut and a horse and cart utilised to

transport the supplies for the families and fuel for the light - at different times this has been whale oil, colza oil (similar to rapeseed oil), kerosene, acetylene and electricity (usually supplied by a generator). This basic set-up often resulted in a short tramway on the jetty, with the goods, once safely off the jetty, being loaded onto the cart.

If the lighthouse was some distance from the jetty and the terrain not suitable for a simple cart track. tramways were extensively used until the introduction of aerial ropeways and flying foxes. Often the elevation of the lighthouse and its position on a cliff top required the use of an incline tramway (or two) plus a normal tramway. Sometimes a combination of jetty tram, ropeway and incline tram were required with manual handling of goods between stages. At some lighthouses a tramway was only used during construction, being superseded by horse and cart for ongoing supplies. Some lighthouses only had a tramway for the boathouse and a few of the more interesting ones of these are noted on the below list.

The tramways at Cape Don (NT), Vlamingh Head (WA), Green Cape (NSW) and Cape Inscription (WA, see LR197) were to my knowledge the longest, all being over four kilometres in length. Tasman Island

(Tas) was surely the most difficult to access, using a flying fox to pluck supplies and people off the heaving deck of a vessel, depositing them on a high, but sometimes wave-washed wharf, followed by a vertigo-inducing incline tramway up the cliffs to the relative relaxation of a near level wooden-railed tram to the lighthouse (into the teeth of a southerly gale!). Thus one endured a very dangerous disembarkation, the steepest (av. 1:1½) and highest (220m) lighthouse tramway before even starting one's posting.

Also off southern Tasmania, Maatsuyker Island had the honour of the most southerly tramway in Australia whereas Cape Don, on the Cobourg Peninsula in Northern Territory had the most northerly.

In my opinion, Barranjoey (NSW) had the most picturesque tramway though it was short-lived - the present main track to the lighthouse partly follows the construction tram. Whilst all lighthouses were lonely places to work, Balaclava Island (Qld) had the added burden of being one of the most dismal places, due to its location in a mangrove swamp at the mouth of the Fitzroy River; although Cliffy Island (Vic) wasn't far behind, being on a tiny knob of granite protruding above the dangerous and turbulent waters of Bass Strait.

Pre-1915, when the Commonwealth Lighthouse Service (CLS) was



A preserved mining skip photographed by Lionel Rickard in the northern Flinders Ranges during June 1975. Phil Rickard believes the skip relates to uranium ore extraction in the 'Mount Painter' area. Can any reader provide further details?

formed, control and operation of lighthouses was a colonial/state responsibility. In that year 104 lighthouses were vested in the CLS, together with a large number of unattended beacons, lights and buoys. Some local lights remained a state responsibility.

My list comprises:

Althorpe Island	SA
Archer Point	Qld
Balaclava Island	Qld
Barranjoey	NSW
Bedout Island	WA
Booby Island*	Ωld
Breaksea Island	WA
Busselton	WA
	SA
Cape Borda	
Cape Bowling Green	Old
Cape Capricorn	Old
Cape Cleveland	Old
Cape Don	NT
Cape du Couedic	SA
Cape Everard	Vic
Cape Inscription	WA
Cape Jaffa	SA
Cape Levêque	WA
Cape Otway	Vic
Cape Sorell	Tas
Cape Wickham	Tas
Carnarvon	WA
Cliffy Island	Vic
Corny Point	SA
Currie Harbour	Tas
Deal Island	Tas
Degerando Island	WA
Dent Island	Ωld
Eclipse Island	SA
Eddystone Point	Tas
Gabo Island	Vic
Goose Island	Tas
Green Cape	NSW
Hook Island	Qld
Jarman Island	WA
Kingston S.E.	SA
	WA
La Crosse Island	Qld
Lady Elliot's Island*	
Legendre Island	WA
Low Isles	Qld
Maatsuyker Island	Tas
Montague Island	NSW
North Barnard Island	Old
Penguin Island	SA
Pine Islet	Qld
Point Cloates	WA
Sandy Cape	Qld
South Neptunes	SA
South Solitary Island	NSW
Sugarloaf Point	NSW
Swan Island	Tas
Tasman Island	Tas
Vlamingh Head	WA
Wadjemup Hill (Rottnest Is)	WA
Wedge Island	SA
White Rock	Qld
Woody Island	Qld
* boatshed/slipway tram on	ly

All these tramways were duo-rail except Degerando Island (WA) which was a monorail, supplied around 1959 by Road Machines (Drayton) Ltd, England, and of the same industrial type as has been previously reported in Light Railways and online at the LRRSA Yahoo discussion group. Degerando, I believe, was the last to have rail installed. It is also the only one to have self-propelled motive power, all others being either manual, animal, winch or capstan, powered. Rails were, variously, iron, steel and wooden.

Spelling note: Over the years spelling (and sometimes the name) of a number of places has changed — indeed in the CLS records one may often find the same locations with many different spellings — Cape du Couedic, on Kangaroo Island, being a good (or bad!) example of careless clerks and often illegible writing. I have tried to use the historically correct spelling. If anyone disagrees, blame me, not the editor.

I have searched as many lighthouse records as are available online at the National Archives but they represent only a fraction of all their records — a number of locations are still on the 'possible' and 'probable' lists. I suspect that some that had ropeways or flying foxes from the landing point to the lighthouse may additionally have had a jetty with a tramway.

I would like to thank Colin Harvey, John Browning and David Whiteford for their kind assistance in identifying a number of locations of which I was unaware, particularly in Victoria, Queensland and Western Australia. If readers know, or have even a vague reference to any that I have not mentioned, please let me know.

Readers wanting more information on Australian lighthouses may wish to visit the Lighthouses of Australia Inc website at www.lighthouse.net.au.

Phil Rickard

PTC photos online, Victoria

The Public Record Office Victoria magazine [*Proactive*, Spring 2007) advises that the Public Transport Commission (PTC) online photographic collection has been considerably expanded this year with the addition of a further 7500 images to bring the total to over 23,400 images now available online. The latest additions cover adver-

tising, construction, rolling stock and signals and are from the original glass plate negatives.

Whilst VR broad-gauge images predominate, interesting items noted include Loch Valley tramway, Puckapunyal target trams, VR narrow-gauge railways, Australian Standard Garratts, the multi-gauge test track at Spotswood (2ft 6in, 3ft 6in and 5ft 3in), construction tramways at places from Euston to Spencer St Bridge, and a Malcolm Moore loco (possibly of 4ft-gauge) on the Albion-Broadmeadows line construction. Note: although PROV is a member of www.pictureaustralia.org, there were some images that Picture Australia's search facility could not find. Better results were obtained via www.prov.vic.gov.au/online/ptc.asp then clicking on 'View digitised images online'.

Phil Rickard

NSW Division of LRRSA tour to Mittagong. 28 October 2007.

Sunday the 28 October 2007 was warm and sunny as 25 members and visitors met at Mittagong railway station in the Southern Highlands. The guides were member Alan Smith and local historian Leonie Knapman, well known for her research on the old oil-shale mining town of Joadja and its associated railway.

First stop was the basement car park of the new Big W shopping centre (but not for shopping!). Here in one underground section, instead of parking spaces for 60 odd vehicles, a fence, lighting and interpretation signs have been erected around the partial site of the old Fitzroy Ironworks rolling mills. Uncovered during construction of the shopping complex and previously covered over by market gardens, an archeological dig revealed foundations and other historic remains of the ironworks. The unusual location is quite impressive and very well protected from the weather.

Next stop was the summit of Mount. Alexander, situated just north of the town. In 1873 an incline tramway was built up and over the mountain to anthracite mines which supplied this fuel to the ironworks. At the summit the foundations of the steam winding engine remain, hewn, in part, out of solid rock. After photographs, the party walked down the other side of the hill to the site of a 30m

tunnel bored through a ridge of solid sandstone. The bore is still as good as the day it was excavated. The site of a large trestle bridge was inspected situated a little way before the tunnel. After the tunnel the tramway formation continued on downhill towards the anthracite mine.

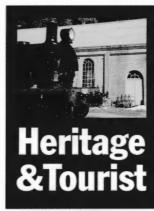
The next point of interest was back in town and a little to the west of the industrial estate where the remains of two earthen embankments, running side-byside were inspected. One once carried the 3ft 6in gauge Joadja tramway of 1880 and the other the standard gauge railway of the Mittagong Coal Mining Co. of 1888 and the Box Vale Colliery Co. of 1890. Lunch was partaken at the home of Leonie Knapman who kindly produced many historic maps and photographs of the district for close examination.

Now well refreshed after the morning exertions, the group drove to the car park at the head of the Box Vale Colliery railway walking track which is maintained by the Lands Department. The track follows the old railway formation, which includes many deep rock cuttings, embankments, trestle bridge sites and the feature of the walk, an 80m tunnel cut through a picturesque sandstone outcrop. The railway terminated on a ridge which overlooks the gorge of the Nattai River far below.

From this point, which once included coal loading facilities and a steam winding engine, a double track incline tramway dropped into the valley where a coal mine was situated 160m beneath the summit. The coal seam outcropped a few metres above the river and was of supposed good quality but the mine closed in 1896. An intrepid group descended the steep hillside to inspect the colliery remains and skip line formation, which were both very much overgrown. The incline's formation, carried on embankments and in cuttings was considerably eroded making the ascent difficult and

After returning to the car park in the early evening, a few members adjourned to the comforts of the Mittagong RSL Club for a well earned dinner and refreshments. A good day was had by all, with many thanks to the guides, Leonie and Alan.

Ross Mainwaring



News items should be sent to the Editor, Bob McKillop, Facsimile (02) 9958 8687 or by mail to PO Box 674, St Ives NSW 2075.

Email address for H&T reports is: rfmckillop@bigpond.com

Digital photographs for possible inclusion in *Light Railways* should be sent direct to Bruce Belbin at: boxcargraphics@optusnet.com.au

NEWS

Queensland

COOMEANA HERITAGE CENTRE, New Chum

Ipswich Historical Society

Two yellow-painted steel coal skips mounted on a short section of elevated track feature as the entry statement at the Society's museum site. The gauge is approximately 483mm (19 inches). 610mm gauge Bundaberg Foundry 4wDM Model BJ15 11 of 1953 has been moved here from a compound near the Swanbank Powerhouse and is stored with a variety of narrow gauge rolling stock including coal skips and cane railway line bogies. There are about a dozen coal skips, mostly 600mm or 610mm gauge, but also including examples varying between 483mm and 508mm (19 to 20 inches), and three man riders, only one with wheels (610mm John Browning 10/07 gauge).

QUEENSLAND PIONEER STEAM RAILWAY, Swanbank

1067mm gauge

A visit on 7 October 2007 found the ex-Pioneer sugar mill 0-4-2T KILRIE (Perry 265 of 1925) on passenger train duties. The Malcolm Moore 1954-built Model L48 4wPM ex-Mackay Massey Harris was observed at the depot and appears to be used as a depot shunter. Goodman 4wWE 6035 of 1949 ex-Southern Electric Authority was noted in the storage sidings John Browning 10/07

New South Wales

ILLAWARRA TRAIN PARK, Albion Park 610mm gauge Illawarra Light Railway Museum Society

As the year draws to an end, ILRMS volunteers look back with pride at the various restoration works that have been completed during 2007 and forward to a fruitful 2008. Restoration of the ex-Goondi mill 4wDM Simplex (Motor Rail 10291 of 1951) has been completed and this locomotive was scheduled for commissioning in November. Work has continued on the ex-Condong mill 4wDM Ruston 40DL locomotive (371959 of 1953), which is now running, although it awaits painting. The torque converter has now been fitted to the rebuilt ex-Tully sugar mill 0-6-0DH No.8 (John Fowler 2192 of 1937, rebuilt EM Baldwin 5.90 9.63 of 1963 - LR 197, p.26). Once the drive chain components are completed, it is hoped this locomotive will be ready for service by mid-January 2008.

There have also been significant achievements in building construction and restoration during the year The renovated and upgraded former NSWGR carriage has been reopened for public use of the smart new canteen and sales area. The recently completed fettlers' shed was opened for public inspection during the September running day. The display of track work, memorabilia and the Lloyd Hartnett motor-trike provided the public with an impressive display of the operations required to maintain the permanent way. The refurbished 1890 Yallah station building was formally opened during the October running day. It contains a room of 'vestervear' and houses a small display of memorabilia creating a great feeling for people waiting inside for a train. The works program for 2008 will see a third platform constructed behind the station and brought into use when the new rail yard area for the entrance into the museum building is finished.

Several items of rolling stock from CSR arrived at the Albion Park site on 7 October 2007, including the diminutive 4wDM IVANHOE (ComEng GA1042 of 1960) from Kalamia mill. The locomotive is in almost complete mechanical condition except for the starter, muffler and air-cleaner. Unfortunately water had entered the engine via the

manifold due the missing aircleaner, so it is likely the engine will need to be stripped down.

The committee and volunteers of the ILRMS wish all readers of Light Railways a safe and merry Christmas and hope that the New Year be great for you all.

Brad Johns, 10/07; Tony Madden 10/07

MENANGLE NARROW GAUGE RAILWAY 610mm gauge Campbelltown Steam & Machinery Museum

The autumn Steam, Oil & Kerosene Open Days were held on 20-21 October 2007. Train operations were well patronised on the Saturday and Sunday was busy until around 3pm, with full trains still being hauled at that time. The ex-Corrimal Colliery 0-4-0WT (Hudswell Clarke 1423/1923) ran flawlessly all weekend. The red 4wDM Simplex (Motor Rail 11023) and the yellow weed tanker were used to mark the end of the original track run. The two ex-Hillgrove Gemco 4wBE locos were displayed on the turntable near the station, and the ex-Plane Creek Mill 0-4-0DM (John Fowler 18801/1930) was parked in the siding next to the platform on Sunday. The green 2-cylinder ex-MSB No.2 Simplex (Motor Rail 20560) and the ex-Condong/Childers Mill 0-6-0DM (John Fowler 16830/1926) were in the shed.

The new track extension was not in use as it has not been accredited for operation by the NSW Independent Transport Safety and Reliability Regulator (ITSRR). ITSRR representatives were on site on Saturday and inspected train operations over the currently accredited track. They also inspected the new track extension. Currently the plan is to build a new station and run around loop near the current end of track to allow all trains to be hauled.

John Garaty, 10/06

RICHMOND VALE RAILWAY, Kurri Kurri 1435mm gauge Richmond Vale Preservation Cooperative Society Ltd

The annual Friends of Thomas (FOT) event on Saturday 15 and Sunday 16 September 2007 was most successful. The large amount of work done by museum volunteers before the event that helped make the week-end so special. A great deal of effort had been put in by many members and their work was rewarded by the excited and happy

faces on all who attended, especially the children.

Ex-BHP Bo-Bo DE No.34 (A Goninan 3 of 1954) had failed in May, requiring one cylinder-head to be replaced. This was not as easy as expected as finding spare parts took some time, and it was not until the Wednesday before the event that the engine was completed and tested. In fact there was not enough time to replace the engine bay doors, so her usually unseen internals were on view.

Ex-Lysaghts 0-4-0ST MARJORIE (Clyde Eng 462/1938) had developed a hot axle box in August and this also was hastily repaired the week before, but unfortunately it did not cure the problem and the loco was failed again late Saturday afternoon. Accordingly, the event was run with ex-SMR 2-8-2T No.30 (Beyer Peacock 6294/1924) and No.34 taking turn about on the train to Pelaw Main.

Following the failure of MARJORIE, the ex-Water Board 4wDM Planet loco (FC Hibberd 3715/1955) gallantly took over the Mulbring Road shuttle. As it could only handle one carriage compared to MARJORIEs three, it was only seen to stop the wheels long enough to unload or load. In fact, on Sunday the Planet broke the record for the number of runs completed on the Mulbring Road shuttle.

As reported in LR 196 (p.37), ex-BHP centre-cab Bo-Bo DE 53 (A Goninan 018/1964) required further mechanical and electrical work. This had been proceeding slowly, but on Sunday the loco was pressed into service with the CHP brake van on the Glass House shuttle. Unfortunately a minor fault developed late in the afternoon and the service was cancelled at 15.00 hours.

Graham Black, 09/07

THIRLMERE RAIL HERITAGE CENTRE 1435mm gauge

NSW Rail Transport Museum
The transfer of former Al&S 0-6-0ST

BRONZEWING (Clyde 457 of 1937) from Port Kembla to Thirlmere did not eventuate in June as anticipated in LR 196. The movement finally occurred on Wednesday 26 September, when the loco was transported by road to Maldon cement works, where it was placed back on rails and towed to Thirlmere by NSW RTM locomotive 4803. BRONZEWING has a current boiler certificate and requires only minor

It will therefore be available as an operating locomotive at Thirlmere, although it is not expected to see regular service there. A likely outing will be during the Thirlmere Festival of Steam in March 2008.

Chris Statton, 10/07

experiments were held at Spotswood where speeds up to 40mph were reached on three-quarters of a mile of re-gauged track. (*Australian Armour* by Major-General R.N.L. Hopkins; AWM 1978)

Although the target trolley is now

on display, there was no visible signage explaining its use or significance. Hopefully this will be rectified soon. Do readers have any knowledge of any other target range tramways in Australia?

Phil Rickard 10/07

Victoria ALEXANDRA TIMBER TRAMWAY & MUSEUM 610mm gauge Updating the report in LR 19 John Fowler 0-6-0T (B/N 1 1909) has had its boiler r

Updating the report in LR 197 (p.26), John Fowler 0-6-0T (B/N 11885 of 1909) has had its boiler removed from the frame and the tubes were removed in the week of 15 October. A very positive response by the Alexandra community to the museum's request for funds to purchase new tubes has resulted in an order being placed with suppliers in Brisbane and it is hoped that the locomotive will be back in service by Christmas. It is planned to replace the brake blocks and to have the boiler inspected while the tubes are out. The two Kelly & Lewis 0-6-0DM locomotives have been the mainstay of train operations while the Fowler is out of service and K&L 5957 performed extremely well, over the weekend of 13-14 October. This included the annual Woodturners Gala Day and a market day, as well as visits from two car clubs, so there was intensive train operations on both days. Peter Evans, 10/07

ROYAL AUSTRALIAN ARMOURED CORPS TANK MUSEUM, Puckapunyal

915 mm gauge (LRN 105, April 1995)

A follow-up visit was made to this excellent museum on 27 October 2007 to ascertain the current position regarding the target trolley. In December 1994 the trolley (believed to be No.3) was in storage. It has now been repainted in grey and set up on a short length of track. Contrary to the previous report that it was battery powered, readers will note that it is actually powered via an electrified centre rail. (See photo on page 30.)

It is understood that the WWII armoured fighting vehicle (AFV) 3ft-gauge range railway was constructed by VR engineers in mid-1941 and that the target trolleys, of which there were three or four, were constructed at the VR's Newport Workshops. Early



610mm gauge Bundaberg Foundry 4wDM Model BJ15 11 of 1953 stored at the Ipswich Historical Society's Coomeana Heritage Centre site at New Chum in October 2007. Photo: John Browning



The museum shop plays a key role in generating finances to cover the running and restoration costs of preserved railways. The Illawarra Light Railway Museum Society has recently completed renovations to a former NSWGR carriage that serves as the cafeteria and shop area. Brad Johns photographed the improved shop display area in October 2007.

Tasmania

DON RIVER RAILWAY

1067mm gauge

Van Diemen Light Railway Society Inc.

DRR volunteers have made good progress with the restoration of the ex-Mt Lyell Mining & Railway Company 40DL 4wDM (Ruston & Hornsby 187072 of 1937). The replacement 'sentry-style' box cab fitted some years ago has been reduced in height to more reasonable proportions and the locomotive has been painted in its original Ruston green livery as delivered to the MLMRC in 1938. A new fuel tank. top water header tank and upper plate of the radiator support structure have been fitted. The loco is still missing side footboards and window glass. It has been numbered '2' in the DRR fleet, being the second Ruston acquired, with 40DL 279571 being the first.

In August 2007, the Ruston 4VRO 44/48HP engine was waiting for the main bearings to be re-whitemetalled, line-bored, and scraped in prior to it being installed in the loco. The crankshaft had been re-ground. One of the major tasks confronting the restoration crew was to strip the Cummins yellow spray painted over the top of any grime present when the engine was in the care of Dillinghams, in order to restore it to the Ruston green.

The locomotive was wheeled out for an informal photo session on Saturday 20 October 2007 to celebrate its 70th birthday exworks at Lincoln. Although minus its engine and a set of radiator cores, the locomotive looked splendid in its near original livery.

Philip G Graham, 08/07; 10/07

Western Australia

BENNETT BROOK RAILWAY, Whiteman Park

610mm gauge

WA Light Railway Preservation Assoc. Inc.

The Friends of Thomas the Tank Engine (FOTTE) Day held on 23 September 2007 was another resounding success. Record crowds attended. Operations were altered from previous events, with three trains running in top-and-tail formation to various destinations on the railway. 0-4-2T BT1 BETTY THOMPSON (Perry Eng 8967.39.1 of 1939) ran between Whiteman Village Junction (WVJ) and Mussel

Heritage & Tourist

Pool with 0-6-0DM ROSALIE (John Fowler 411019/1950). The ex-South African 2-8-2 NG 123 FREMANTLE (Anglo Franco Belge 2670 of 1951) operated trains between WVJ and Zamia with the ex-PWD 4wDM PW27 (Gemco-Funkey 1963), Trains between WVJ and Kangaroo Flats were hauled by the ex-Lake View & Star 4wDM Planet No. 1 (FC Hibberd 2150 of 1938), together with the 4wDM ASHLEY (Kless Engineering). All in all, there were 60 train movements out of WVJ over the 7 hours of the event.

The BBR operated every day during the October school holidays with 2-8-2 NG123 as the main motive power and operating 'Top and Tail' with 4wDM Planet No.1. The section of track between WVJ and Kangaroo Flats had been cleared for the NG locomotive, but the loop at the latter location remains out of use, necessitating the 'Top and Tail' operating mode. The section from Kangaroo Flats to Zamia also remains closed. Additional trains operated on Sunday 7 October, with a chartered steam demonstration goods train hauled by 0-4-2T BT1, as well as Gemco 4wDM PW27 undertaking a further test run with a loaded train. Following some initial 'teething problems', NG123 has performed well in its return to service on the RRR

The Gemco 4wDM PW27 had been out of service since July 2005 with a damaged crown wheel. The first week in October also saw lengthy restoration work on the 4wDM Planet No. 2 (FC Hibberd 1938) make a significant step forward when the engine was started and worked well.

Bob Baker, 09/07; BBR website news report, 10/07, Lindsay Watson, 10/07

STATHAM'S QUARRY, **Darling Range**

The Statham's Quarry site on the Upper Darling Range zig zag railway was entered into the Western Australian Register of Heritage on 31 July 2007. In addition to 1067mm gauge WAGR sidings, the quarry had a large narrow gauge extraction and spoil tramway network.

David Whiteford, 10/07

Overseas

BURMA RAILWAY, Kanchannaburi, Thailand

1000mm gauge

I recently attended the funeral of a Jewish friend of some 30 years standing who had survived the horrors of working on the Burma Railway as an Australian POW during World War II. He never spoke of this experience and I did not ask out of respect for his silence. It was only at his funeral that many of us who knew Neville well learnt something of the ordeal he went through at that time. As the last of those survivors pass on, I suspect many Australians are learning something of what their relatives and friends who worked on the Burma Railway went through and becoming interested in finding out more. It was there-

fore most timely that Peter Murray sent us a recent photograph of relics of the railway taken by his daughter Helen, which is reproduced in this issue. [Ed.]

A Japanese military truck, converted to rail, and wagon is on static display on a short section of rail outside the Kanchannaburi Railway Station. Also on display at the Station is a 2-6-0 steam locomotive of the Japanese C56 Type, purportedly from the Burma Railway epic. The truck and wagon appear to be genuine relics from the Burma Railway, the military truck being a standard Japanese Army type of the war years that were evidently built as dual road/rail operating units. Tourist trains leave from and return to the active Kanchannaburi Station on the short run to the Kwai River. The Burma Railway display at the station is not

associated with the JEATH (Japan. England, Australia, Thailand and Holland) or 'Death Railway' Museum in the same town.

Peter Murray, 09/07

DOC rail heritage sites, New Zealand

The Department of Conservation (DOC) has 31 rail heritage sites across New Zealand open to the public. These sites are different from static museums and operating lines in that they offer an adventure experience exploring remote and scenic trails, adding diversity to the overall rail heritage scene and providing further entry points to trigger peoples potential interest. DOC's sites have a strong industrial railway focus, covering timber, gold, coal, and even lighthouses, and so preserve another category of rail heritage.

Details of the sites open to the public an be found at:

www.doc.govt.nz/upload/docume nts/conservation/historic/topics/r ail-heritage-factsheet.pdf Some of the outstanding sites in

the North Island are:

· Kauri Timber Co tramline, 1925-40, Whangaparapara, Great Barrier Island. This 14km long bush tramway includes 11 sections of incline worked by winch and cable.

 Billy Goat incline, 1922-25. Kauaeranga Valley, Coromandel Forest Park This 5km bush tram route includes a section of relaid track. A Price rail tractor will be restored and displayed here.

 Victoria Battery & Tramway, 1895-1954, Waikino, near Waihi. This was the terminus of the 825mm gauge mine railway and the site of the largest stamper batter in New Zealand, A 450mm gauge mine tramway is still intact in kiln tunnels and the Victoria Battery Tramway Society operates a 600mm gauge tram on the site using two battery mine locos.

 Piako County Tramway, 1883-1918, Waiorongomai, Kaimai Mamaku Forest Park, near Te Aroha. This 8km 825mm gauge gold mine tramway has 5km of 1883 track still intact. It has three inclines with two brake-heads intact.

 Waitawheta bush tram. 1895-1926, Kaimai Mamaku Forest Park, near Waihi. A 12km 825mm gauge bush tram route with outstanding scenery and integrity. A set of log bogies with kauri log will be restored and displayed on a short section of re-laid track.

Coming Events

DECEMBER 2007

1 Puffing Billy Railway, VIC. Santa Special train departs Belgrave at 1105 for Lakeside and return - also on 8 and 15 December, with Santa's Sunset Special departing Belgrave at 1710 on 8 December. Information (03) 9754 6800 or download booking form from:

www.puffingbilly.com.au/info/specials/santa.htm

1-2 Redwater Creek Steam & Heritage Society, TAS. Operating weekend with narrow-gauge steam railway rides 1100-1600, daily from 27-31 December. Information Chris Martin, phone (03) 6334 8398 or 0429 418 739. 1-2 Wee Georgie Wood Railway, Tullah, TAS: narrow gauge steam train operates 1000-1600. Phone: (03) 6230 8233.

2 Australian Sugar Cane Railway, QLD. Steam-hauled narrow gauge steam trains in Bundaberg Botanic Gardens (1000-1600) every Sunday, public holiday and Wednesdays during Queensland school holidays. Phone (07) 4152 6609.

12 Cobdogla Irrigation Museum, SA. Operating day with Humphrey Pump and narrow gauge steam train. Phone (08) 8588 2323.?

15-31 Semaphore to Fort Granville Steam Railway, SA. Miniature steam trains operate daily 1100-1600 (except Christmas Day), unless temperature in Adelaide is 35 degrees or above. Phone: NRM (08) 8341 1690. 16-31 Bennett Brook Railway, Whiteman Park, WA. Daily train operations

during school holidays (except Christmas Day), 1100-1500.

JANUARY 2007

1-16 Redwater Creek Steam & Heritage Society, TAS. Narrow-gauge steam railway rides daily 1100-1600. Information Chris Martin, phone (03) 6334 8398 or 0429 418 739.

2-27 Bennett Brook Railway, Whiteman Park, WA. Daily train operations during school holidays, 1100-1500.

2-27 Semaphore to Fort Granville Steam Railway, SA. Miniature steam trains operate daily 1100-1600, unless temperature in Adelaide is 35 degrees or above. Phone: NRM (08) 8341 1690.

5 Cobdogla Irrigation Museum, SA. Twilight narrow gauge train rides for the whole family with diesel traction. Sausage sizzle, drinks and ice creams available. Also on 12, 19 and 26 January. Phone (08) 8588 2323

9 Illawarra Light Railway Museum Society, Albion Park, NSW. Operating day with two narrow-gauge trains on mainline, plus the trolley-wire miners' tram and miniature railway 1100-1630. Phone: (02) 4256 4627 or www.ilrms.com.au

19-20 Wee Georgie Wood Railway, Tullah, TAS: narrow gauge steam train operates 1000-1600; also on 26-27 January. Phone: (03) 6230 8233.

FEBRUARY 2007

3 Wee Georgie Wood Railway, Tullah, TAS: narrow gauge steam train operates 1000-1600; also on 9-10, 17 & 24 February. Phone: (03) 6230 8233.

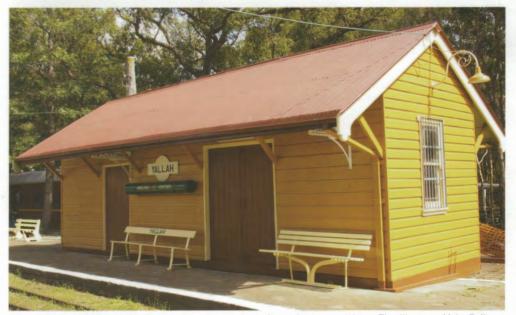
Note: Please send information on coming events to Bob McKillop rfmckillop@bigpond.com - or the Editor, Light Railways, PO Box 674, St Ives NSW 2070. The deadline for the February 2008 issue is 5 January.



Java, Indonesia July/August 2008

There are probably more 'working' narrow gauge steam locomotives and more 'working' stationary steam engines in the sugar mills of Java than in the rest of the world put together – they are a giant living museum of the steam age. I have been running tours for small groups of enthusiasts since 1991 and you can be there too. For details email Rob (and Yuehong) Dickinson on chinasteam@dial.pipex.com or visit our web site: http://www.internationalsteam.co.uk/tours/java2008.htm

Armchair enthusiasts can enjoy the action on our DVD, Sweet Spot which features Olean, the 'Jewel in the Crown' of the mills – see http://www.internationalsteam.co.uk/dvd/sweetspot.htm for more information or email us as above.



The railway station sets the image of a preservation railway for many visitors. The Illawarra Light Railway Museum Society has recently completed renovations to the former NSWGR Yallah station at its Albion Park site, which now greets visitors with provocative images of past eras.

Photo: Brad Johns



The ex-Mt Lyell Railway Ruston & Hornsby 44/48HP (187072 of 1937) stands for an informal photo session at the Don River Railway on Saturday 20 October 2007 to celebrate its 70th birthday ex-Ruston works at Lincoln.

Photo: Philip G Graham

Heritage & Tourist

 Sheridan Creek tramway, 1930-38, Tararua Forest Park, near Otaki. This steeply graded bush tram has seven stream crossings.
 A short section of tram track remains in situ, together with the Vulcan log hauler and steam plant at the mill site.

South Island sites will be covered in a following report.

Paul Mahoney, DOC, 08/07

WELSH HIGHLAND RAILWAY,

United Kingdom 597mm gauge Updating our report in LR 198 on the ex-TGR 0-4-0+0-4-0 Garratt locomotive K1, the loco had a short test on 2 October 2007 and then ran to Rhyd Ddu on two subsequent days. The valve gear had been adjusted with greater accuracy for compound working with dramatic results. K1's performance with the five-car 'F set' was very pleasing, the loco is steaming better on coal and exhausting from the low pressure engine has also improved. A bearing still ran hot, but it was considered that this is now at the level where running in and additional lubrication will suffice and it was dismantled the next day for attention. After attention to the axlebox on 9 October, a further satisfactory run took place on 12 October with a view to having the loco in service this autumn/winter. Remaining tasks include fitting the damper controls in the cab and improving the operation of the injectors.

WHR Stop Press Page, via John Browning, 10/07.

20th Anniversary of Coalfields Steam Operations at the RVR

Saturday 22 September 2007 marked 20 years since the last train of nonair hoppers rattled out of Stockrington yard, across the Hexham swamps and into history. To commemorate this historic event, a special function was held at the Richmond Vale Railway Museum.

Considerable effort had been made to track down former employees of the line, but some had since passed away while others just couldn't be found, Nevertheless, three former employees, Glen Bates (engineman), Ray Cross (engineman), and Howard Trevethan (wagon repairer) reunited for the day to reminisce about the line. Former employees of South Maitland Railways were also present for the festivities.

A simple ceremony commenced at 11am with the arrival of the non-air train into the platform amidst much enthusiastic whistle blowing. There was a welcome from the RVRM chairman, a brief discussion of the line and a short presentation about the non-air train restoration program funded by the Mineworkers Trust. All present then boarded the non-air train for a spirited run to Pelaw Main with a photo stop en route.

Upon arrival back at Richmond Main, a luncheon was served at the old administration building, overlooking the platform. Guests enjoyed a DVD presentation, courtesy of David Threlfo, a display of RVR images with kind permission of Brian R. Andrews and line drawings courtesy of Jeffrey Mullier. After lunch, the demonstration coal train made another two trips to Pelaw

Despite the weather deteriorating as the day wore on, many stayed for all three trains and all present seem to have immensely enjoyed rekindling fond memories of steam. A special thank you is extended to all the volunteers at RVRM for their tireless efforts to make the day a success.

Richard Kiejda, 10/07



Glen Bates (left) and Ray Cross, who crewed the last train of empty nonair hoppers on the Richmond Vale Railway, met again for the first time in 20 years at the RVR museum commemorative event on 22 September 2007. The Eureka flag draped between them is the very one flown on SMR No 25 during the three-week protest that followed the end of steam operations. Behind them, SMR 2-8-2T No 30 stands with its train of nonair coal hopper wagons. This locomotive was used in the blockade of the Stockrington coal loader and it hauled the last revenue train on the line.

Photo courtesy RVR Museum.



The restored target trolley on display at the Royal Australian Armoured Corps Tank Museum at Puckapunyal was photographed by Christine Rickard on 27 October 2007. ☐ During the Richmond Vale Railway Friends of Thomas event the failed 0-4-0ST MARJORIE had been placed on display in the perway siding on Sunday 16 September. On the right, 2-8-2T No. 30 waits for its next train, while the Planet 4wDM pauses for its carriage to load before departing with another Mulbring Road shuttle trip. Photo: Graham Black





The Japanese military truck and wagon on static display as a memento to the Burma Railway, were photographed by Helen Murrary outside the Kanchannaburi Railway Station in Thailand on 7 August 2007. \(\subseteq \text{View from the curve near the end of the new track on the Menangle Light Railway looking back to the ex-Condong mill 4wDM Simplex locomotive (Motor Rail 11023) and a yellow tank wagon parked at the end of accredited track. Menangle Road is in the background. Photo: John Garaty. \(\subseteq \text{The ex-Pioneer sugar mill 0-4--2T KILRIE (Perry 265 of 1925) rests between duties on the Queensland Pioneer Steam Railway at Swanbank on 7 October 2007. Photo: John Browning

