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LIGHT RALWAYS

Australia's Magazine of Industrial & Narrow Gauge Railways



Light Railway Research Society of Australia Inc.



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Australia's Magazine of Industrial and Narrow Gauge Railways

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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 ton	1.01 tonnes
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1 gallon	4.536 litres
1 cubic yard	0.765 cubic metres
1 super foot	0.00236 cubic metre
(sawn timber)	

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Comment

'Do research, no matter how little'

The Narrow Gauge Railway Society (UK) recently published a special issue of its magazine, *The Narrow Gauge* (No.215). The issue was devoted to the results of a project by LRRSA member Norman Drake to visit and record details of a large company's oil plantation railways in Malaysia. In the magazine, Norman explains how he went about this and tells of his delight at how far the results of his curiosity exceeded his expectations. His quest had arisen from a chance viewing of a photo in an in-flight magazine years before, and the words of Peter Lee, late Librarian of NGRS, '... *do research, no matter how little*.'

These words are very significant ones. They encourage us all never to underestimate the potential of our own efforts. To investigate a topic of interest is enjoyable and rewarding. To record the results is satisfying. To publish the results is to leave a legacy.

So much of what we know and enjoy today is because those who went before made the effort to investigate, record, and publish the results of their efforts. Our magazine, *Light Railways*, provides an encouragement and an opportunity for us all to do this, and what it records is not just for now; it is for future generations to enjoy and benefit from.

You never know where making a start will leave you, so 'do research, no matter how little.' John Browning

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.

Light Railways is the official publication of the Society. All articles and illustrations in this publication remain the copyright of the author and publisher. Material submitted is subject to editing, and publication is at the discretion of the Editor.

Articles, letters and photographs of historical and current interest are welcome. Contributions should be double spaced if typed or written. Electronic formats are 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: On the morning of Saturday 6 August, Victoria Mill's preserved Hudswell Clarke 0-6-0 HOMEBUSH (1067 of 1914) is being prepared for its day of passenger duties at the annual Ingham Italian Festival. Photo: Chris Hart



No 6 (Walkers 653 of 1970, rebuilt Walkers 1993) is heading back towards the mill along King Road just east of the QR crossing at Jaffa in 2001. Photo: Rod Milne

The El Arish loop

by Rod Milne

Introduction

1937 was a big year in the development of the sugar mill at Tully.That year, the mill forged a connection with the El Arish district, north of the mill and the Walter Hill Range, where a one time soldier settlement had blossomed into a significant cane growing area. The 2ft gauge line connecting the Tully mill system at Feluga to El Arish was a notable construction task. It featured an overpass over the QR North Coast Line north of Djarawong, and a scenic profile through rain forested ranges. Additional tramway crossings over the QR were also forged at Maadi and Jaffa, to the south and north of El Arish, but these were ground level traditional crossings protected by signals and catch points on the tram lines.

Maadi, Jaffa and El Arish are all the names of World War I battle fields, being adopted when the QR line opened. As soldier settlements were created, other names honouring battles of that era were adopted; a notable and unusual one was Hill 60, which became the name of a public road leading west from the old Quatia siding, located between Jaffa and El Arish.

An expensive piece of infrastructure to build, the cane tramway was formally opened with a certain degree of fanfare at a function at Hogans Creek near the summit of the Walter Hill Range on Saturday, 12 June 1937. Officiating at the opening was the then chairman of Cardwell Shire, Mr Brice Henry, but the weather was described in the media as "unfavourable". That said, it was also noted that three special trains ran from Tully and El Arish to enable residents to view the remarkable new line. The cost of the line was estimated to be $\pounds 65,000$. The 2ft system at El Arish soon grew into a significant system in itself, based on a large loop that circumnavigated the town, plus quite lengthy spurs. El Arish also gained a small loco depot west of Maadi, which doubtless housed the mill's original diesel locomotive, No. 8, which worked the line in the earlier years.

Recollections

When I worked at Tully in 1996-1997, I was briefly resident at El Arish and found it a marvellous experience. While the QR held some interest with several daily trains (2800 class worked as well as by other locos), I was naturally drawn to the El Arish Loop, the cane tramway that seemed to encircle the town like a great lasso. While most cane railways do not enjoy a regular daily service in the cane season, the El Arish was one that did, the Warrami line south of town also being in the same category.

The line was also usually worked by one loco at the time too, usually the ex-QR DH class loco rebuilt and rebranded as Tully No. 6. Although other locos worked the line, I recall the strong association that No. 6 had with El Arish. The first trip of the day brought bins up from the mill about dawn, and usually returned south around the time I went to work. There was often a lunch-time job too, while a regular afternoon run also came back with full bins about the time I headed home. The tramline crossed the Bruce Highway twice as well as the busy Mission Beach Road, so the sound of the loco whistle tooting at various busy crossings around El Arish punctuated each day in the season. An errant whistle usually gave you a pretty good idea where No. 6 was in its journey!

A curious feature of the El Arish loop was that it was normally worked in one direction only. The empties would arrive, crossing the QR at Maadi. The train then continued around the eastern side of El Arish gathering loaded rakes of bins before crossing back to the western side of the QR at Jaffa crossing. Most of the cane spurs were set up so that they trailed in the direction, though every so often a bin train would terminate east of Maadi, and run back to the mill via Maadi if the full load was offering there. This happened on Saturday 17 August, 1996 when No. 6 took the bins over to the load out at East Maadi and brought its load back direct.

Some cane spurs were central receiving points that saw regular business, notably the bigger sidings east of El Arish which served cane lands going east towards Bingil Bay, but there were also odd little sidings too. One of my favourites was the spur just west of the Jaffa crossing, running south from the tramway along Jaffa Road towards Hill 60 Road. It crossed a small semi-derelict bridge before ending in the long grass. Only once the whole time I was there did I see it used!

Another interesting spur ran up the valley west of Maadi and the El Arish loco depot and was likewise rarely seen with bins. That area along Jackson Road was known as Shell Pocket. On the main line south towards Tully, there were a couple of lifted cane spurs, striking off to long-abandoned cane fields enclosed by rain forests. The rails in the crossings of Old Tully Road were the sole reminder of their existence.

A quaint little aspect to the El Arish loop was the existence of a loco depot there. Sited about a mile west of Maadi, the depot was on two short dead-ends, and commonly housed one of the diminutive Tully Mill EM Baldwin-built 0-4-0DH locomotives (either 1, 2 or 3) allocated to navvy duties. During the year, it was not uncommon to find this little loco hitched up to a rake of tiny trucks parked somewhere around El Arish as the gang attended to repairs. Hogan's Branch, parallel to the Bruce Highway south of King Road leading towards El Arish was a common place for the navvy train to work. On Thursday 15 August 1996, No. 3 was parked there.

On Friday 29 November 1996, No. 1 hauled the work train back over the Djarawong overpass to El Arish depot. There were two locos working in the fields around El Arish on Tuesday



8 July 1997; B-B DH No. 7 (EM Baldwin 10684-1-4-83) was hauling bins and No. 1 was on a work train.

From time to time, extras would bring bins up to El Arish depot assisting the normal cane train. On one occasion on Wednesday 14 August 1996, one of the famed Tully Com-Eng 0-6-0DH multi-pairs (Nos. 10/14) took bins up to the depot and left them there. When No. 6 was indisposed, the other



Nos 10/14 (Comeng AD1341 of 1960 and AK2663 of 1963) are cutting off at El Arish depot at Jackson Road after bringing up a rake of bins on Wednesday 14 August 1996. Photo: Rod Milne



No. 1 (EM Baldwin 6/1082.3 2.65 of 1965) is on a work tram going over the QR bridge between Maadi and Djarawong on Friday 29 November 1996 heading back to El Arish depot Photo: Rod Milne

ex-QR DHs deputised, though No. 4 tended to be rusted onto the Warrami line. No. 7 made a run around the El Arish loop on Friday 5 September 1997, passing east of Jaffa with empty bins, that EMB unit appearing a few times around El Arish that season.

As much as the line between Feluga and Maadi is scenic, the loop also has its scenic qualities, the pretty El Arish valley framed by stately inland rain forested ranges and coastal ranges to the east. In its traverse of the valley, the loop crossed Digger Creek twice, and Maria Creek was likewise crossed by a steel and concrete bridge on the main line back to Feluga and Tully. With three crossings of the QR, the El Arish line cane trains regularly came in close quarters to the bigger QR trains. Every once in a while, a cane train would clatter over the bridge north of Djarawaong at the same time as a QR train would pass under, while the rules of play at Maadi and Jaffa tramway crossings tended to involve the simple dictum of "first in, first served". From time to time, QR trains, including the 'Landers', would be obliged to come to a stop at the signals at Maadi and Jaffa to wait clearance by the loop line cane train. A simple lever frame with phone worked the tramway catchpoints and disc signals, as well as the semaphore stop signals on the QR.



Tully Mill remained a strong supporter of cane tramway use during the years subsequent to my time there, opening a number of extensions. It's one of the 'good guys' when it comes to tramway usage, so it was sad to see it suffer so badly from the savage Cyclone Yasi in early 2011.

In 2007, El Arish witnessed 70 years of continuous 610mm gauge tramway access to the district mill at Tully. With luck it will see 70 more.

0-6-0DH No 8 (Fowler 21912 of 1937/rebuilt EM Baldwin 590-9-63 of 1963) at Tully in its twilight. Photo: Rod Milne



Dismantling is well under way on the City of Newcastle, hard ashore beneath the steep cliffs of Shepherds Hill. When laid, the salvage railway would have headed off to the left of the photograph." Photo: Author's Collection

A Tale of Two Cities: light railways and marine salvage

by John Shoebridge

Introduction

During researches into the railways near Merewether, New South Wales, I examined information relating to a light rail line said to have been constructed in connection with a local shipwreck. This in turn brought to my attention another short railway built many years later, on the Illawarra coast for a similar purpose. The following is a short account of two New South Wales maritime disasters where light railways were constructed to assist in salvage operations. It also includes mention of one other instance, of which the author was a witness, where an industrial locomotive played an unique role during a maritime emergency.

City of Newcastle

In 1859 the paddle steamer *City of Newcastle* (390 tons) entered service on a regular run between Sydney and Morpeth, NSW. The ship, built in Scotland by Scott and Company to the order of the Hunter River New Steam Navigation Company, had collided with and sank the tug *Bungaree* in 1865, but otherwise plied her route for almost 20 years without incident. With the regularity of a train service, the *City of Newcastle* departed Morpeth at 8am each week day and from Sydney at 11 the same night.

Before dawn on the morning of Thursday 12 September 1878, however, disaster struck. Coming north, in bright moonlight and close inshore, she rounded Little Redhead and passed up the Long Beach and into a fog of smoke from the Port Waratah smelters. Captain Summerbell was called from below, but before he could take action, the ship struck a reef just north of (present day) Bar Beach and was fatally holed.

The sea was calm, but with his ship sinking fast the master made the quick decision to press her on the shore and by skill and chance she came into a small natural cove, touching rock on either side. Gangways were rigged and passengers and crew all walked ashore unscathed. As morning advanced and the tide fell, the hull settled on the bottom. The crew set to work to remove passengers' luggage and small items of cargo. Soldiers from Fort Scratchley salvaged the mails and stood guard over recovered goods. By afternoon, around 3000 spectators had gathered to watch events.

The next morning, the steamship company directors held a special meeting overlooking the site and agreed to engage the services of James Russell, a local contractor. Russell undertook to refloat the vessel if he could. If not, he would dismantle it and in return would receive one third of the value of any material recovered.

An inspection of the hull by a diver soon revealed that the first option was not going to be possible. The following report from the *Newcastle Morning Herald*, dated 19 September 1878, describes the ensuing activity:

Since the directors of the HRNSN Co decided on Friday last upon what steps should be taken with regard to the ill-fated steamer, the City of Newcastle, no time has been lost in carrying out their wishes.

Mr James Russell, the well-known contractor, commenced operation immediately after arrangements had been completed with the Board on Friday morning. He undertook to clear the wreck, unload the cargo and save as much of the ship's property as possible. A gang of sixty men was at once put to work and a scene of busy activity soon succeeded the previous twenty-four hours dreamy inaction. Sleepers were quickly conveyed to the spot for the purpose of ultimately laying down a tramway for the removal of the goods, and a wide cutting was made by a large party of men down the side of the cliff. This operation, although performed with all possible dispatch occupied considerable time and was not completed till Friday evening.

On Saturday the lifting gear and the heavy parts of the plant required in the work were got down, a large number of horses being required to drag the gear up the cliff. On Sunday, the work being one of necessity (as it was afraid the vessel would go to pieces, a southerly buster being expected) authority was kindly granted by Sub Inspector Thorpe for it to be carried on.

All the cargo was got out of the vessel's hold on Monday morning by nine o'clock, besides recovering a large quantity that had fallen overboard. In addition to this a great part of the machinery, with the anchors, chains, donkey engines, the two funnels, steam pipes, cabin and galley furniture, and parts of the main engine were got on shore.

On Tuesday Mr Russell commenced putting up the shear-legs and the necessary lifting gear, and a donkey engine alongside the ship for the purpose of lifting out the boilers, cylinders and other portions of the machinery. So far everything has progressed satisfactorily, and not the slightest accident has occurred in connection with the clearage of the wreck (except for the misadventure of Mr Alexander's horse and cart, with which Mr Russell or his men, had nothing to do.) It had been found on examination by the divers, that the bottom plates are split from the stern post for the extent of 30 feet.

The necessary tramway for the removal of the boilers & will be nearly a mile in length when laid down, and every expedition is being used to get this completed.

By Monday 23rd, the weather had worsened, making work hazardous for the divers who were dismantling the engines. In the event, the boilers proved too heavy to lift and the lifting tackle carried away, felling a bystander, who was carried home on a door! At this stage, Russell appears to have abandoned his part of the agreement, leaving the owners to call for fresh tenders to salvage the boilers. Prospective salvors were offered 'a share of what they may realize' and the boilers were eventually floated out ready to be towed to Newcastle Harbour. Soon after the tow commenced, they sank, and as far as can be determined, were never recovered.

Regarding the 'tramway', some historians have stated that the line was laid to connect with the Burwood Railway's sand siding, (*see map in LR 210*), which ran for most of its length beside the beach. Research has not revealed any further references in contemporary newspapers and more significantly, there is no mention in the Burwood Estate archives (especially in the Cash Book which records transactions as small as a sixpenny load of firewood) so it appears that with the removal of the boilers, there was no further need for the railway, and any track that had been laid was soon removed back to Russell's yard.

One piece for the ship survives to this day. The wrought-iron follower-shaft from the oscillating-cylinder paddle engine was overlooked by the ship-breakers and lay on the rocks until the 1970s. Removed by amateur marine historians, the relic is now in the safekeeping of the Newcastle Marine Centre at Lee Wharf.

Cities Service Boston

The 9000 ton steamship, *Cities Service Boston*, a US merchant marine tanker, was built in 1921 at the Bethlehem Shipyard in Maryland USA. Initially named SS *Agwipond*, she ran oil and general cargo to African ports until requisitioned from the Cities Service Oil Company for war service. In the early hours of 16 May 1943, the *Boston*, light in the water and leading an 18 ship convey south from Sydney, was blown off course and onto Bass Point, just south of Shellharbour.



US Tanker Cities Service Boston ashore on Bass Point NSW. The weather has abated and the wreck is being broken up. A hole has been cut in the hull and the salvage railway laid across the rocks." Photo: Wollongong City Library Collection



A dramatic scene. The collier Wallarah almost on the beach at Catherine Hill Bay. Just discernable, the locomotive on the jetty strains to keep the stern off the sand, while a single bow anchor still holds. Below the taunt chain, a stream of small coal can be seen pouring overboard from the ash ejector. Photo: AJ Donne, Authors Collection

Despite huge seas and blinding rain, all 62 crewmen were saved, largely due the heroic efforts of Australian Army personnel who were trucked from their camp at Dapto. During the rescue, however, four soldiers from the 6th Australian Machine Gun Battalion were swept off the rocks and drowned.

The American military authorities removed all armaments and communications equipment and passed the wreck for disposal. In November, Sydney auctioneer FR Strange, sold her 'as she lay', to scrap dealers, Dickson Primer & Co Pty Ltd for \pounds 1500. Workmen were recruited and, under the personal supervision of Mr Dickson, temporary accommodation was constructed overlooking the headland, and four miles of road upgraded to facilitate a fleet of motor lorries running to the Illawarra Railway.

Initially, the ship's fittings and more valuable non-ferrous metal parts were removed by means of a flying fox. Once these were gone, Dickson Primer sold the hull to Australian Iron and Steel Limited, contracting to dismantle and recover the steel.

In January 1944, a short railway track was laid across the rocks, using 45lb/yd rail on steel sleepers. For a short time, this railway was used to remove the heavier scrap, with petrol-driven winches hauling small trolleys to and from a hole cut in the hull.

However, within two months, in heavy weather, the stern section broke off and sank in deep water, taking with it the engines and boilers. Following this event, salvage work was deemed to be unprofitable, the little railway and haulage tackle were retrieved, and the remains of the ship abandoned to the elements.

A portion of the hull remained visible for many years and to this day the site is popular with recreational divers, with portions of the machinery section still recognizable beneath the surface.

A memorial to the soldiers who lost their lives has been erected overlooking the scene of the wreck.

Wallarah

SS Wallarah (1400 tons) was built by Austin's, of Wear Dockyard, Sunderland in 1952 for the Wallarah Coal Company to run between Catherine Hill Bay (south of Newcastle) and their Sydney coal depot at Balls Head. In June 1958, caught by an unexpected change in the weather as she was departing the jetty around 2pm, the deeply laden ship was driven bow-first, anchors dragging, almost onto the beach, in imminent danger of broaching-to.

A tug arrived from Newcastle at 10 that night and the first of several four-inch wire hawsers was floated down to the ship. All proved unequal to the strain and she moved further inshore.

Next day mineworkers from Wallarah Colliery volunteered to board the ship and commenced to hand–fill the cargo over the side. A bucket was rigged on the ships derrick, and the engineers moved the hydraulic ash ejector from the boiler room to assist with the task.

The forward winch maintained a steady strain on the single anchor which had caught hold, whilst on the jetty, one of the colliery locomotives was connected by a hawser in an attempt to hold the stern seaward and keep the rudder and propeller off the sand.With insufficient traction to itself move the ship, the little engine was however readily able to take up and hold any slack cable as the hull rose on the surges. For three desperate days and nights the men shovelled in relays round the clock, and the locomotive held its ground. My father was at that time, the Wallarah company's consultant engineer, and I well recall accompanying him to the site and witnessing the drama of the scene, particularly the moment when the insurance assessor, meeting with the colliery manager, engineer and jetty master, advised that he was prepared to accept that the ship was a total loss.

The colliery officials decided to persevere, and just after midnight on the fourth day, with a high tide and the weather abating, the lightened *Wallarah* moved under her own steam into deep water, and then accompanied by the tug, made her way to Newcastle. After drydocking to ascertain damage, she went back on the run until sold to an overseas buyer in 1971. *SS Wallarah* was lost off the coast of New Zealand in 1974.

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The 'Peter Pan Colliery' 1927 — 1962

ELRINGTON

By Ross Mainwaring Published by the LRRSA.

A coalmine and its railways near Cessnock NSW, established by the BHP in 1927.

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A pair of Baldwins in use at Mojopanggung Sugar Mill, 4 August 1997. On the left is 04, the unique EM Baldwin 6wDM and on the right is 8, Baldwin Locomotive Works 0-8-0T 44692 of 1916. Photo: Ray Gardiner

Stranger in Paradise: an EM Baldwin locomotive in Indonesia

John Browning

Java's sugar mills, with their extensive narrow gauge cane railways, were a paradise for steam enthusiasts 30 years ago. Even today, although few mills have retained field lines, they provide the world's largest remaining concentrations of narrow gauge steam power in industrial use. Many more steam locomotives by a wide variety of German, Dutch, French and American builders remain out of use. A variety of gauges were used, with 700mm gauge (the 'standard' Dutch narrow gauge) predominating.

Internal-combustion locomotives were used on Java's sugar lines from an early date, and after independence following World War II, large numbers of small diesel locomotives were imported, mostly from Germany, but with examples also from Belgium, the USA and Britain. Sales may possibly have been associated with the aid programs of donor nations. (It is perhaps significant that almost no locomotives were supplied in the period of Indonesia's *confrontasi* with Malaysia from 1962 to 1966.) The first Japanese locomotives were supplied in 1965. Many diesel locomotives also lie out of use today.

With Australia a close neighbour, it might have been expected that locomotives would have been supplied from here. In truth, however, the major manufacturers of narrow gauge industrial locomotives here from the mid-1950s, Clyde and Com-Eng, focussed on production-series large diesels that were reasonably sophisticated technologically, having full order books and no great desire to develop niche markets.

The entry onto the scene of EM Baldwin & Sons Pty Ltd changed all that. While innovators, they were also prepared to experiment with 'one-off' designs and to adopt technological solutions that were customer- and price-driven. In Built by Baldwin, Craig Wilson explained that, having produced their first locomotive in 1962, by the end of that decade they were well aware of the potential market in Indonesia for narrow gauge locomotives and were interested in exploring the possibilities. Advised of the need to have a local agent working for them, a link was formed with the Indonesian/ Australian Trading Corporation Pty Ltd (IATC) in 1971, which wished to offer 8-12- and 18-ton diesel locomotives on the Indonesian market. During 1972, a number of tenders were responded to through IATC or another agent, Segard Oliver Trading Pty Ltd. However, the two German suppliers, Schöma (Christoph Schöttler Maschinenfabrik) and Diema (Diepholzer Maschinenfabrik Fritz Schöttler) both from the same north-west German town of Diepholz, had the Indonesian market sewn up and no orders came.

In order to better understand the requirements of the market, Frank Baldwin travelled to Indonesia in January 1973, and spent ten days visiting sugar mills in Java and palm oil estates in Sumatra to get a better understanding of their requirements. The opportunity was also taken to examine the products of his main competitors.

This trip resulted in a tender to supply through IATC a 6-wheel 700mm gauge 12-tonne diesel locomotive. The customer was the state-owned sugar miller PTP XXI-XXII of



Clockwise from top left: The Baldwin, complete with in-cab washing line, is crammed into the airy shed with a variety of steam and diesel locomotives as well as agricultural tractors. 🗖 The familiar plate shows 'Model DM-12'. 🗖 The spartan cab interior. The cabinet on the far side accommodates transmission gear components. The tray above the coupler would have been used for sand. Now it contains discarded workshop rags. **The Baldwin instrument** panel and driving console. The driver's seat is minimal. Photos: Author, 2 August 2010





In 1997, the loco had an attachment behind the cab that looks like a box for coupling chains, jacks, and other useful items. It had gone by 2010. 4 August 1997. Photo: Ray Gardiner

Surabaya, for its Modjopanggoong sugar mill near Tulungagung in the south-west of East Java. It was to be powered by a Deutz F6L 714 135hp engine. Although the initial proposal was for a hydraulic transmission, as used by the German builders, it must have come as a surprise when the customer requested a mechanical gearbox, requiring a redesign and some lengthy negotiations. A Turner TSA 4007 four-speed synchronised gearbox was eventually fitted and the locomotive was completed in August 1974 with builder's number 5281.1 8.74. A further problem then arose because IATC was facing winding-up action and as a result the letter of credit for payment had to be re-assigned to Baldwins before dispatch could occur. The locomotive finally left for Indonesia in February 1975.¹

The locomotive was somewhat different in appearance from other canefield Baldwins, being quite small with the cab high in relation to the bonnet. The cab was open at the sides with large windows front and rear. The wheels were outside the frames, partially shielded by ballast weights that took the form of valences. A very distinctive Baldwin feature was the hood front, with its rectangular expanded mesh radiator grille and the builder's plate mounted above it.

The driver's controls were simple, consisting of a forward/ reverse lever, throttle, gear selector and sanding lever for forward and reverse. The forward/reverse lever

was marked: IMPORTANT – LOCOMOTIVE MUST BE STATIONARY BEFORE CHANGING DIRECTION. The console included controls for horn, headlights and windscreen wipers as well as a variety of internal lights, engine start and stop buttons, and the usual gauges. There was a substantial handbrake wheel on the front wall of the cab and a swivel driver's seat.

At the mill, the locomotive joined a variety of 0-8-0T steam locomotives, including an American Baldwin. There were also three Orenstein & Koppel diesels built in 1955,



Number 3, Orenstein & Koppel 4wDM Model MV4A (25951 of 1960) is the preferred yard shunter for full trucks with some four-legged friends on the empties. 2 August 2010. Photo: Author



Number 05, a Schöma, was, like the EM Baldwin, a 12-tonne 6wDM (3938 of 1975), and it is also now out of use. 2 August 2010. The Baldwin steam locomotive is behind. Photo: Author

1960 and 1966. The first two were 4wDM locomotives of 7 tonnes and 8 tonnes. The last was a 110hp 12-ton 4wDH and it is possible that the mill had experienced difficulty with its axleload and its transmission, explaining the three axles and mechanical transmission of the Baldwin. The fact that the big O&K was reportedly scrapped in about 1980 lends credence to this possibility. However, Baldwin did not receive a repeat order. Also in 1975, another 12-tonne 6-wheel diesel locomotive arrived at the mill, a centre-cab Schöma, Model CSL100-3.

Ray Gardiner saw the EM Baldwin at work in 1997. His photos show that it was in yellow livery with black striping and red buffer beams and sandboxes. Its original number, DIV, had given way to 04 (on the front and sides at least). Following a reorganisation of the sugar milling corporations, the owner was now PTPN X.

With the closure of field lines, the steam locomotives were put out of use and shunting duties were reduced to around the mill yard. We know that the Baldwin operated at the mill until at least 2007. From a notice in the cab, by this time it was limited to hauling seven loaded cane trucks.

An opportunity to visit the mill in 2010 provided the chance to view this unique Australian locomotive. It was found in the loco shed, along with five steam locomotives and two other diesels. The 1960 O&K diesel was out at work in the yard, and the 1955 one was fired up also for a demonstration run. The 1975 Schöma was under repair.

Apart from the inevitable coating of grime, the junk that seems to accumulate on the footplate of every stored locomotive, and the customary in-cab washing line, the Baldwin still appeared to be in reasonable shape, now in a red and yellow livery. The most obvious service modifications have been the little ledges above each coupling – the front one used to carry sand for hand sanding and the rear one for useful bits and pieces such as chains and spare coupling parts – and the protection for the headlights. Some of the controls have gone – for the headlights and windscreen wipers, horn, engine bay lights, and the engine start button.

We were told that the Baldwin had been a good locomotive. However observation showed that only one diesel is now needed for shunting in the yard, with the assistance of a couple of pairs of oxen. The smaller Orenstein & Koppels are obviously well cared-for. It is fairly clear that any return to service for the Baldwin is not a likely prospect.

One can only speculate why only a single Baldwin diesel went to an Indonesian sugar mill. Poor performance of the locomotive does not seem to have been an issue. The delays in supply, the demise of the Australian agent, and the determination of Dutch-based agents and the manufacturer Schöma not to lose out, may well have been significant. So too may have been the fact that this was the time of the Baldwin breakthrough in the construction of bogie locomotives for the Australian canefields, which transformed their business and took their attention to lucrative possibilities much closer to home. When, in 1982-3 a significant number of 15-tonne 0-6-0DH locomotives were supplied to Indonesian sugar mills, they came from Japanese builders.

Reference

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Freddy Smith poses with the new 10-ton Commonwealth Engineering diesel loco on the 1480 Level. His right hand grasps the controller handle. Note the air hoses which connected to the leading Granby car for continuous braking of the rake. The protrusions from beneath each Granby are to restrain the car from vertical movement while tipping. The loco's coupling is also of an unusual pattern. A cab was later fitted to protect the driver. Photo: Courtesy of a private collection, Broken Hill

Beneath the Silver City: A long drive from Browne to No.7 –Part two

by Ross Mainwaring

Introduction

Part 1 of this article in *Light Railways* 220 (August 2011) covered the early history of the Broken Hill mineral field and gave a detailed account of the efforts by Broken Hill South Limited to safeguard its future by developing the 'Long Drive' at the 1480 foot Level. It then detailed the use of battery-electric locomotives for underground haulage through to the introduction of a diesel-hydraulic locomotive built by Commonwealth Engineering in February 1963 for use on the 1480 Level, together with 120 cubic ft Granby cars to carry the ore.

Part 2 of the story covers the underground rail operations on the 1480 Level from 1963 through to closure of the Broken Hill South Mine in April 1972. It concludes with a brief assessment of today's mining activities on the Broken Hill field.

Diminishing prospects - the Western Mineralisation

At the 1964 Annual General Meeting of Broken Hill South held in Melbourne, the Chairman of Directors, Mr G Lindesay Clark, was less than optimistic about the future prospects for the zone of Western Mineralisation. Diamond drilling revealed a grade of 3 per cent lead, 4 per cent zinc and 1 oz silver/ton but the mining grade would be somewhat less. These grades contrasted poorly with those from a winze sunk off the 1480 Level in 1938 where values of 15.8 per cent lead, 14.9 per cent zinc and 10.3 oz of silver/ton were assayed. Clark said, *Under normal industrial conditions at Broken Hill this grade was of marginal economic value, and negotiations for special conditions in this area have been initiated with the labour unions.*¹The hard-and-fast union rule of *two men to a drill* was the stumbling block that was never overcome.

Current ore reserves had declined to 1,120,000 tons and the working cost per ton was given as $\pounds7$ 9s 0d. Production for the year (1964) was 275,000 tons, which, with the higher price of lead and zinc, was valued at $\pounds1,808,000.^2$

1480 Level's new 'diesel mule'

The heart of the ten-ton four-wheel Comeng locomotive was a 105hp six-cylinder Gardner diesel engine. This had an electric starter motor energised by two 12-volt batteries. An air-operated over centre clutch and gearbox was fitted, with one forward and one reverse gear. An over centre clutch has the advantage that no weight is on the controller.

Final drive was by a Reynolds roller chain to each axle's drive sprocket; the chains were oil lubricated by a drip feed arrangement. Correct tensioning was achieved by moving the gearbox.

Scrubbers, used to partially cleanse the diesel exhaust fumes, were made of stainless steel. By necessity, these were flushed

out every day and thoroughly cleaned once a week. Some experimentation was needed with the water; first of all crystals were added to form a solution but this proved too expensive. Later on rainwater was tried; this was obtained in four gallon drums from the house tank of the Underground Manager, Alan Dutton, but with such a dry climate and a low average rainfall of 21mm, this trial didn't persist. Recourse was made, successfully, to ordinary tap water, which was supplied by the council and pumped from the Darling River, 112km away.³

Air brakes, air horns and push button air sanders were fitted. Sand, to prevent wheel slip, was dug out of a nearby dry creek bed. It was not possible to operate the loco until sufficient air pressure was available in the air reservoir. Reportedly, the purchase price of the locomotive was \pounds 11,000.⁴

Fred Smith became the first fitter in charge of the diesel. He had begun his career as a telephone boy in the company's manual exchange, working shift work for 12 months. As a tradesman, his job was weekly greasing, checking bearings and drive chain adjustment. The loco became very dirty underneath as muck dripped from ore chutes onto the track and splashed up onto the chassis. This grit didn't do the chains much good either. On one memorable occasion, Fred was lying in the trackside drain adjusting something beneath the loco. Somewhere further inside the mine, a worked out stope was being hydraulically filled with sand slurry (known as skimps). The overflow of this wet slurry broke through a barricade and flowed into the drain. Oblivious to this development, Fred suddenly was inundated with this muck as it rushed up the legs of his 'oilers' and out through his collar!

If the engine was revved excessively upon starting away, the chain could jump the sprockets, either damaging them or breaking the chain. At one time, a new German maintenance engineer insisted upon using German-made chains but these broke frequently compared to the Reynolds, so their use was quickly discontinued! If a chain broke, the loco was only able to move itself.

Don Nixon travelled to Sydney to enquire of the Gardner agents, Ferrier and Dickinson Pty Ltd, about the servicing of the injectors and pumps so BHS could do this in-house. This proposal was found not to be necessary as an Adelaide company promised an overnight injector exchange service. The Sydney agent also arranged for Don to visit Bulli Colliery to study its maintenance facilities. Situated near Wollongong, south of Sydney, and owned by Australian Iron & Steel Pty Ltd, this mine ran 42-inch gauge Malcolm Moore diesel locomotives built in Melbourne, at the head of their 360-ton underground coal trains.

One day Don turned up in a suit, but the colliery Undermanager had no protective clothing to offer, except a dust coat. Emerging from inspecting the underground diesel maintenance facilities, even the luxury of a hot shower was not possible, so a very grubby visitor made his way back to Sydney by train.

1480 Level operations: 'AC-DC' tickets or 'Woolworth's' certificates

One of the loco drivers was Bob Shamroze. He started work as a trucker in 1965 on 10 Level, pushing 1-ton skips. After loading from a chute and turning on a flat steel sheet, the skips went into the shaft cage. They descended to 13 Level and were tipped in a tumbler; the ore fell down a pass to the 1480. To make wages of 45 shillings a shift, pushing 35 skips was the daily production target.⁵

Bob applied for a job as an offsider on the diesel, under tuition from older drivers such as Ron Gibbart or Ron Healey (nicknamed 'rope mo' after his long moustache). Healey took great pride in his job and lavished plenty of polish upon the loco. Following an examination and a prescribed number of working hours over a period of six months, Bob was issued with a driver's certificate, known as a 'Woolworth's ticket'. This piece of paper was endorsed *For hauling men and dirt*.

The FEDFA had long held a monopoly on the position of locomotive driver in metalliferous mines, a position that was often exploited by the militant leadership. This did not endear the Federation to the Broken Hill Mine Manager's Association (MMA) or to other companies in a similar situation. Way back in 1949, the Manager of Lake George Mines, a silver-leadzinc mine at Captains Flat, NSW, approached the local Mines Inspector in an effort to circumvent the onerous restriction of the *Mines Regulation Act*. Although in agreement, it was not until 1962 that the NSW Minister for Mines acquiesced and enacted new regulations that satisfied the MMA.

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Usual signature Say C	to take charge of DIESEL LOCOMOTIVES used for the purpose of hauling men and materials. Examined by	



Lobbying by management eventually resulted in an amendment to the Engine Driver's Examination Rule 20(c), dated 9 November 1962. Prospective loco drivers need no longer require an intimate knowledge of the electrical intricacies of their locomotives. This requirement and the issuing to its members of an electric motor driver's certificate, colloquially termed an 'AC-DC' ticket, had cemented the monopoly of the Federation. The new amendment opened the occupation to members of other unions by making the acquisition of a ticket much easier. This fact was advantageous for BHS management. The Minister for Mines, James B Simpson, told the Federation that *no great electrical knowledge is required to drive an electrical locomotive underground*.⁶

As a first step in obtaining the 'Woolworth's' ticket, the applicant need only pass a *viva voce* oral and a practical examination on a locomotive, after which the Inspector of Mines issued a written permit. The trainee was required to work as an offsider under the tuition of an experienced driver for 26 weeks, with at least 10 hours a week on a train hauling ore or mullock. After this period of time the special electric locomotive driver's certificate of competency, or 'Woolworth's' ticket, was granted. This certificate was also a requirement to drive the diesel loco.

Management was not slow to take full advantage of the new regulation. At a July 1963 meeting of the Broken Hill sub-branch of FEDFA, an allegation was made that *FEDFA men were being taken off the mules, yet members of other unions were being employed in their place.*⁷ The meeting felt that the mining companies' policy of replacement of FEDFA men by members of other unions was not only breaking down the conditions of FEDFA members, but was in effect, breaking down general line of lode conditions.

1480 Level: moving the ore

The purpose of the 'Long Drive' was to be *the* transport artery to economically move the ore by rail from the Junction leases to the BHS mill. Browne shaft, which was referred to as *the Junction end*, was provided with a change house to accommodate the train crews. Day shift descended the shaft in a double-deck cage, five men to a deck, which replaced the original small single cage. If the loco was at the other end, a van drove the fresh crew across to No.7 shaft before their descent. In the afternoon, no van was available so if necessary the driver and offsider pedalled a four-wheel 'bicycle' along the subterranean route. They then exchanged conveyances and drove the Comeng loco and cars back to Browne's for loading.

Air-operated chute doors, controlled by the offsider, regulated the ore filling into the Granby cars. Paint marks on the wall indicated the driver's stopping place when each truck was correctly aligned at the chute. Bell signals were also used — one to stop, two to move back and three to go forward. If a stone became jammed in the chute it was blasted into manageable pieces.

The wet and slushy ore would stick to the sides of the car so plastic sheet was placed inside before filling; it was unrolled in the drain to wet it. But this plastic had other uses too! One man who raced greyhounds asked for a long length to be tightly wound around his body so he could get it to the surface. His assistants were a bit too enthusiastic with their wrapping because he collapsed in the cage on the way up. The plastic had to be cut off him, and he was closely questioned by the shift boss who wanted to know why – he sheepishly explained that it was to wrap the dog meat in!

Near Browne shaft a decline ran down to 14 Level. Here the Granby cars were lowered down by a winch cable, three at a time, for loading at a chute. The ore carried good values. When loaded, the electric winch could only manage one car at a time on the steep grade back up to 1480 Level. Lew Hudson was one of the winch drivers (see Figure 4 above).

When all the cars were coupled, the offsider walked to the loco and climbed in beside the driver. The full rake then set off downgrade, with warning bells ringing and red lights ablaze along the drive. Ventilation doors were encountered along the way; these were automatically opened by a pneumatic cylinder activated by a switch placed about 100 yards beforehand. On occasions, this mechanism failed, resulting in unwanted timberwork adorning the front of the loco. The warning lights and bells were switched off after the crew passed through the first door. Warning bells were superfluous when Keith Grose was at the controls of the Comeng. He was a country and western music fan and entertained his offsider, Neil Horne, with an unlimited repertoire of Slim Dusty songs.

On some trips a four-wheel man transport car was attached to the rear, but passengers were reluctant to travel by this conveyance as the short wheelbase caused the vehicle to whip about, alarming the occupants. No doubt the driver would let his loco run just that little bit quicker!

When approaching the Western Mineralisation warning bells and lights were again activated to herald the approach of the rake. Refuges, illuminated by an electric light, were provided for employees' safety from Delprat's to No.7 shaft. Passing through another ventilation door the rake approached the shaft plat. Here, a 16-ton weighbridge weighed each truck; on day shift the magazine keeper recorded the weights, at other times the offsider (see Figure 3 below).

The position of the ore tip received careful consideration as bad ground caused by faults was present. Roof bolting was necessary around here. For unloading, the older 2ft gauge 55-cubic ft capacity Granby cars came with a small diameter wheel fixed on an outrigger. This wheel ran up and over a ramp, known in local parlance as the 'harbour bridge', which automatically opened and closed the side door on the truck. However, with the new 120-cubic ft cars, a pneumatic ram, operated by the offsider, tipped the car body, opening the side door over the ore pass. A steel angle bracket restrained the car's chassis while tipping (see Figure 3). The dirt and plastic sheets (it was said that miles and miles of plastic went down this hole over the years) fell down the ore pass, which was protected by a dust-proof, air operated steel door. If large stones refused to fall out, they were blasted in-situ. Also, if the car door would not close — the linkage on one end had stretched, affecting the mechanism — it was persuaded to do so with a pinch bar.

From this level, the ore tumbled down the pass to a skip loading station at the 1940 Level. Here twin loading hoppers (5-ton capacity) filled the shaft skip upon its arrival at the station. On reaching the surface, the skip automatically tipped into a concrete bin of 120 tons capacity. Here a jaw crusher and gyratory crusher reduced the ore down to two inch diameter after which it went by conveyor to the mill for further crushing and treatment by the flotation process.



Toilet facilities were provided near the shaft but on one memorable occasion the points were incorrectly set and the diesel, unable to stop, crashed into the 'little house' which was occupied at the time. The occupant fortunately escaped just before the timbers came crashing down around him.

When the crew had emptied the 13 cars, the loco was uncoupled and ran around to couple onto the other end of the rake. For proper ventilation of this dead end roadway, a 'back drive' allowed fresh incoming air from No.7 shaft to circulate. The cool darkness in this short drive also promoted a good growth of mushrooms.

The long uphill grade to Browne's now confronted the crew. In 1967 the warning system was changed slightly in that blue lights shone instead of red on the return trip.⁸ In the early days when the track was still well laid, four trips a shift was usual, but with the inevitable deterioration through wear and tear, three trips became the norm. Loose dogspikes allowed the rail to whip from side to side. In 1964 an enquiry was made about a track tamping machine to assist with track maintenance but nothing came of this idea.⁹

A trip that once took 15 minutes now stretched out to 30, with the loco barely managing 10mph on the sometimes slippery rails. The rails were not only slippery from mud and moisture — the numerous rats were often tardy in jumping off the railhead and so met a quick end beneath the wheels. Wheel slip was arrested by sanding which improved rail head conditions after a few trips, rats permitting of course! The rodents hung around the crib rooms looking for tasty morsels. They once helped themselves to a part-time bookie's crib and then stole \pounds 300 from his jacket, which was hanging from a peg. When he returned and discovered his loss he hastily blamed his workmates but was forced to apologise when the money was recovered and the true culprits were revealed.

Initially only two seven-hour shifts were worked, 8am to 3pm and 4pm to 11pm, but in later years a third shift, 12am to 7am was introduced. On night shift, in the wee small hours, if the Browne ore chutes were empty, the train crew stopped near Delprat's (known as 'B5000', around here after a term for diamond drill rod size) for a well earned snooze.

Exhaust fumes hung heavy in the air through a section of the drive where air movement, ventilated from Kintore shaft, was sluggish. Returning along this long uphill section on night shift was stupefying; the combination of exhaust fumes, the monotonous throb of the six-cylinder Gardner and fatigue often lulled the driver and his mate off to sleep, even though a 'deadman' foot switch was mounted on the floor. Carbon monoxide levels were closely monitored; in well ventilated places CO readings registered zero (permissible: 50 parts per million) and nitrous oxide registered a half part per million (permissible was 5 parts per million).¹⁰

From time to time there was the inevitable derailment. One day the fettlers removed two rails but did not inform the shift boss that they would be replaced on Monday's day shift. That morning the diesel's headlight pierced the darkness to reveal the gap in the rails. Bob Shamroze called out to his driver to stop but, thinking that Bob was only joking, he ignored the warning. With a lurch the loco miraculously jumped the gap and regained the rails on the other side but the cars were derailed, some even ending up upside down. This mess took days to sort out, using wedges and jacks to get everything back on the line. To prevent a repetition of this inconvenience a battery powered blinking yellow light was placed either side of an obstruction as a timely warning.

On another day, Ray Thomas relates, a fall of roof occurred in the drive and the rake was unable to stop in time. The loco hit the fallen rock, swinging around and crashing into the wall beside the startled driver, who fortunately was not injured. Loco derailments also occurred after new wheels were fitted and before they were fully worn in, most often along the straight at B5000.

The drain beside the rails needed to be periodically cleaned of mud, the crew being paid so much per foot for this task. A 'special' shovel was custom made to speed the job up; a rope was attached to the shovel then tied off to the diesel. The offsider stood on the shovel while it was dragged along the drain; this procedure scooped the muck up and deposited it onto the roadway. After a length was completed the mud could be easily shovelled up into a truck for disposal.

At the finish of the shift, the train was stabled at either end then the crew returned to the surface. The shift boss was verbally informed of the 'plod' tally for the shift (the number of cars tipped) as the crew were paid contract rates. Driver Ray Thomas recalls average fortnightly pays of \$170 plus \$40 lead bonus. The lead bonus, first paid in 1925, was calculated on a sliding scale reflecting the prevailing price of lead on the London market when in excess of $\pounds 30$ a ton. When the first battery locomotive was introduced, in 1938, the driver was paid a lead bonus of 12s 6d a week.¹¹

A trial of remote control

It was the intention of BHS to use only one man on the 1480 haulage train so a hush-hush experiment was conducted late one night after the afternoon shift had gone home.

The loco was wired up with a remote control unit supplied by Electronics (BH) Pty Ltd of Broken Hill. At this trial at No.7 shaft tip, Don Nixon was driving the loco and was assisted by a representative (engineer-in-charge) of the firm, Ron Walsh, and a shift boss. The loco was uncoupled from the rake and was set to run around it, using a portable remote control push button control box. An electronic detection sensor was placed between the rails, but instead of the loco stopping on command, it took off — with Nixon in hot pursuit.

At 2am, while pushing the rake, three cars derailed. The company rep had seen enough and deciding that it was way past his bedtime, went home. The shift boss suddenly remembered that he had his rounds of inspection to complete, leaving Don Nixon alone with the task of rerailing the cars using an ancient wind-up jack. By the time this chore was completed, there was only time to go home, shower and breakfast, then return to work. To cover up the night's clandestine activities, and deflect undue scrutiny, afternoon shift were blamed for the disturbance below.

Safety devices were fitted to the loco in case of failure of the electronic components but these caused endless trouble so most of them were removed. The experiment was a failure and the entire scheme was resisted by the men as they didn't want to work on their own.

However, a notable success was the '*Carrier Control*' radio communication system commissioned in October 1963 by Electronics (BH) Pty Ltd.¹² This specialised form of radio used a cable, running the length of the drive, as a conductor. The loco driver could now communicate by radio directly with the magazine keeper at No.7 shaft.

Keeping the Comeng running

For routine maintenance and the convenience of the fitters an underground workshop, complete with workbench, pit and overhead crane, was built near No.7 shaft.

Diesel fuel was brought underground in a square tank mounted on rail wheels; the fuel was then pumped into a holding tank that was surrounded by a low protective wall.



Undergoing trials in the South mine yard is the unique 2ft gauge self-loading train for use on the 2400-ft level drive being developed from No.7 shaft. An air-operated Eimco bogger loaded rock from the face into a travelling skip which was pulled by a winch cable along a railed way along the top of the Granby cars. The mullock was unloaded into each car in turn; when full, tandem battery locomotives hauled the train away for dumping of the waste rock. Photo: Author's collection

From this tank the dieseline was pumped by hand into the locomotive fuel tank which was situated beneath the driver's seat. A fuel additive was used that smelt not unlike cherry brandy.

Normally easy to start, one morning the engine became recalcitrant, so a diesel fitter was summoned from the adjacent power station. This tradesman may have been *au fait* with stationary 3000hp diesel engines but a mobile 105hp locomotive was a different proposition, so Don Nixon went up to the surface ambulance room to borrow a bottle of ether. A suitably soaked rag was placed over the engine's air intake — the result was an immediate start. The other fitters had kept their distance as they were fearful of an explosion! After that aptly impressive demonstration all concerned bought an aerosol spray can of ether. Throughout its working life the engine needed only a valve grind.

The cooling system was reliable but once a four inch diameter steel pipe punctured the radiator. As no spare was on hand, a drawing was hurriedly prepared and sent down to Lincoln Radiators in Adelaide for a replacement. With the return of the new radiator, an oversight was soon discovered – there was no radiator filling housing. To avoid embarrassment the tinsmith was hastily summoned; he removed the original filler housing and soldered it onto the top of the new radiator.

The two drive chains were the Achilles heel of the loco's design, either breaking or damaging the sprockets if the driver was careless in moving off. During one industrial dispute, drive chains were mischievously broken on four consecutive days, adversely affecting production.

Battery locomotives — a quest for more efficiency

The haulage capabilities of the Comeng diesel put the battery locos to shame, so BHS decided to experiment with

tandem operation using semi-permanently coupled battery locomotives with only one driver.

In 1965 it was decided to drive the new 2400ft Level from No.7 shaft. For this work, an experimental self-loading train of four permanently coupled Granby cars was run in behind an Eimco loading machine, which filled mullock into a four wheeled skip that ran along a railed way fastened to the top of the Granbys, into which the skip tipped successively until each car was full. The skip was hauled to and fro by a cable attached to a winch drum. Tandem 2ft gauge battery locos, connected electrically by a cable, pushed and pulled the entire ensemble thus — belt loader car, travelling skip, four Granby cars and travelling skip winch car.¹³

The FEDFA Executive was approached by management to agree to one man operation of the locos. However the request was initially refused, with the Union deciding that members on the South Mine be instructed *that when two locos are coupled, they must be manned by two drivers.*¹⁴ Later, at a special meeting at the Trades Hall in November 1965, the hardline attitude had somewhat mellowed with the Federation membership passing a resolution, which in part read *That this association inspect the company's proposal under working conditions...*¹⁵ BHS was now tentatively permitted to use tandem locomotives under the control of one driver, subject to inspection and agreement.

On Saturday 27 November, the FEDFA Executive went underground at 9am, accompanied by the Mines Inspector, to inspect firsthand the proposed working. At a special general meeting on the following Monday *it was decided that special permission be given to the South Mine for the use of dual locos on this particular job, but the meeting reserved the right to review the* permission if more trucks than observed by the executive were added to the dual-loco train.¹⁶ Bad ground conditions prevented good progress and the whole arrangement was withdrawn after driving only 1000 feet due to certain difficulties, notably the irregularity of the temporary rail joints which affected the alignment of the Granbys. This misalignment often derailed the travelling skip as it was hauled along the top of the trucks by the cable.

When the 2400 Level drive was eventually completed, the tandem locos were put to work hauling up to 18 trucks. They were fitted with what was described as an *extra magnetic brake* system.¹⁷

The closure of the Broken Hill South Mine

The mine's ore reserves had been steadily declining; the acquisition of the British-Junction leases only allowed a temporary increase in tonnage and the potentially promising Western Mineralisation was found to be a disappointment because of the low values. No.7 shaft did not have the hoisting capacity to make this low grade proposition economic. At the time when the Comeng diesel entered service in 1963, the ore reserves were put at 1,270,000 tons.

BHS suffered its first financial loss in 50 years for the six months to December 1971. Two reasons amongst others were the fall in metal prices (lead was £106.57 per tonne, zinc £141.26 per tonne and silver £58.58 per fine oz) and an increase in costs of extracting the ore. At the AGM in November 1971, Sir Lindesay Clark said of the mine ... Its life will depend on metal prices, of lead in particular.¹⁸ Ore reserves were put at a meagre 450,000 tons — barely two years' work.

Nevertheless, it came as a shock to the employees and townspeople when an announcement was made on 6 April 1972 that the mine was to close in three months. Metal prices had not improved, rather the opposite. And so the last shift at the mine finished on 7 July 1972; the men riding in the final cages arriving at the surface were greeted by a loco driver, Fred Martin, playing *Abide With Me* on his cornet. He later explained that he chose this piece as it reminded him of another tragic event that occurred 60 years before, that of the sinking of the *RMS Titanic* where the stoic bandsmen were said to have played this same hymn as the doomed White Star liner slowly sank beneath the waves. Immediately after the conclusion of the cornet solo, the 3pm mine whistle blew for the end of the shift — and the end of the South Mine.

A total of 447 employees and 54 staff found themselves unemployed at a time when Broken Hill's unemployment rate was 10 per cent. All trucking and ore hoisting had previously ceased three days earlier, on 4 July, so possibly this was the last time that the 1480 Level haulage reverberated to the throb of the Gardner diesel engine on its familiar run from Browne's to No.7.²⁰



Freddy Smith and the 10-ton Commonwealth Engineering diesel locomotive featured on the cover of the 1963 BHS Annual Report. Author's collection

Production over the life of the South Mine totalled 19,557,000 tons of ore, which equated to 1,504,000 tons of zinc, 2,511,000 tons of lead and 108,000,000 ounces of silver.²¹

Today

On 4 August 2007, Professor Geoffrey Blainey officially opened Consolidated Broken Hill Resources Ltd. (CBH) *Rasp Mine* which intends to exploit the Western Mineralisation by way of a decline driven from the bottom of the old Kintore open cut pit.

Travellers arriving at Broken Hill by the *Indian Pacific* passenger train from Sydney will see from their carriage window, silhouetted against the rising sun, the weathered timber headframe of Browne Shaft as the train enters the eastern precincts of the city. After a lengthy stopover at Crystal Street station, the train heads west, skirting the huge mullock dumps and slag heap of the *Big Mine*. As these end, another steel headframe can be seen, that of No.7 Shaft.

TABLE 1: List of locomotives known to have operated at the Broken Hill South mine

Builder	Builder's number	Date of manufacture	Gauge	Model	HP	Weight
Greenwood & Batley Ltd, Leeds, England	1499 1643-1644 2027-2029	1937 1940 1946	2ft		6	3
Wingrove & Rogers Ltd, Liverpool, England	3903-3905	1948	1ft 3ins	W217	4	1
Goodman Equipment Corporation, Chicago, USA	6034	1949	2ft	75D	38	8
Standard-Waygood Ltd, Sydney	(8 locos)	1950-1	2ft		?	3½
Commonwealth Engineering Pty Ltd, Brisbane	KA1061	1962	3ft 6ins		105	10

These two historic landmarks still proudly stand tall, denoting the northern and southern extent of the Broken Hill South Ltd 1480 Level drive, once the domain of a diesel locomotive and the men that drove it.

Today the Comeng loco and its train remain abandoned underground in the inky blackness at Browne Shaft. Present day mining companies at Broken Hill use rubber tyred vehicles; underground locomotive haulage has gone the way of hand tramming and horse haulage — it has ceased to be a part of the mining scene. 'Electric mules' and diesel locomotives alike no longer roam the drives and crosscuts beneath the 'Silver City'. Art galleries, museums and tourism have now eclipsed mining as the predominant 'industry'.

Acknowledgements

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Glossary

Cage: Enclosed steel platform used in a shaft to carry men and equipment.

Country rock: The rock within which a mineral lode occurs.

Crosscut: A roadway driven at an angle to the main tunnel. **Drive:** Tunnel following the ore body.

Flotation: An ore concentration process that takes advantage of the principles of surface tension and colloid chemistry. **Level:** A horizontal passage in a mine.

Mullock: Waste or refuse rock.

Ore body: Generally a solid and fairly continuous mass of ore. **Plat:** The floor of a level near its intersection with a shaft. **Skip:** A large container used in a shaft for the hoisting of ore or rock.

Stope: An underground excavation from which ore is extracted. **Sulphide:** A compound of metal and sulphur. **Winze:** An incline shaft down from a level.

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At the northern end of the 1480 level, Browne shaft and its associated surface buildings remain essentially intact to this day on the site of the original Junction Mine, high up on a ridge overlooking the eastern residential streets of Broken Hill. The location is now part of a Heritage Trail and is signposted with explanatory information signs. This scene looking to the west shows the shaft's wooden headframe while the building housing the shaft's electric winding engine is on the right. The black mass of rock on the far left is the outcrop of the ore body, which is one of the very few undisturbed locations remaining along the Line of Lode. Photo: Author



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Special thanks to contributors to the LRRSA & Cane Trains e-groups, the Canetrains.net forum, and Jim Bisdee's West Australian Railscene e-Mag

NEW SOUTH WALES

GLENCOE AGRICULTURAL TRAMWAY, Southern Tablelands

(see LR 218 p.26)

610mm gauge

Construction work on the tramway has continued throughout winter with the line now reaching the south-eastern corner of the farm where a run round loop and headshunt has been completed. This will allow firewood wagons to be stored during summer, while in winter it will be used for the fire fighting consist of three

LOCOMOTIVE, ROLLING STOCK AND EQUIPMENT MANUFACTURERS

ONTRAK ENGINEERING PTY LTD, Maraylya, NSW

(see LR 206 p.21)

Rather surprising news is that the two 610mm gauge Baldwin bogie locomotives held on site for Proserpine Mill (7240.1 5.78 of 1978 and 8290.1 4.79 of 1979) were scrapped in February. These locomotives had been purchased by Proserpine Mill from Fiji in 2004 for future rebuilding. It is understood that the bogies and mechanical portions were sold to another mill for spare parts before the remains of the locomotives were scrapped.

Work has continued on a spasmodic basis on rebuilding the two Fiji Sugar Corporation Clyde 0-6-0DH 610mm gauge locomotives on site as funds become available. It was reported in August that Rarawai Mill number 8 (62-271 of 1961) is close to completion.

A 1067mm gauge diesel mancar from Gujarat Coking Coal's South Bulli colliery is understood to be undergoing refurbishment. This is thought to be numbered 22 and if so is likely to be Westfalia 13800.1 4.91 of 1991. John Garaty 8/11

wagons, each fitted with two 1000 litre water tanks connected to a high pressure water pump. Fifty seven 5-metre long 14lb/yd portable track panels were purchased from a retired cane famer in the Nambour region and are now on site, and will allow the tramway to be completed to the front of the property. Discussion about the purchase started around 25 years ago and fortunately the farmer kept the track even though the timeframe extended from a few years to a few decades.

Until 1967, the cane farm utilised two sets of portable track, comprising straights and sharp radius curves, initially using horses to move the bins to a set of jump points where they were transferred to the Moreton Central Mill line which ran through the property. Locomotives were not used but eventually tractors replaced the horses. The 57 panels probably date from the first few decades of the 20th Century. They appear to be from a number of manufacturers, as in some cases the steel sleeper/rail connection is bolted while there are also the riveted variants.

The Days Engineering 0-4-0PM locomotive has been fitted with a cab based on detail from a photograph taken at Cheetham Salt, Laverton, many years ago showing the remains of two derelict Day's locomotives; the one on the Glencoe Tramway is believed to be one of them. via Editor 8/11

MANILDRA FLOUR MILLS PTY LTD, Manildra (see LR 181 p.18)

1435mm gauge

There was plenty of rail activity at Manildra as observed from the *Outback Xplorer* on 15 August. Clyde Co-Co DE MM02 (64-342 of 1964) was stabled in the dock road at the station, with the ex-Newcastle steelworks Goninan Bo-Bo DE MM03 (015 of 1961) shunting in the yard. Bob McKillop 8/11



On Sunday 10 July 2011, on a brisk Southern Tablelands winter's morning, the Day's 0-4-0 PM has just propelled two 8' flat tops, carrying a 6.7m long left-hand turnout, to the waiting International diesel tractor fitted with carryall and crane. Within 20 minutes of the photo being taken the turnout was laid — by just one man with the help of his dog!



Top: 15-ton 750mm gauge Plymouth 4wDH LOCO 2 leased from Mining Equipment (USA) for use by Thiess in the City West Cable Tunnel project. Photo: courtesy Martin Bell **Centre:** Mackay Sugar's repaired Eimco B-B DH GARGETT (L255 of 1990) heads towards Marian Mill with 24 loaded bins at Narpi on the morning of 9 July. Photo: Scott Jesser **Above:** On Sunday 28 August, Mackay Sugar's EM Baldwin B-B DH INVERNESS (10123.1 5.82 of 1982) heads its rake of 30 loaded bins towards Farleigh Mill. Photo: Scott Jesser

SCT LOGISTICS PTY LTD, Parkes

(see LR 193 p.18) 1435mm gauge

The captive shunt locomotives here, former Westrail J-class Clyde Bo-Bo DE locomotives J102 (66-480 of 1966) and J103 (66-481 of 1966) were noted coupled together with a rake of wagons outside the Parkes freight terminal. They arrived here on 1 December 2009 and are in a well-worn yellow and black livery. Bob McKillop 8/11

JOHN HOLLAND PTY LTD, Sydney Desalination Plant, Kurnell narrow gauge

As part of tunnelling work for this project, which was completed in early 2010, two 2.5km tunnels were bored from the desalination plant to a point beneath the ocean using tunnel boring machine technology. Rail transport was used for the transport of personnel and tunnel segments and there is an internet video available that shows a few relevant sequences. One locomotive can be seen in the video and appears to be a Plymouth 4wDH. Any further details would be welcome. The video can be found by following the link at: http://www.leighton.com.au/about_us/projects/ sydney_desalination_plant.html/location/87/ date/2010/p/8/section/1376 Editor

THIESS PTY LTD, City West 132kV Cable Tunnel, Sydney 750mm gauge

This project, which was carried out between 2007 and 2010, was to provide Energy Australia with a tunnel for electricity supply cables linking Ultimo to a new substation on the corner of Sussex and Erskine Streets in Sydney's CBD. Construction of the 1.6km tunnel involved the use of a 3.75 metre diameter tunnel boring machine. The tunnel varies from about 25 metres to 45 metres deep, with a maximum gradient of three percent.

deep, with a maximum gradient of three percent. The tunnel was segment-lined. The 750mm gauge track was laid with 22kg/m

rail and there were three 15-ton rebuilt Plymouth 4wDH locomotives hired from Mining Equipment Inc, USA. Rolling stock included four-wheel muck cars, bogie flat cars, four-wheel personnel cars, and four-wheel segment cars, all built in China and hired from Mining Equipment. There was single track in the tunnel, with 80m of double track at the base of the 20m shaft to allow one train to be readied while the other was in the tunnel. An internet video is available that shows the rail system in use and can be found at: http://www.youtube.com/watch?v=1XGb25dH8BU Martin Bell 8/11; http://www.thiess.com/smartsolutions/case-studies/city-west-cable-tunnel

QUEENSLAND

MACKAY SUGAR LTD

(see LR 220 p.26) 610mm gauge Marian Mill's Eimco B-B DH *GARGETT* (L255 of 1990) re-entered traffic on 25 June following the

repair of collision damage suffered in July 2010.

The front of the short hood is now all yellow. The *EIMCO AUSTRALIA* plate on the short hood front is mounted about 15cm lower than it had been, and there have been sundry other alterations to lights, handrails and other details on the short hood end. The two headlights have been moved to the top of the cab roof, in front of the air conditioner.

On 26 July, a new 40-tonne bogie brake wagon for GARGETT, numbered BVAN 6, was delivered to Marian Mill from Racecourse. The chassis was built by Farview Engineering Pty Ltd of Farleigh. It incorporates regauged QR bogies and was fitted out by Racecourse Mill. It has red bogies, red and while dazzle stripes on the ends, a yellow chassis and handrails, while everything else above the frame is green. A further similar vehicle is under construction. The new brake wagon was taken over to Marian by Clyde 0-6-0DH multi-pair HABANA (60-215 of 1960) and the former MARIAN (56-104 of 1956) which had been undergoing repairs at Racecourse following an incident in the full yard at Marian which left them sitting next to each other facing in opposite directions.

At about 6am on 9 July, Marian Mill's EM Baldwin B-B DH locomotives *CHARLTON*(9562.1 6.81 of 1981) and *LANGDON* (9562.2 6.81 of 1981) were involved in a collision. *CHARLTON* was parked in a siding when *LANGDON* approached with 40 empties. The siding points were incorrectly set, and *LANGDON* entered the siding at speed, colliding with *CHARLTON* at 28kph. Both locomotives sustained damage, but *CHARLTON* came off worse with its 270mm thick front headstock plate torn away. *CHARLTON* was back in service by the start of August.

There are still a number of 'horse lines' in use on the Racecourse Mill system, some apparently a legacy of Homebush Mill which closed after the 1921 season. These lines are privately-owned and connect to the main cane railway but mill locomotives are not allowed to run on them and tractors are the usual haulage method. Where they survive, they are valued by farmers as they make cane haulage easier in wet weather. The lines are Broadsound (at the end of the Broadsound line), Bartolo's (junctioning at Racecourse 7 siding on the Racecourse main line), No.5 (Peri 3), Camilleri Brothers (at the end of Friebergs line in Homebush). Zarb's (Homebush 9) and Doug Ross (Homebush 10). The Broadsound horseline is more than a kilometre long and on 26 July, a tractor was seen hauling 20 empty bins down it.

A breakdown at Marian Mill around the middle of August saw some Marian Mill locomotives working through to Farleigh.

Scott Jesser 7/11, 8/11; Hayden Quabba 7/11; Brian Millar 7/11

MSF LTD, Mulgrave Mill, Gordonvale

(see LR 220 p.28) 610mm gauge

Com-Eng 0-6-0DH 8 (A1926 of 1958) re-entered service in early August after its rebuild, named *CHARINGA*. It has redesigned bodywork and cab. Its normal run seems to be to Redbank, in the old Hambledon Mill area.



Top: The new Mackay Sugar brake wagon, BVAN 6, in service on 1 August 2011.Photo: Scott Jesser **Centre:** Twenty Racecourse Mill empties progress towards the terminus of the Broadsound horse line on 26 July. Photo: Scott Jesser **Above:** Mulgrave Mill's Walkers B-B DH MULGRAVE (612 of 1969 rebuilt Bundaberg Foundry 1995) with steps on the footplate to give access for fuelling and watering, 15 July. Photo: Brian Webber



Top: A little-known feature of the Mulgrave rail system is the cut and cover tunnel under Reservoir Road at the Brinsmead Gap north-west of Cairns. Walkers B-B DH MULGRAVE emerges with a load from Redlynch on 17 August. Photo: Tom Porrit **Centre:** Ex-Hambledon Mill Clyde 0-6-0DH 16 (56-96 of 1956), its rebuild close to completion, and ex-South Johnstone Mill Com-Eng 0-6-0DH 17 DEERAL (AD1453 of 1962) rest outside the Mulgrave loco shed on 18 July. Photo: Tom Porritt **Above:** Mulgrave Mill's newly rebuilt Com-Eng 0-6-0DH 8 CHARINGA (A1926 of 1958) brings a rake into the mill yard on 6 August. Photo: Carl Millington

Industrial NEWS Railway

Clyde 0-6-0DH 16 (56-96 of 1956) is nearing the end of its rebuild it has been fitted with a new engine cover but has retained its Hockey cab. Ballast weight is being added to maintain it at its original weight.

Com-Eng 0-6-0DH 6 (A1006 of 1955) has now been dismantled for rebuilding. It will be fitted with a Cummins L10 engine and an Allison torque converter with a retarder. It is planned to use it permanently coupled with the 1972 NQEA brake wagon for working the Green Hill line.

The two Walkers B-B DH locomotives rebuilt by the Bundaberg Foundry in 1995, *GORDONVALE* (595 of 1968) and *MULGRAVE* (612 of 1969) have been fitted with steps on the running board at the front of the driver's side and extended handrails to assist in filling the radiator safely. *MULGRAVE* has also had its under-chassis fuel tanks removed, and now has a tank fitted in front of the cab, with more steps and another handrail extension. *GORDONVALE* still has its under-chassis tanks.

Two locomotives normally work the line to Redlynch. This is usually GORDONVALE and Clyde 0-6-0DH 19 REDLYNCH (65-435 of 1965) although after suffering breakdowns they were both displaced by others of the same types during July-August. The Clyde leaves the mill two hours before the Walkers locomotive and proceeds beyond the QR overbridge at Redlynch to deliver empties and pick up fulls in the Barron River area. The Walkers loco, which cannot pass under the QR, meets the Clyde back at Redlynch depot and returns to the mill with a rake of fulls, having swapped crews. The Clyde again proceeds to the Barron River area and is met at Redlynch a second time by the Walkers with a new crew, which again is swapped at Redlynch. The Clyde again heads north into the Barron River area before returning with fulls all the way back to the mill after an absence of about 18 hours. Brake wagon 19 (Clyde Queensland, 1969) has been fitted with an additional fuel tank to extend its range for this purpose. On a Saturday night, the Clyde works back to the mill light engine having delivered the empties for Monday morning.

Both regular Redlynch locomotives were out of service in mid-August. *GORDONVALE* had a problem with the leading axle drive at the long end and 19 *REDLYNCH* had a failure of its GM 6V92 engine and was being fitted with a Cummins L10.

A quantity of surplus Mulgrave Mill 4-tonne bins that were in store at Russell Road and near the QR on the northern side of Gordonvale, were moved on 17 July to the former mill yard at Babinda. It is expected that they will be scrapped as there are now 300 ex-Babinda 6-tonne bins available for use. Tom Porritt 7/11, 8/11; Carl Millington 7/11, 8/11

MSF LTD, South Johnstone Mill

(see LR 220 p.28) 610mm gauge It appears that cane shuttle trains from the Babinda area to South Johnstone are being handled by

Industrial NEWS Railway

EM Baldwin B-B DH locomotives 24 (5477.1 8.74 of 1974) and 25 (6470.1 1.76 of 1976). Clyde 0-6-0DH locomotives 3 (56-90 of 1956) and 16 (56-93 of 1956) were noted standing outside the loco shed at the Babinda mill site in mid-July. Carl Millington 7/11; Brian Webber 8/11

PROSERPINE CO-OPERATIVE SUGAR MILLING ASSOCIATION LTD

(see LR 220 p.28)

610mm gauge

Having been unsuccessful in its bid for Tully Sugar, Mackay Sugar lobbied with Proserpine Mill growers in the hope that they would reject the proposal to alter the structure of the company to allow a takeover by Sucrogen, with a vote to be finalised by 29 August. However, Mackay Sugar stated that they were unable to make an immediate counter-offer because they were not in a position to assess the value of Proserpine Mill through a due diligence process. Nevertheless COFCO, the new owners of Tully Mill, came in with a last minute offer of \$120m, \$5m above the Sucrogen bid, on 25 August.

The vote of Proserpine grower shareholders narrowly failed to achieve the required 75% majority. Sucrogen's response was to indicate it did not intend to increase its offer while it emerged that Sucrogen had advanced \$15m to Proserpine Mill to keep it afloat, opening the prospect of the company going into administration.

Proserpine Mill now has just three operational Clyde 0-6-0DH locomotives with 3 (58-195 of 1958) used on navvy trains. On a visit in late July 5 (60-218 of 1960) was being used in the yard and on the Valley line (towards Airlie Beach) while 8 (65-442 of 1965) was being used on the Gregory line.

ABC Rural 22/7/11, 12/8/11, 25/8/11; Whitsunday Times 28/7/11; Mackay Daily Mercury 17/8/11; The Australian 1/9/11; Scott Jesser & Hayden Quabba 7/11

SUCROGEN (HERBERT) PTY LTD, Herbert River Mills

(see LR 220 p.28)

610mm gauge

On 3 July, Victoria Mill's Walkers B-B DH JOURAMA (680 of 1972 rebuilt Bundaberg Foundry 1996) failed on the Bambaroo line just north of the Bruce Highway overpass near Helens Hill. It was rescued from here with its brake wagon by Walkers B-B DH CAIRNS (681 of 1972 rebuilt Bundaberg Foundry 1997).

Clyde 0-6-0DH *INGHAM* (64-382 of 1964) returned to Victoria Mill from Macknade Mill on 2 July, in exchange for *PERTH* (69-682 of 1969). *PERTH* stayed at Macknade until 14 July but then had to be returned as the result of an incident at Victoria Mill.

A collision had occurred when the driver of EM Baldwin B-B DH *MAITLAND* (7070.1 3.77 of 1977), approaching the loco shed, suffered a



Top: Proserpine Mill's EM Baldwin B-B DH 10 (9816.1 10.81 of 1981 rebuilt Ontrak 2004) at Kurkowski's on the Kelsey Creek line on 27 July. Photo: Sctott Jesser **Centre:** With the cab of number 18 gone, the 'scene of desolation' at Macknade Mill looks worse than ever on 28 August: Clyde 0-6-0DH 18 (DHI.5 of 1954), EM Baldwin 0-4-0DH 17 (6/1446.1 9.65 of 1965), Clyde 0-6-0DH DHI.2 of 1954, & Motor Rail 4wDM 11255 of 1964. Photo: Chris Hart **Above:** Victoria Mill's EM Baldwin B-B DH TOWNSVILLE II (6400.2 4.76 of 1976) eases its train down to the Herbert River Bridge at Abergowrie on 27 August. Photo: Luke Horniblow

health issue and fell from the cab, in the process opening the throttle. The vigilance control did not have a chance to operate before MAITLAND careered at speed into a line of three Clyde 0-6-0DH locomotives, LUCINDA (65-436 of 1965), INGHAM, and CANBERRA (65-433 of 1965). LUCINDA and INGHAM suffered only light damage. MAITLAND suffered some front end damage requiring a new headstock to be fitted. CANBERRA sustained the worst damage. Its cab was stoved in at the rear and pushed forward off its mounts. The cab pushed the fuel tank forward which damaged the hood top and bent its side pillars. The cab was removed from out of use Clyde 0-6-0DH 18 (DHI.5 of 1954) at Macknade Mill with a view to fitting it CANBERRA, and it was transported to the Victoria Mill loco shed on 26 August.

PERTH returned to duties at Macknade on 17 July. It returned to Victoria Mill a day or so before EM Baldwin B-B DH *DARWIN* (6171.1 9.75 of 1975), its refurbishment at Victoria Mill completed, arrived at Macknade on 25 July. *PERTH* returned to Macknade yet again, to cover for a loco failure, on 2 August.

Hudswell Clarke 0-6-0 *HOMEBUSH* (1067 of 1914) operated in passenger service as usual for the Italian festival on 6 August.

Chris Hart 7/11, 8/11; Luke Horniblow 7/11, Steven Allen 8/11; *Herbert River Express* 20/7/11

SUCROGEN PLANE CREEK PTY LTD, Sarina

(see LR 218 p.30)

610mm gauge

The Locotrol train from Karloo is being operated on a regular basis this season. The regular locomotives

on this run are Walkers B-B DH locomotives rebuilt by Bundaberg Foundry in 1995, 1 *ALLAN PAGE* (594 of 1968) and 2 *KARLOO* (630 of 1969), with bogie brake wagon 2 (Anderson Rea, 1995). This train with its mid-train locomotive can total up to 400 loaded bins. Scott Jesser 7/11, 8/11

TULLY SUGAR LTD

(see LR 20 p.29)

610mm gauge

Following the success of the Chinese company COFCO in obtaining a majority of shares in Tully Sugar, Bunge Australia and Mackay Sugar sold their shares to COFCO, bringing the company's stake to above 99% and paving the way to the compulsory acquisition of any outstanding shares. 2011 is the first year when female locomotive assistants have been employed at Tully. Three have been employed and according to the driver trainer Fabrizio Mestroni, "They learn quicker than the boys and they have more common sense". *Farm Weekly* 19/7/2011; *Cairns Post* 29/8/2011

SOUTH AUSTRALIA

McCONNELL-DOWELL CONSTRUCTORS, Adelaide Desalination Plant, Port Stanvac narrow gauge

Underground rail transport has been used in connection with the construction of two 2.8m diameter undersea tunnels for the Adelaide desalination plant using tunnel boring machine technology. The tunnels were completed in April 2011. They are approximately 1km and 1.5km in length. Two 30-tonne locomotives were reportedly in use and any further details would be welcome.



SA Government News Release 21/4/2011; Les Howard 8/11;

http://www.ancr.com.au/port_stanvac.pdf http://www.macdow.com.au/news/tbms-arriveat-adelaide-desal-plant

WESTERN AUSTRALIA

BHP BILLITON IRON ORE PTY LTD

(see LR 220 p.30)

1435mm gauge

All the remaining GMEMD Model SD40 Co-Co locomotives are now believed to have been withdrawn as a result of the completion of the Rapid Growth Project 5 track duplication. Twenty of these were imported as a stop-gap measure in 2003-4 pending the arrival of new locomotives. Further expansion work commenced in July will see a duplication between Goldsworthy Junction and a second balloon loop constructed at Finucane Island for Car Dumper 5. Ten new side dump cars and 30 new ballast cars were being commissioned at Bing in early July. Derailment victim Electromotive Canada Model

SD70Ace Co Co DE 4301 *BING* (20038540-02 of 2005) was moved to Nelson Point workshops for repairs on 9 August while GE Model AC6000CW Co-Co DE 6070 *PORT HEDLAND* (51062 of 1999) has been cut up on site.

Brett Geraghty 8/11; WA Railscene e-mag 143, 146 & 150



With the Paluma Range in the background, Victoria Mill's Walkers B-B DH VICTORIA (599 of 1968 rebuilt Tulk Goninan 1994) pulls into Scrubview on the Bambaroo line to pick up more loaded bins on 14 July. Photo: Brian Webber



THE PILBARA INFRASTRUCTURE PTY LTD

(see LR 220 p.30)

1435mm gauge 280km of underground fibre optic cable is

being installed between Herb Elliott Port and Christmas Creek to facilitate signalling and communications on the Fortescue rail system, including implementation of the onboard Positive Train Control Signals System.

Earthworks for just over 150 kilometres of duplication between Herb Elliott Port and Chichester Hub are under way and work has started on the construction of a rail spur from the existing mainline to the Solomon Hub.

The five GMEMD Model SD90MAC-H Co-Co DE locomotives being re-engined at Altoona in the USA will be designated Model SD9043MAC, not as previously advised. 909 (976833-34 of 1999) in FMG livery and 905 (976833-6 of 1999) still in Union Pacific livery, were reported on a test run in Pennsylvania in early August. 907 (976833-10 of 1999) was also completed but unpainted by late August.

It is believed that an order has been placed for 17 new GMEMD Model SD70ACe Co-Co DE locomotives for delivery in the first quarter of 2013. It is not know if these units will be built in the Electromotive Canada plant or in the new Progress Rail plant at Muncie, Indiana.

The Breakthrough 01 (FMG) August 2011; WA Railscene e-mag 149 & 152

PILBARA RAIL

(see LR 220 p.30) 1435mm gauge

Rio Tinto has commenced preparations for duplicating 80km of single track on the Deepdale line from Western Junction to Cape Lambert with the awarding of a contract to build a 200 room construction camp to be completed in February 2012. This represents the start the northern link rail capacity enhancement project to cost some \$US17billion over four years that will see the Cape Lambert port capacity increased from 80 million tonnes per year to some 185mtpa by mid 2015. The upgraded railway and port is expected to take nearly all Rio's expanded mining output that is coming on stream over the next four years. *WA Railscene* e-mag 153

SCT LOGISTICS PTY LTD, Forrestfield

(see LR 220 p.30) 1435mm gauge English Electric (Aus) Bo-Bo DE H3 (A.085 of 1964) returned to Forrestfield from heavy repairs at Gemco Rail on 27 July.

WA Railscene e-mag 148

CORRECTION

Tom Badger has kindly pointed out that the photo at North Eton on p.26 of LR 220 does not feature Mount Kinchant, which would be off to the right of the photographer. The hills in the picture would be the Eton Range, which is part of the Connors Range, and the peaks are of Mount Bridgman.

OVERSEAS

PT FREEPORT INDONESIA, Grasberg Mine, Irian Jaya

Alstom and PT Freeport Indonesia have signed a contract of around €90m for the supply of a rail system to develop mining operations at the Grasberg mine. Alstom will supply the rolling stock, rail, catenary, substations and the signalling and telecommunications systems for an underground rail network.

The mine, the world's biggest gold mine and third-biggest copper mine, is currently an open cut operation but the new underground operations will involve 19km of single track, 15km of which will be underground to transport personnel, equipment, explosives, and rock waste. Trains will operate at up to 40km/h. Rail operations are expected to be in place by mid-2013.

Stefan Matthaeus, 8/11

LRRSA ONLINE DISCUSSION GROUP

Have you joined the LRRSA's email discussion group yet? See: http://au.groups.yahoo.com/ group/LRRSA/ and click on "Join This Group"!



Kalamia Mill's EM Baldwin B-B DH NORHAM (5383.1 7.74 of 1974) shunts QR molasses tanks on mixed gauge track at Kalamia Siding in Ayr on 30 July. Photo: James Chuang

OBITUARY Mark Plummer 21 September 1949 – 16 June 2011

We are sorry to report that Mark Plummer passed away on 16 June. He suffered a stroke a few weeks earlier and had been living with Parkinson's disease for over ten years. For the past few years he had been living at Byron Bay.

Mark was born on 21 September 1949. He was active with his school railway club (Caulfield Grammar) and hence the schools section of Puffing Billy. The school also had a campus at Yarra Junction, not far from the Britannia Creek tramway, and it was here that his interest in timber tramways was kindled. He had a part-time job as a salesman at Model Dockyard, which was very much the focus of the hobby for baby boomers. During his teenage and university years, Mark was a strong supporter of Young Labor. He graduated and worked as a solicitor: first with Legal Aid, then to the USA for 3½ years to work for Skeptics (another passion of his younger years), based in Buffalo NY. His daughter Belinda was born in 1977; Mark and his partner were together for 12 years, but never married. She and his daughter spent one year in USA with him, but didn't like the place. They returned to live with Belinda's maternal

grandmother. After returning to Australia, Mark moved into building law and worked at the Housing Guarantee Fund. With both parents deceased, Mark is survived by his daughter, his sister and a nephew. He was cremated, with a service at Emerald Lake to be near Puffing Billy.

Mark played a critical role in reviving the Victorian Light Railway Research Society (now LRRSA) in 1966. In that year, when Mark was 16 turning 17, he succeeded in convincing Frank Stamford that the Society should be revived. Frank was sceptical, expressing the view that such a Society could only expect to attract about 60 members. At the time the VLRRS had been

inactive for about 18 months, and there had been no plans to revive it.

As the Honorary Secretary's position was vacant, Mark was invited to take it. This he did, and he held it for three years until June 1969. One of Mark's great strengths was his ability to sell what the Society had to offer, and it was a strength which was totally lacking in the Society up to that time – and has probably not been equalled since. Mark took every opportunity to gain new members. He would work railfan trains from one end to the other distributing membership forms and sample magazines, and signing up many members on the spot. Then, after approval was obtained from the ARE and ARHS to distribute membership forms through their mailouts, membership grew to 197 by the end of 1966.

In December that year the Society held the first of many meetings in the Victorian Railways Institute in Melbourne, and for this Mark organised a very well attended film night covering a wide variety of interesting subjects. Then on 7 May 1967 he organised the first of the Society's major tours, hiring a bus to go to Alexandra and Rubicon, and arranging travel on the SEC's Rubicon incline and tramway.

At the same time Mark broke new ground in the way that Victorian timber tramways were researched. Much of this required a lot of travelling, and as he was too young to have a driver's licence, he hitch-hiked everywhere. He sought out and interviewed the former owners and employees associated with the timber tramways of Forrest and Barwon Downs, uncovering much new information and sourcing many previously unknown photographs. The result of this was published in LR 18, 19 and 22. In LR 21 he wrote an article on Cropley's Darnum-Ellinbank tramway, about which little had previously been known.

As a result of that frenzy of activity Mark not only established a viable membership base for the Society, but also demonstrated that successfully researching timber tramways required very different techniques to those used for government railways.

The scope of the Secretary's role was not clearly defined in the LRRSA Rules at that time, and by 1969 Mark's perception of his role differed from that of others. As a result a Constitution Committee was elected by the Society at an Extraordinary General Meeting, and a new Constitution was adopted in June that year. Mark chose not to stand for election on the new Council.

Phil Rickard recalls:

"Like many in the late sixties, I was signed-up by Mark on a fan trip – in October 1966. Coming back from Healesville behind N468. His enthusiasm was rather infectious – I'm sure I'd never thought about 'light railways' prior to that date but Mark's brochure convinced me that I needed to part with a hard earned 7s 6d for a junior membership in order to find out more about them. Never regretted it. Greatest memory (teenagers' brains work in funny ways) was when he stood on a bullants' nest and got bitten, on a McIvor tour. I recall the leaping around and yelling!"

Rod Smith recalls:

"Mark and I were contemporaries. Despite the many tensions within VLRRS/LRRSA at the time, we got on well. He had a brilliant mind, and was always very plausible. I was a guest at his 21st birthday party, with his university friends singing 'And it's one two three, what are we fighting for...

Next stop is Vietnam, fighting for Uncle Sam'.

"At the end of 1971, when I was about to enter national service, Mark phoned me one day and said he had two free tickets for that night's ferry to Tasmania. 'Would you like to head there for a week?' I packed fast, and was on the special M&MTB bus to the Webb Dock terminal. The check-in clerk said: 'Mr Plummer, this is one ticket, not two'. We went home, and booked concession tickets to fly next day (TAA — Mark would only ever use the government airline). My luggage arrived; Mark's didn't (it came across on a later flight). We had a great time, the only holiday of my

Photo: Alexander McCooke

life where I relied on hitchhiking. On one night, we camped in a hike tent in a mosquito swamp near Zeehan. Soon after, I chickened out of hitching, and took a bus (an iconic Flxible Clipper) to Strahan. Mark not only hitched a lift, he charmed the driver into going via the former railway alignment, and the car was stuck in sand twice. We hired a car for one day to visit Lune River. At the quarry, the bulldozer transporter was against the loading ramp, so we drove the car onto it and took a photo.

"We lost touch. One day, relatively recently, I was on escalator at Melbourne Flagstaff station, and there was Mark heading in the other direction. I did an about turn, and met him at the top. It took me a while to realise that his medical condition had changed. Over the next few months, I had him as a guest aboard my boat, cruising from Sale. He also stayed at my house for a few nights when fleeing from internal family tensions after the death of his mother. He seemed to find peace and a niche when he relocated to Byron Bay; I believe that he returned to providing volunteer legal aid. He was forwarded an invitation to be part of the LRRSA Fiftieth Anniversary celebrations. Regrettably, Mark didn't (or couldn't) respond.

"In his time, Mark had been abrasive and demanding, a young man full of himself: we were all like that in our own way; that is what being young 20s is all about. His sincerity cannot be doubted, and his contribution was immense."

Away from LRRSA, Mark was known widely for establishing the railtrails movement in Australia. He had seen the movement in action in USA, and was impressed. Always one to support causes (he was still promoting schemes for trolley rides on closed lines in his declining years), he attracted a group of like-minded people to form Railtrails Australia. The group has had great success in convincing local communities to fund and manage the conversion of closed railway lines to recreational trails for hikers, cyclists, disabled people on mobility quadrupeds and horseriders. The initial success was in Victoria, but the idea has spread interstate, and the well-produced manual is now into a second edition, with regular online updates.

Frank Stamford, Phil Rickard, Roderick Smith



Mark on the Beech Forest Railtrail, c.2005.



Dear Sir,

PERONNE (LR 220)

The August 2011 Light Railways front cover picture of former BHAS, Port Pirie, works locomotive PERONNE (Andrew Barclay Sons & Co. Limited 1545 of 1918) brought back very fond memories for me. During my childhood in the 1940s we used to frequently visit my mother's family in Port Pirie, the highlight being a trip to the entrance of the Smelters to watch the four little Andrew Barclay locomotives, PERONNE, POZIÈRES, PASSCHENDAELE and PORT PIRIE, at work.

A couple of decades later, in July 1965, when my enthusiasm for the fast-declining numbers of Australian steam locomotives was at its peak, and it was evident that the BHAS locos' days at the Port Pirie Smelters were numbered, I checked out their status. PORT PIRIE (1955 of 1928) and POZIÈRES (1543 of 1918) were stored in the engine shed with current boiler certificates and their boilers dehydrated chemically and sealed, ready for use when the Clyde 6-coupled dieselhydraulic works locomotive was being overhauled. PASSCHENDAELE (1546 of 1919) had been 'preserved' minus its injurious fittings in a pre-school kindergarten in Risdon Park, a southern suburb of Port Pirie, where it stood painted in bright colours with 'Bessie Port Pirie' on its front buffer beam. (It was later moved to the Homestead Park Pioneer Museum in Port Augusta.) PERONNE had been run into the loco shed a couple of years earlier and left with half a boiler full of water. The boiler had deteriorated and its certificate, issued on 31 May 1963 and in force until 28 May 1964, had been allowed to expire. Perry Engineering had re-boilered the loco in 1950. Most brass and copper fittings had been removed in preparation for sale and stored in the shed.

I wrote to the BHAS that same month seeking to purchase *PERONNE* and was offered it for $\pounds 100$, subject to suitable arrangements for its removal and transport to Adelaide. I confirmed my interest and approached the ARHS (SA Division) with an offer to donate the loco to their museum at Mile End. The offer was enthusiastically accepted and *PERONNE* was transported to Mile End on SAR flat car FB8661, arriving there on 10 February 1966. The rest, as they say, is history.

Brian Andrews South Hobart, Tas

Dear Sir,

Beneath the Silver City (LR 220)

The diesel locomotives purchased by The Zinc Corporation Ltd (ZC) at Broken Hill, which were mentioned in the article were assisted by at least two other Ruston and Hornsby diesels.

The booklet Operations of The Zinc Corporation Ltd, New Broken Hill Consolidated Ltd, Southern Power Corporation Pty Ltd June 1960 listed two 5.5 ton Ruston 40DLU and two 6 ton Ruston 48DLU locomotives with exhaust conditioners working underground on ore transfer levels. These supplemented 78 battery locomotives on 2ft gauge tracks.

Some years later Radmanovich and Woodcock's *Broken Hill Mines – 1968* only listed battery locomotives being used in the adjacent ZC and New Broken Hill Consolidated Ltd (NBHC) mines on 2ft 0in and 3ft 0in gauge tracks. I photographed Ruston and Hornsby 48DLU 394021 out of service near the gate to the NBHC mine in early 1977.

Anthony Weston Melbourne, Vic



Ruston and Hornby locomotive out of use at NBHC mine, Broken Hill in early 1977. Photo: Tony Weston



An undated photo of PERONNE headed for the slag dump at the BHAS Smelters, Port Pirie. Photo: Private collection



PERONNE, having just arrived at the ARHS Museum, Mile End, on SAR flat car FB8661 on 10 February 1966. Photo: Brian Andrews

Dear Sir,

Iluka Breakwater Construction Railway, NSW (LR 181)

Further to my letter published in 2005, in which the Iluka breakwater tramway locomotive present in 1876 was tentatively identified as Vale & Lacy 0-4-0ST 1 of 1866, I have now found solid evidence that there were two government-owned locomotives at the Clarence Heads Harbour Works at Iluka from mid-March 1877.

A letter to the Editor of the Clarence and Richmond Examiner & New England Advertiser dated 2 February 1877 from 'VITROL' detailed the "systematic breaking down of THE locomotive" that had been supplied by the government for use at Iluka, "which AGAIN occurred yesterday about 5 p.m. Since the 2nd of October last to the present time, not less than fifty-five days have been lost to the contractor, and the navvies"

VITROL continued, "Now, sir, it appears that this so-called engine was condemned seven years ago, but through some 'hanky panky' was FOISTED upon the Government for \pounds ,500 (not worth \pounds ,100), since which repairs, alterations, and other outlays bring up the cost of this wretched specimen of decayed mechanism to about **one thousand pounds**! and she, or it, is now WORTHLESS.... I have learnt that the resident engineer at once sent a telegram to head quarters, stating that the engine had broken down, but WHEN replaced, Heaven only knows."1

A "new locomotive engine" was landed safely at Iluka from the steamer *Agnes Irving* on 16 March 1877.² Although the description "locomotive engine" seemingly leaves plenty of room for doubt about what was landed, a copy of "Mr. Moriarty's Report" that appeared in the press in mid-May 1877 leaves no room for doubt that a second locomotive arrived at Iluka in March 1877:

The works at the Clarence Heads are now going on very satisfactorily, but some time back there were interruptions, owing to the breakdown of the locomotive engine used for hauling the stone from the quarry to the breakwater. We have, however, sent down another engine, which has been at work for about a month, and, as I have stated everything is now going satisfactorily. The repairs of the other engine are now also nearly completed, so that we shall have two engines, and there will be no further danger of the work being delayed. (Signed) E. O. MORIARTY.³

References

1. Clarence and Richmond Examiner and New England Advertiser, 6 February 1877, page 2.

 Sydney Morning Herald, 19 March 1877, page 5.
 Clarence and Richmond Examiner and New England Advertiser, 19 May 1877, page 2.

RJ Madden Wagga Wagga. NSW

LRRSA 50th Anniversary Celebrations 2011 NATIONAL CONFERENCE

The recent 50th Anniversary celebrations provided an excellent opportunity to review the ongoing relevance and sustainability of the Society, as key members were travelling to Melbourne to participate in the festivities.

The last National Conference was held in Sydney in 1997 so this one was well overdue. On Saturday 7 May 2011, 26 attendees from around Australia convened at the Puffing Billy training room at Belgrave to undertake a review of the Society. The agenda covered the following topics:

- Our aging Council and succession of LRRSA management
- Succession of the LR production team
- · How will we grow
- Future forms of publications
- Production, marketing and sales of other publications

These topics provoked lively discussions, interspersed with the arrival and departure of Puffing Billy, much to the pleasure of attendees.

The review was convened by Mike McCarthy who is the current Vice President.

Mike emphasised that the Society is in excellent shape with steady membership, comprehensive research and publication and an excellent financial position.

However, the issue of succession and future growth is a concern, given railways are playing a much less prominent role in the community. Also, technology is changing the research and publication landscape and waiting to see what happens may be a high risk strategy for our Society.

The agenda elicited a number of valuable suggestions which were discussed and explored as time allowed. The day's activities resulted in over 20 flip charts of comments and ideas which will be collated and presented to members at a later time.

Special thanks goes to Mike and those who participated in the pre-work for arranging an excellent programme in what must be one of the best locations for light rail enthusiasts. Breaks were timed so attendees could see the Puffing Billy departures and with time at the end to visit the workshops.

The general consensus was that the Society should hold National Conferences more often in such great locations. *Simon Moorhead*



ADELAIDE: "Spanish mining railways"

Videos of Spanish narrow gauge mining railways will be shown. Contributions are invited on any light railway topic, and suggestions of topics for future meetings are welcome.

Location: 150 First Avenue, Royston Park. Date: Thursday 6 October at 8.00pm. Contact Les Howard on (08) 8278 3082

BRISBANE: "Cane Railways in the 1950s and 1960s"

John Browning will show some interesting collections of cane railway images from the 1950s and 1960s..

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 October at 7.30pm. Entry from 7pm.

MELBOURNE: "Some Railway Museums in Britain"

John McCutcheon will be giving an illustrated talk based on his extensive travels in Britain visiting many museums and filming in action or photographing many historic railway locomotives and other significant railway related objects. He will be asking the question; what was the world's first rack railway?

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

Date: Thursday, 13 October at 8.00pm

SYDNEY: "Caldwell Vale"

Railway researcher and author Jim Longworth will present an informal history of the Caldwell Vale Truck and Bus Company which manufactured all manner of road vehicles and engineering equipment in the early 1900's in the western Sydney suburb of Auburn. Of interest to LRRSA members though are the narrow and standard gauge locomotives. The first petrol-mechanical loco went to a sugar mill near Bundaberg in 1912. The subject promises to provide much of historic interest in early Australian internal combustion locomotives and their application to the industrial railway scene. Location: Woodstock Community Centre, Church Street, Burwood, (five minutes walk from Burwood railway station). Date: Wednesday 26 October at 7.30pm

LRRSA 50th Anniversary Celebrations

ANNIVERSARY DINNER

On Saturday night 7 May 2011, 76 LRRSA members and guests gathered at Belgrave narrow gauge station to celebrate the 50th anniversary of the society with a journey on the Puffing Billy dinner train to the Nobelius Packing Shed for dinner.

Prior to departure each member received a copy of the 50th anniversary *Light Railways* publication. The anniversary publication, which has been sent to all members, provides a 32 page historical account of the society's development. It covers the formation of the society, its expansion interstate, office bearers and life members. It also provides a chronology of the key events in each year with a corresponding photograph from that year.

The dinner train comprising Garratt locomotive G42 and the former Mt Lyell Railway cars departed at 7pm for the Packing Shed, 11.6km from Belgrave. Appetisers were served on the forward journey. On arrival, members sat down to a delightful meal in front of a roaring open fire. Our food was skilfully presented by the Puffing Billy catering and waiting staff, several of whom are LRRSA members.

Bill Hanks, the LRRSA president, opened the dinner and welcomed guests to the 50th anniversary celebrations before handing over to Mike McCarthy, who explained to the dinner guests the reason behind the conference and some of the important items which had been discussed that day. Between courses, five guest speakers addressed the members, each covering a decade of the Society's activities and developments.

Founding member and current publications officer, Frank Stamford, opened with an amusing account of the first ten years of the society. The time between entrée and the main course was covered by Arthur Straffen who reflected on the 1970s, and then Mike McCarthy covered the Society's achievements during the 1980s. As the guests settled into their main course, Bob McKillop spoke of the 1990s, highlighting the launch of the revamped *Light Railways* and the formation of the interstate divisions, while John Browning discussed the society's last ten years. The proceedings were wrapped up when Bill Hanks presented Frank Stamford with a section of 'very heavy rail' as a Lifetime Achievement Award.

Around 10.45pm the participants departed the Packing Shed behind G42 for Belgrave. On the return journey the members discussed the event over tea, coffee, port and cheese, and each received a commemorative mug as a memento of the occasion. Back at Belgrave the celebrants said their farewells and praised the organisers and Puffing Billy staff for a truly memorable night.

Our special thanks go to the Puffing Billy staff who ran the dinner train and hosted the dinner, Frank Stamford, Bill Hanks and Wayne Brown who all contributed to a sensational 50th anniversary dinner, and to the train crew who gave some of the interstate visitors the opportunity to ride in G42's cab. Simon Moorhead



AA Company fish-bellied rail, Newcastle NSW (LR 197)

Conservation work on the AA Company fish-belly rail for display at the Newcastle Regional Museum (see page 36) has led to the identification of AA Company initials cast into the rail. David Campbell, who discovered the rail, was also the first to spot the 'AA Co' lettering on the restored rail when sunlight passed over the rail at a low angle.

This additional identification confirms that the rail was a piece of the original AA Company tramway of 1831, that the rail is cast iron and that the rails were especially cast for the AA Company rather than being second-hand cast iron rails that had been replaced by wrought iron ones. Newcastle researchers have contacted counterparts in the United Kingdom to see if the style of the markings will assist in establishing the provenance of the rail. *Rod Caldwell*

Mount McIntyre logging tramway SA

Glen Howe advised members of the LRRSA Yahoo Group in August 2011 about a 1907 photograph of a horse-drawn four-wheel flat wagon loaded with small diameter logs or posts on the SA Primary Industries & Resources website. The wooden-railed tramway was at Mt McIntyre in the south-east of South Australia. This has generated considerable interest in LRRSA circles as it is the first timber tramway to be identified in South Australia. Details are sketchy at this stage, but the editors are keen to hear from anyone who can provide some further information on this, or any other logging tramways in this state.

Great Cobar locomotives, NSW (LR 146)

Ron Madden published the results of his research into the John Fowler 2-4-0T jackshaft drive locomotives used on the Great Cobar Copper Company firewood tramways, together with the two 0-4-0WT locos built by Morts Dock



A close-up photograph of the 'AA Co' lettering cast into the c1826 fish-belly rail now on display at the Newcastle Regional Museum. Photo: Rod Caldwell

& Engineering Company, in the April 1999 issue of Light Railways. While six locomotives were ordered from John Fowler (B/N 4370-3 in 1882 and B/N 4631-2 in 1883). Ron demonstrated that only four of these seem to have arrived at Cobar and states that the two Fowler locos that arrived at Cobar in October 1883 were almost certainly B/N 4631-2 and that these "were replacements for two of the original four Fowler locomotives ordered, but for one reason or another did not reach Cobar."

In his research into John Fowler records, Richard Horne found that B/N 4370-3 were ordered for the Great Cobar Copper Mining Company per William Noakes, whereas 4631-2 were ordered direct by the Great Cobar company. All six were 51/2-inch Patent type locomotives. The records show that all these locos left the works and there are no notes to indicate lost at sea, cancelled order or diverted order, so Richard concludes that something must have happened to two of the locomotives (presumably from (B/N 4370-3) after arrival in Australia. Any contributions by readers on this mystery are welcome.



Presenting our rail heritage

I have been travelling in western NSW and Western Australia over the past month, visiting a number of preserved railways and museums, together with heritage sites and general interest museums. Reports on a number of these sites are included in the current 'Heritage & Tourist' section and more will follow in the next issue of *Light Railways*.

The experience has highlighted the achievements of groups and communities where dedicated volunteers have achieved remarkable outcomes in terms of conserving, researching and interpreting our railway heritage for the enjoyment and education of others, but this is countered by other examples of grand ambitions that were never achieved.

Notable in the former category are the Bennett Brook Railway at Whiteman Park in Perth (covered below) and the Kojonup Tourist Railway (to be covered in our next issue). On the other hand, the heritage sites and museums that left an unfavourable

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

NEWS

Queensland

BARRON FALLS HYDRO-ELECTRICITY STATION

610mm gauge

The original Barron Falls hydro station (1935-1963) was built near the base of the gorge under the present Skyrail Barron Falls Station. It was serviced by a rope-hauled tramway which transported materials and workers down the steep sides of the gorge. A haulage trolley lowered and raised by two winches powered by a diesel engine and an air-compressor transported materials and equipment down the gorge, which were then transferred to a second tramway and hand-pushed into the tunnel. Personnel were carried up and down the gorge in a four-wheel trolley capable of carrying up to six people. A personnel trolley and an equipment trolley are preserved at the station under a shelter with interpretative signs.

John Browning, 08/11

FORSAYTH MINING DISPLAY

The remote community at Forsayth, 423km from Cairns by rail, has established a small display of railway equipment that helps visitors, including passengers on the weekly *Savannahlander* tourist train, to gain some insight into the town's railway and mining history. Situated adjacent to a picnic area and opposite the Goldfields Tavern, the display includes ex-QR 2-6-0DM DL2 (Robert Stephenson & Hawthorns 7747 / Drewry 2481 of 1954) and a mining skip apparently retrieved from a nearby mine. The impression point to some important lessons for all groups involved in preserving and selling our railway heritage.

Clearly, many groups have failed to attract a new generation of members to maintain the collection and sell it to the public. They are struggling to survive, and in several cases we arrived at railway museums in their advertised opening hours, only to find the place closed with no explanation of what was going on — a sure sign of imminent death. In contrast, a core reason for the success of the WA Light Railway Preservation Association (WALRPA) at Whiteman Park is its ability to attract and nurture young members. What a remarkable experience it was to witness a young visitor seeking out WALRPA officials at Whiteman Village Junction station to become an active new member!

The other lesson that emerges for both museums and preserved railways is the importance of good collection management. Far too few heritage organisations have a clear goal of what they can achieve with the resources available, a clear policy that defines what can be accepted into the collection, effective procedures to ensure that the collection policy in implemented and good storage facilities that enable objects not currently required for exhibition are out of sight so that exhibition spaces do not become an unattractive clutter. As a consequence, many heritage sites and museums present the visitor with a sense of disorganised clutter with little attempt to identify and interpret significant objects.

Bob McKillop

presentation of the skip is excellent and it demonstrates what can be done by communities to interpret local history, even in remote locations. Brian Webber, 08/11

New South Wales

MENANGLE NARROW GAUGERAILWAY610mm gaugeCampbelltown Steam &Machinery Museum

Restoration work on the ex-Condong Sugar Mill 0-6-0DM No 7 (John Fowler 16830 of 1925), which has been parked outside the loco shed for some years, has commenced. Its three owners had the Gardner 5LW engine realigned in the chassis and plumbed up and running by mid-July. They are in the process of making a new coupling to get the drive connected from the clutch to the gearbox, and are having replica builder's plates cast (any information on the originals would be greatly appreciated). A new clutch release shaft needs to be made and some work is needed on the bodywork, particularly the cab roof.

The 4wDM 'Red Simplex' (Motor Rail 11023 of 1955) has recently



The personnel carrier used to access the original Barron Falls hydro station on display at the Skyrail Barron Falls Station. Photo: Carl Millington

had new brake blocks fitted and is fit for service. It is used with the ex-Corrimal Colliery 0-4-0WT (Hudswell Clarke 1423 of 1922) on running days. The two Gemco battery locomotives and the Fowler 0-4-0DM (18801 of 1930) are also operational; the latter having seen use on the works train in recent months. The ex Maritime Services Board 4wDM 'Green Simplex' (20560 of 1955) that belonged to Ray Graf has gone to the Alexandra Timber Tramway in Victoria.

Paul Dove, 06/11

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

Restoration work on the ex-CSR Victoria Mill 1924 Drewry cane inspector's car car (Baguley 1338 of 1924) has brought this project close to finalisation and it is expected to be the highlight of the Tongarra Train Fest in November. Restoration of the former NSWGR passenger carriage that serves as a kiosk at Yallah station is also nearing completion. The return of the Tongarra Train fest by popular demand on the 13 November running day will see the ILRMS locomotive fleet in operation together with attractions by local community groups making for a great day of activities. The 184mm gauge miniature railway has received a donation of a live steam locomotive from an Illawarra family. It has been successfully steamed and is expected to be in operation by year's end.

Brad Johns, 09/11

AUSTRALIANA PIONEER VILLAGE, Wilberforce

610mm gauge Friends of Australiana Pioneer Village

Australiana Pioneer Village is an established and recognised heritage site situated at Wilberforce, just outside Sydney. After being closed for more than a decade it was reopened on Australia Day 2011 by a non-profit volunteer group, the Friends of Australiana Pioneer Village. Much of the village has been or is being restored, but the railway is one area that has not received much attention. It provided rides for visitors around a large oval-shaped track for many years, but has not operated for a very long time. The former Kurrajong goods shed is on site and

was used as the station building. The track and rollingstock are all on site, but the latter require complete overhaul to be able to operate and meet applicable regulations. The locomotive is a steam outline 4-4-0PM named *Pioneer Express* and carrying the number U105. Two bogie passenger carriages were noted in the shed, with a third partly dismantled. The wheels are unusual as they have a central flange with only the outer half of the wheel running on the rail head. The trackcomprises light rails with steel sleepers and is in good condition. There are two substantial steel bridges on the line.

The Friends group has received an

offer to operate the railway on a commercial basis and negotiations regarding this are continuing. A retired engineer with some knowledge of accreditation requirements is advising. Items to be checked include the use of enclosed carriages, the load bearing capacity of the bridges and the exhaust of the locomotive.

Jim Dean, 08/11

STATE MINE RAILWAY. Lithgow 1435mm gauge Lithgow State Mine Railway

Limited

The losses from the fire that burnt out the carriage shed at the State Mine on 31 October 2001 (LR 162, p 27) extended far beyond the carriages that were destroyed and the damage to locomotives and rolling stock, particularly 2-6-2T 2605 (Dübs 2794 of 1894). Its most serious impact was on the morale of the volunteers who had restored the locomotives and carriages in readiness for the commencement of passenger services over the 3km branch line from Eskbank station to the State Mine site. Many of the volunteers were lost to the organisation and while a larger carriage shed and workshop was built with insurance money in 2002-03 (LR 171 p 27), most of the locomotives and carriages were mothballed awaiting a revival.



Veteran 2-6-2T 2605 (Dübs 2794 of 1894) made its first public appearance at the formal launch of the Lithgow State Mine Railway on 10 August 2011, following restoration after severe damage from the State Mine fire on 31 October 2001. Ex-AIS Port Kemble loco D23 (English Electric A.040 of 1960) stands on the adjacent road. Photo: Michael Wilson



Restoration of John Brown's personal carriage at the Richmond Vale Railway had reached the stage where it could be placed on a train and displayed. It featured in a demonstration train at the 125th Anniversary of the Greta Coal Seam on 13-14 August. Photo: Graham Black

The Lithgow State Mine Railway Limited (LSMRL) was registered as not-for-profit company limited by guarantee in 2006, but considerable time and effort was devoted to establishing the new organisation and developing a strategy that would hopefully enable it to become self-sufficient and sustainable. These efforts received a boost in late 2010 when Tim Elderton, formerly maintenance manager for the Office of Rail Heritage at the NSW Rail Transport Museum, decided to establish his rail servicing and maintenance business. Elderton Engineering Pty Limited, at the LSMRL workshops. The company, which currently employs ten people including two apprentices, has become a major strategic partner for the LSMRL in providing the necessary maintenance and certification requirements required for the tourist railway's locomotives and rolling stock. Tim was appointed as general manager of LSML and has made Lithgow his home.

Elderton Engineering, with support from the Department of State & Regional Development, has implemented a \$180,000 project to upgrade the branch line track and carried out extensive repairs to the two rail bridges located on the line. These had been damaged by over-height trucks on Bells Line of Road. Restoration of steam locomotive 2605 to operational condition had been completed by August 2011 and steam tests are expected to commence shortly. A formal launch of the State Mine Railway on 10 August 2011 marked its 'rise from the ashes' of ten years ago. Freshly painted locomotives 2605 and the former Port Kembla steelworks diesel-electric locomotive D23 were moved out into the sunlight for photographs with Elderton employees and LSMRL volunteers. Chairman Michael Wilson said: "we have the land, we have the concept and we have the expertise. Now we need more volunteers to complete the dream." Contact details and further information can be found at www.stateminerailway.com.au or by contacting Tim Elderton 0429140654 or Michael Wilson 0427455580.

Bluescope Steel has donated one of its pioneer 800 series Bo-Bo diesel-electric locomotives, D6 (Com-Eng, built 1950) to LSMRL, together with the cannibalised 400 Series locomotive D24 (English Electric Australia A 053 of 1961). D6 is to be moved to Lithgow shortly, where it will be restored to operating condition, while D24 will be stripped for spare parts to keep the other three LSMRL 400 Series locomotives D20, D21 and D23 operational. In another development, LSMRL has been successful in acquiring Co-Co DE D34 GEC-AEI A.197 of 1969) from Bluescope Steel. This acquisition will give the organisation a locomotive that is capable of doing mainline work. The LSMRL is fast becoming known as the "home of the English Electric".

Lithgow Mercury 11 August 2011, pp 1-2; Michael Wilson, 08/11

BROKEN HILL RAILWAY MUSEUM

1067/1435mm gauge Broken Hill Railway & Historical Museum Trust

Located in the Silverton Tramway Company's 1905 Sulphide Street passenger station, this museum is primarily devoted to the history of the role played by the STC in Broken Hill's mining industry. The station itself, constructed in locally quarried sandstone, is a fine monument to the STC and there is a well-presented collection of its locomotives and rolling stock.

The pioneer STC locomotive, 2-6-0 Y1 (Beyer Peacock 2971 of 1888) is displayed with six GX -four-wheel 5-ton ore wagons, while ON 959, one of 100 of these bogie 31-ton ore wagons owned by the STC, No. 69 a four-wheel ballast wagon and four-wheel water gin form a short train behind ex-SAR 4-8-0 T 181 (Jas Martin 182 of 1904). Other STC locomotives are 4-8-2 W 24 (Beyer Peacock 7553 of 1951) and 0-6-0 DM 26 (Andrew Barclay 391 of 1953). The latter is housed in a shelter shed with the restored Tarrawingee Tramway Company four-wheel 1895 carriage, which was unveiled by the NSW Premier Bob Carr in 1995.

The museum is the custodian of the STC records and photographs. The recently opened Ron and June Carter Transport Pavilion display includes a range of these photographs, together with track maintenance vehicles from the



STC and NSWGR, and a number of horse-drawn vehicles. Of interest to LR readers is a hand-pushed emergency rescue vehicle used on underground track at the BHP Delphrat Shaft.

The Migrant Museum, opened in 2006, contains an excellent professionally curated exhibition telling the stories of migrants at Broken Hill. The remainder of the museum is, however, tired and in need of clear direction and a manageable collection policy. Like many similar locally-run museums, its small dedicated band of volunteers find it a challenge to keep the museum open and effectively manage a large collection.

The Railway Museum is open daily from 1000 to 1500. Editor

BROKEN HILL MINERS' MEMORIAL

Broken Hill City Council

Located atop the world's richest lead, silver and zinc ore body, the 7km Line of Lode, the Miners' Memorial commemorates more than 700 miners who lost their lives on the job in Broken Hill mines since1885. It was funded in 2000 by a Commonwealth Federation Grant to preserve the history of the Line of Lode, including a memorial. The design reflects the existing pattern of the city and reinforces its role as a gateway to the history of the city and it is visible high above the streets below. The weathered steel monument is approached via a long board-walk, with the steel canopy protecting the honour rolls. The floor plan is in the form of a cross, opening out onto a viewing platform to the north.

A collection of underground mining equipment has been assembled nearby, including a number of railway items. Noted were a 4wBE loco numbered D29T, a Ruston Model 48DLU 4wDM (394021 of 1956 - see letter, page 30), and an EIMCO bogger. Presumably these will used for some form of interpretative display at a future date. Two restored underground box skips filled with mullock are located beside the access road to the memorial in honour of the two young mullockers (aged 19 and 21) entombed underground by a rock fall. Their bodies were never recovered. Fditor



Ex-Silverton Tramway Company 0-6-0DH No 26 (Andrew Barclay 391 of 1953) displayed under cover at the Broken Hill Railway Museum, 17 August 2011. The 1895 Tarrawingee Tramway Company composite carriage is behind the locomotive. Photo: Bob McKillop

SILVERTON GAOL MUSEUM Broken Hill Historical Society

This museum, located in the restored gaol at Silverton, covers a mish-mash of local history of the Broken Hill district and the original mining settlement of Silverton in particular. A 4wBE locomotive (TB1 with battery box TB2) and two underground skips displayed at the entrance to the museum were noted in LRN 108. There is a larger collection of underground rolling stock located in a yard at the rear of the museum, including a large Granby ore truck numbered X77 from the Zinc Corporation and an EIMCO bogger. A number of Silverton Tramway Company artefacts are displayed in the museum, but their impact is diminished by the general clutter and lack of interpretation at this museum. Editor

NEWCASTLE REGIONAL MUSEUM, Civic 914/1435mm gauge

Newcastle City Council

The \$23.5 million project to relocate the Newcastle Regional Museum to the former Honeysuckle Railway Workshops was opened to the public on Thursday 4 August 2011. The workshops date from the Great Northern Railway in 1857, but the remaining buildings are more recent. Located adjacent to Civic railway station, the museum utilises the former Blacksmith's Shop (1880), Locomotive Boiler Shop (1887) and the New Erecting Shop (1927). The major exhibitions are 'The Newcastle Story', which explores the natural environment, Aboriginal life, and the city's history and beliefs; 'Fire and Earth', an exploration of Newcastle's two major industries, coal mining and steel making, which is located in the New Erecting Shop; and 'Supenova' in the Locomotive Boiler Shop, which features interactive science, maths and engineering exhibits from the miniscule world of molecules to the wide cosmic reaches of the universe. Industrial railways are prominent in the displays. The coal industry displays feature the remarkable 1820s era fish-belly cast iron rail made for the AA Company and the J&A Brown Richmond Vale Railway 0-6-0ST locomotive No 4 (Kitson 1620 of 1870, see LR 219, p 36), as well as examples of the ubiquitous four-wheel, non-air coal hopper wagons. The first diesel-electric locomotive to operate at the Newcastle steelworks, Bo-Bo DE

32 (A Goninan 1 of 1954) has pride of place in the BHP section of the 'Fire and Earth' exhibition, which also features two narrow gauge hot ingot wagons. Operation of the significant 1855 Craven Brothers rope crane in the Locomotive Boiler Shop was to be a feature event at the opening, but the machine threw a leather belt from the crab drive train during practice runs, resulting in the cancellation of this activity. The museum is open 10am to 5pm, Tuesday to Sunday and entry is free. Rod Caldwell, 08/11

HUNTER VALLEY TRAINING COMPANY, East Greta

1435mm gauge

Friday 5 August 2011 saw a steam passenger train on the South Maitland Railways (SMR) line from East Greta Junction to Neath for the fist time in many decades. To celebrate the 100th birthday of SMR 2-8-2T 10 (Beyer Peacock 5520 of 1911), the class leader of the famous 10-class locomotives that provided the mainstay of coal train operations on the SMR network. this locomotive and its sister No. 18 (Beyer Peacock 5909 of 1914) operating in push-pull formation hauled a train of enthusiasts in 3801 Limited carriages to Neath for lunch at the Neath Hotel and return. The event also celebrated the 30th anniversary of the Hunter Valley Training Company (HVTC) and the 125th anniversary of mining on the Greta Coal Seam. Thanks are extended to the Friends of the

SMR, the HVTC and 3801 Limited for organising this most enjoyable event. Brad Peadon, 08/11

Victoria

PUFFING BILLY RAILWAY 762mm gauge

Emerald Tourist Railway Board The PBR carried 268,984 passengers in the financial year ended 30 June 2011, a new record. Nevertheless, the ERTB is experiencing financial constraints and is seeking additional funding. To this end, it has established the ETRB Project Governance Committee to review all projects. The Board has also negotiated a settlement with the Australian Taxation Office for the payment of \$0.5 million as a refund for overpaid GST, while the State Government has provided a \$0.5 million grant for track improvements and a new milling machine for the workshops.

By the end of August, work on the main frame of Climax locomotive 1694 had been completed, the cab and water tank had been fitted to the frame and work was being undertaken on the crank shaft. A sale of second-hand books and magazines was held at Gembrook station on 3-4 September to raise funds for the Climax Locomotive Restoration Committee. A special mixed train was operated to Gembrook on Saturday 3 September to coincide with this event.

PBR Monthly News 458, September 2011

WALHALLA GOLDFIELDS

RAILWAY 762mm gauge Walhalla Goldfields Railway Inc.

On 21 July 2011 the Walhalla Goldfields Railway was the unfortunate victim of a landslide affecting the track formation a short distance up Stringers Creek gorge from the Thomson river bridge. Consistent heavy rain had been falling in Gippsland and the road to Walhalla (on the other side of the creek) had also been damaged by rockslides. Work trains were operated to the site on the 22nd and 23rd with ex-SECV 0-6-0DM No 14 Spirit of Yallourn (John Fowler 4210051 of 1951) propelling two mini excavators on a flat wagon to the site. A new stone retaining wall was created with work being finished on the 3 August, and a test train of ex-EBR 10 class B-B DH Spirit of Emu Bay (Walkers 576 of 1963) and two carriages operated to Walhalla prior to receiving engineering accreditation on 4 August to re-commence passenger services the following Saturday.

Scott Gould, 09/11

Western Australia

BENNETT BROOK RAILWAY, Whiteman Park 610mm gauge Western Australian Light Railway Preservation Association Inc

Your editor enjoyed a memorable day at Whiteman Park on Saturday 27 August absorbing the enthusiasm and achievements of



Former SMR 2-8-2T 10 (Beyer Peacock 5520 pf 1911) was the centre of attention when it arrived at Neath with a special train on 5 August to celebrate its 100th birthday. Photo: Brad Peadon

WALRPA since his last visit there 26 years ago. Lindsay Watson kindly drove me to the BBR depot at Whiteman Park, where the crew Simon Mead (driver), Wayne (fireman) and Bob Davis (guard) were getting their train ready for the day's activities with NG 123 *FREMANTLE* (Anglo-Franco-Belge 2670 of 1951) raising steam, so we toured the workshops. Restoration work is currently focused on the ex-Marian Mill 0-6-2T (Perry Eng 2801.51.1 of 1951), while *RIDLEY* 2, rebuilt by Willis Engineering and delivered back to the depot on 4 August, was in the adjacent carriage shed. It was one of the first locos in service at Whiteman Park and has served as the motive power for the Plasser tamper TM 799 for several years. The immaculate rebuilt version bears little resemblance to its former guise.

I caught the first train to Whiteman Village Junction and spent time travelling around the system, including the privilege of a cab ride on NG 123, and discussing the group's achievements and future plans with WALPRA personnel. I also spent time at the *Revolutions* Museum at Whiteman Village Junction, which presents the history of transport in a highly professional manner. Lunch was taken at a cafe in the village as trams of the Perth Electric Tramway Society rolled down the street and vintage buses from the Bus Museum picked up passengers from the station.



'Long Tom' wagon displayed on track at Phoenix Park, Norseman, on 22 August 2011. Phot

Photo: Bob McKillop



The former Whitemans Brickworks loco RIDLEY 2 has recently been rebuilt by Willis Engineering. It was photographed in the Mussell Pool carriage shed on 27 August with the Plasser tamper it powers. Photo: Bob McKillop



Clearly, Whiteman Park presents a wonderful example of a number of transport museums and preservation groups working together to provide complementary services/ attractions and to facilitate the ability of visitors to enjoy the natural features of this extensive parkland. And to be able to explore the achievements of the WALRPA committee and volunteers over the past 26 years was a memorable experience. Clearly the Bennett Brook Railway is now one of Australia's premier preserved railway attractions. Its ability to attract and nurture young members and engage them in restoration and operation tasks stands out as a key to this success, as does its demonstrated ability to work with other groups in symbiotic relationships to achieve outcomes beyond the resources of single groups.

Editor. 09/11, BBR Newsletter, June 2011

BUSSELTON JETTY RAILWAY 1067mm gauge

Busselton Jetty Environmental Conservation Association

Updating the report in LR 209 (p 30), the 1.8km Busselton jetty was formally reopened on 6 February 2011 by the WA Premier Colin Barnet with singer Kate Ceberano helping to attract an estimated 10,000 visitors. The jetty railway resumed operations a few weeks later. A visitor in June found that the jetty railway was a popular attraction with the first three return trips for the day being booked out. Our reporter finally obtained seats on the last journey of the day.

Lindsay Watson, 08/11

BOYUP BROOK PIONEER MUSEUM

This museum featuring rural life in this agricultural district on the former cross-country railway line between Donnybrook and Katanning is based in the historic building precinct of the town. A restored WAGR 'out of' building from Dinninup houses railway memorabilia from the era when the district had an excellent railway service.

The 610mm gauge former South Perth Zoo train was moved to the

Heritage &Tourist

museum for restoration in 2009 (LR 202, pp 24-25). The train, including its 4-4-2PM locomotive, was built by the WA State Engineering Works at Rocky Bay, North Fremantle in 1953. With the assistance of a 'Royalties for Regions' Southwest Regional Grant of \$19,000, stage one of the project to restore the locomotive had been completed when our reporter visited the site on 16 April 2011. The loco was housed in a small workshop, making photography difficult.

The Pioneer Museum is a member of the Working Life Trail that links 20 heritage sites and museum in the south-west. The museum is open from 2-5pm Monday, Wednesday and Friday or by appointment. Phone (08) 9765 1504.

Lindsay Watson, 08/11

AUSTRALIAN PROSPECTORS & MINER'S HALL OF FAME, Kalgoorlie

A visit to this site on 24 August 2011 found a range of mining railway items on display across the complex in various stages of restoration. The Gemco 4wBE and tourist carriages (see LR 201, p 29) were stored in the open near the south wall the locomotive shed and are no longer on rails. The few items inside this building include an early type of rail-mounted bogger and General Electric 4wBE (B/N 12206 of 1937), both of which have been recently restored, as has a similar bogger displayed in the open. The ex-Lake View & Star Planet 0-4-0DM (FC Hibberd 2011 of 1937) is located in the open on the north side of the loco shed in very poor condition. A recently-restored Gemco-type 4wBE locomotive and two skips (one V-type the other a box skip) are displayed on a short section of track in a garden area on the east side of the Hall of Fame building. Editor, 08/11

KAMBALDA TOURIST INFORMATION CENTRE 762mm gauge

Coolgardie Shire Council

The underground mine train displayed in the grounds of this information centre was reported in LR 204 (p 30). A visit on 20 August found that the information centre had

Coming Events

OCTOBER 2011

4-8 Kerrisdale Mountain Railway & Museum, VIC. This scenic narrow gauge railway and steam museum is open to the public from 1000-1600 Thursday to Monday and public holidays. Steam engines run in the museum each Sunday. Information, phone (03) 5797 0227 or website: www.kerrisdalemtnrailway.com.au

6-7 Red Cliffs Historical Steam Railway, VIC. Narrow gauge steam operations with train rides every half-hour 1100-1600 using Kerr Stuart steam and EM Baldwin diesel locomotives, 1100-1600 and the first weekend of following months. Enquiries: (03) 5024 1345.

6-7 Redwater Creek Steam Railway, Sheffield, TAS. Narrow gauge steam train operations on the first weekend of every month.Information: www.redwater.org.au

6 Ballyhooley Steam Railway, OLD. This narrow gauge railway operates steam trains between Marina Mirage station and Port Douglas every Sunday and on selected public holidays from 1020 to 1500. Information: (07) 4099 1839.

8-9 Alexandra Timber Tramway, VIC. Market Day (Saturday) and 'Wood and Steam Gala' event with steam train operations 1000-1545. Sunday 23 October, History Week event with diesel-hauled trains. Information and group bookings: 0427 509 988.

8-9 National Railway Museum, Port Adelaide, SA. Free admission during the Port Fest weekend with a special exhibition of vintage travel posters. 0-6-0T *PERONNE* will haul trains between the NRM and the Aviation Museum over the weekend 1030-1600 (fare \$3 per person). Phone (08) 8341 1690.

15-16 Puffing Billy Railway, Belgrave, VIC. Day Out with Thomas event featuring *THOMAS* in full steam at Emerald town station. Also on 22-23 October. Bookings required, Phone (03) 9757 0700 or online via www. puffingbilly.com.au 'Special Events/Day Out with Thomas'.

15-16 Campbelltown Steam & Machinery Museum, NSW. 'Oil, Steam & Kerosene' field days with narrow gauge steam train operations, together with a wide range of traction engines, stationary engines, tractors and farm machinery. Contact Paul on 0425 615 774.

29 Richmond Vale Railway, Kurri Kurri, NSW. 'Yobbos and Sheila's Night' – dress up in 1970s for a rock & roll party with night train rides from 1930-2330. Cost \$20 per person. Details at www.richmondvalerailwaymuseum.org and phone (02) 4001 0197 for bookings.

NOVEMBER 2011

5-6 Puffing Billy Railway, Belgrave, VIC. Day Out with Thomas event featuring *THOMAS* in full steam at Emerald town station. Also on 19-20 November. Bookings required, Phone (03) 9757 0700 or online via www. puffingbilly.com.au 'Special Events/Day Out with Thomas'.

13 Illawarra Train Park, Albion Park, NSW. The annual Tongarra Train Fest from 1000-1600 with a wide range of steam and diesel narrow gauge locomotives in action on passengers and demonstration industrial trains (see p 34). For more information, see www.ilrms.com.au or phone (02) 4256 4627.

12-13 Alexandra Timber Tramway, VIC. Market Day on Saturday with trains hauled by a petrol-powered locomotive and steam train operations on Sunday from 1000-1545 for the Alexandra Historical Society Gala Day. Also Sunday 27th with diesel-hauled trains for Community Groups Day. Information and group bookings: 0427 509 988.

20 Richmond Vale Railway, Kurri Kurri, NSW. Santa Special Day from 1000-1600 with steam train rides and special attractions for children. Also Grown Up Kids Santa Night (over 18s only) with night train rides from 1930-2330. Phone (02) 4001 0197 for bookings.

DECEMBER 2011

3 Puffing Billy Railway, Belgrave, VIC. Santa's Sunset Special Train departs Belgrave at 5.10pm for Lakeside and return – also on 10 December. Daytime Santa Special trains depart Belgrave at 10.55am for Lakeside and return on 10 and 17 December. Download the special booking form at: www.puffingbilly.com.au/?id=santaspecial

10-11 Alexandra Timber Tramway, VIC. Christmas Market Day on Saturday with trains hauled by a petrol-powered locomotive and Christmas Steam Up day on Sunday from 1000-1545. Closed Christmas Day. Information and group bookings: 0427 509 988.

Note: Please send information on coming events to Bob McKillop — rfmckillop@bigpond.com — or 140 Edinburgh Road, Castlecrag NSW 2068. The deadline for the December issue is 29 October 2011.

been closed for several years, but was under renovation and the rail vehicles, namely a 4wBE locomotive numbered LM 202, a Granby wagon, and EIMCO 12B bogger, were in good condition.

Kambalda was the site of a gold rush at Red Hill overlooking Lake Lefroy in 1897 and a town was rapidly expanded, but the gold ran out by 1907 and the field was abandoned, except for the odd fossicker. Its revival came with the discovery of nickel in 1964-65, and the Western Mining Corporation established Australia's first nickel mine, the Silver Lake, over the succeeding years. Nickel mining continues today, but gold mining is now the main activity once more and the St Ives Mine is claimed to be the second largest gold mining activity in Australia.

The underground railway equipment was used by the Western Mining Corporation at Silver Lake or Long shaft, which used rail-based mining equipment up to the 1990s. The loco appears to be one of six Clayton 3.5 tonne 4wBE units delivered to Western Mining in 1975.

A 762mm amusement railway in a park at the entrance to Kambalda East was reported in May 1988 (IRN No, 65, p 18). It was still there in August 2011 and locals report that it is used during special events in the town, but this only occurs at irregular intervals.

Editor, with contributions by John Browning

PHOENIX PARK, Norseman

Updating the report in LR 178 (pp 29-31), a visit to this fine presentation of underground mining equipment used at the Central Norseman GM, including a number of rail-based vehicles, was made on 22 August. The impressive display described in LR 178 remains well-maintained with excellent interpretative signs. The two EIMCO boggers on display are M21 and M25 models, while a 'Long Tom' rail wagon designed to send equipment down a shaft and then transport it along the underground rail network was a particularly interesting exhibit.

The Norseman Historical Machinery Collection, near the old School of Mines building on Battery Road contains a number of neglected and poorly described rail vehicles as described in LR 178. It was visited during 'opening hours', but no one was present. Editor, 08/11





Above: Macknade Mill's EM Baldwin 0-6-0DH 14 (6/2490.1 7.68 of 1968) races a load across the Herbert River bridge in preparation for the climb to the mill yard on 31 July. Photo: James Chuang.

Below: Tully Mill loco crews converse at Deans loop, south of the town on 14 July. The crew of Walkers B-B DH TULLY-5 (650 of 1969 rebuilt Walkers 1993) have brought the empty rake out from the mill and have handed it over to TULLY-7 (657 of 1970 rebuilt Tulk Goninan 1994). Photo: Brian Webber

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