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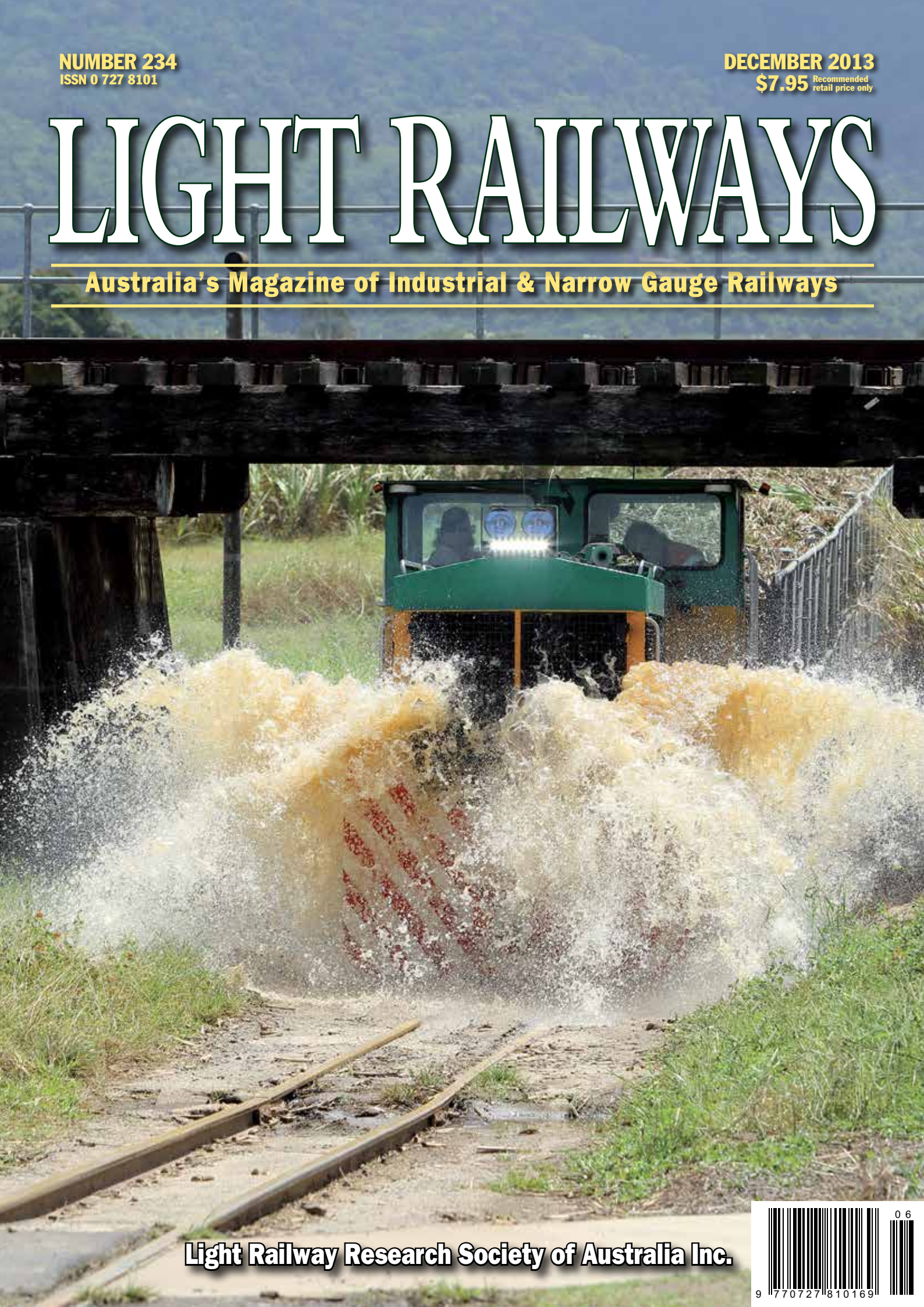
LIGHT RAILWAYS

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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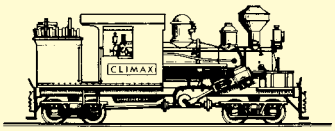

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Imperial to metric conversions:

1 inch (in)	25.4 millimetres
1 foot (ft)	0.30 metre
1 yard (yd)	0.91 metre
1 chain	20.11 metres
1 mile	1.61 kilometres
1 ton	1.01 tonnes
1 pound (lb)	0.454 kilogram
1 acre	0.4 hectare
1 horsepower (hp)	746 Watts
1 gallon	4.546 litres
1 cubic yard	0.765 cubic metres
1 super foot (sawn timber)	0.00236 cubic metre

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Comment

From this issue forward, we will be reintroducing our coverage of heritage narrow gauge railways in the 'Heritage and Tourist' section of the magazine. Our initial coverage focusses on two railways, one of which, the Zig Zag Railway, unfortunately suffered major bushfire damage in recent times. Long-time readers will remember heritage railways were covered in *Light Railway News* until the change to current format of *Light Railways*. Some of the more widely known narrow gauge railways have been operating since the 1970s or earlier – almost veterans themselves!

While the commitment for many years has been to record news about Pilbara iron ore railways, these major private industrial railway operations are now being covered more than adequately by other mainstream railway publications. Not really being able to be classified as 'light railways' under any definition, the Editorial team agrees it is now time to discontinue our coverage of them after this issue.

There are three interesting articles featuring in this issue, Ian McNeil continues his history of the Mount George tramway and sawmilling operations, Chris Wurr takes us on a journey to the edge of the Nullarbor to visit a firewood tramway, while John Browning discusses the dieselisation of the Dreamworld theme park railway.

Scott Gould

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

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

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

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

Front Cover: *In order to cross the Cairns Railway at Redlynch, the Mulgrave Mill cane railway dives below the main line timber trestle bridge across the Freshwater Creek floodway. The limited clearance means that only special low-profile cab locomotives can pass underneath. Because the line dips under the bridge, stormwater can accumulate there. This can create spectacular effects when a loaded train passes under the bridge, rushing the steep rise up to the adjoining crossing of Kamerunga Road. Scott Jesser captured this special moment on 5 September 2013, when Clyde 0-6-0DH 19* REDLYNCH *(65-435 of 1965) took 19 ten-tonne loaded bins through, getting itself a bath at the same time.*

A Nattrass Rail Tractor, possibly at Mt George, though the presence of steel rails makes this uncertain. Weighing little more than 2 tons, the standard Nattrass was in essence a basic Fordson farm tractor fitted with railway wheels. The rear power take off provided power to the wheels of a permanently coupled log bogie. The resulting 8-wheel drive unit was exceptionally capable on rough and steep logging tramways. Rhodes Timber Company finished up with two Nattrass tractors and at least one home-made copy. Photo: Bruce Macdonald collection

The Rhodes Timber Company, Mount George, NSW

Part 2: Logging tramway motive power and the bush sawmills

by Ian McNeil

Part 1 of the history of the Rhodes Timber Company appeared in LR 233, the October issue of Light Railways. *It covered the establishment of the company's Mount George sawmill and the construction of its steeply-graded Woolshed Creek logging tramway.*

Motive Power on the Logging Tramway.

Tullochs Phoenix Ironworks was well experienced in the construction of railway rolling stock which could explain the preference for supplying in-house motive power to the Mount George tramway. The result was a motley variety ranging from quite successful to abject failure.

Unraveling the history of the tramway's motive power roster is complicated by conflicting oral histories, incomplete company records and some very brief sojourns by the unsuccessful candidates. The first definite report of a locomotive for the Mount George tramway came in July 1921 when the first section of the line was nearing completion:

"*A locomotive, to be used on the tramline which is being constructed by the Rhodes Timber Company arrived during the week, so given fine weather this very important adjunct to the sawmilling business here, should be in full working order shortly. The long continued wet weather has been a big handicap in the construction of this line, but not withstanding this, the line has been laid from the mill for a distance of about 4 miles.*"[1]

The Composite Fowler steam locomotive

According to pioneer railway historian Gifford Eardley, then a young apprentice with Tullochs Phoenix Ironworks at Rhodes, this was a small standard gauge 2-4-0T steam locomotive. It was built in 1921 by cannibalising three John Fowler narrow gauge locomotives that had been acquired from the Great Cobar copper mines. The steaming capabilities of this composite locomotive left a lot to be desired and when it was trialled at Mt George it allegedly ran out of steam after a few hundred metres. It was later returned to Sydney and scrapped.[2]

The Four Wheel Drive lorries

After the failure of the composite Fowler locomotive, during 1921 Tullochs fitted railway wheels to a 'British Berna' motor lorry in their possession and sent it to Mount George. It stayed long enough to be dubbed 'The British Burner', but was apparently too light and lacked tractive effort. After suffering gearbox problems it was taken off the line and presumably sent back to Rhodes.

The Company's next effort was a lot more successful. Tullochs Phoenix Ironworks was the Australian distributor for The Four Wheel Drive Auto Company of Clintonville, Wisconsin, USA. This company marketed a successful four wheel drive lorry, and Tullochs exhibited one at the 1921 Royal Easter Show in Sydney:

A type of motor lorry that distinguished itself during the war in France and Palestine is the F.W.D. - four-wheel drive – a model of which stands majestically in the tent of Tullochs Phoenix Ironworks, close to the Hall of Industries. These F.W.D.s were used very largely in conjunction with trailers at the front, also for hauling big guns out of the mud, shell holes, and through sand, where they often became embedded. The service they performed in this respect was greatly appreciated by the British and French Governments. It is claimed that a F.W.D. truck with trailer is capable of transporting 8½ tons dead weight in the roughest of country.[3]

The FWD lorry could also be used as a rail tractor by substituting railway wheels for the rubber tyres. One was sent to Mount George and performed well enough for the Company to advertise in September 1921 for a man to drive it:

Motor Lorry Driver wanted for F.W.D. Truck hauling logs on tram line. Apply the Rhodes Timber Co., Mount George.[4]

21 year old Arthur Bakewell answered the advertisement. He was a local lad who had moved to Sydney and become a motor school driving instructor. When interviewed in 1987, Arthur recalled that his job entailed driving the brand-new FWD petrol lorry on the Rhodes Timber Company's wooden railed tramway. He also drove the Nattrass tractors and said he had no nerves back then – he would kick the tractors into neutral on downhill runs for some really hairy rides.[5]

The FWD performed creditably hauling logs from forest to sawmill along the even grades beside Woolshed Creek. But when the tramway was extended up to the Knodingbul Ridge a few years later, it lacked traction on the steep pinches and in 1926 it was replaced by Nattrass rail tractors.

It stayed on the roster until the tramway closed in 1935. It was refitted with its solid rubber-tired road wheels and a winch, and used as a mobile log hauler in connection with the Connollys Creek sawmill. It was abandoned there when Rhodes Timber Company closed down its Mount George operations during World War II. In 1970 it was retrieved by the Manning District Historical Society for display at their Wingham Museum and was subsequently disposed of to an unknown recipient.[6]

The "*Final Flutter*"

To operate the steep gradients of the Knodingbul Ridge extension, Tullochs Phoenix Ironworks elected to provide the line with a geared steam locomotive. Instead of purchasing a proven product, for example a standard-gauge B-class Climax such as Robert Longworth was successfully running on his wooden-railed Laurieton Timber Tramway, Tullochs decided to build its own, and it was completed in 1925.

Its creation was based on an A-class Climax steam locomotive but it is doubtful if the Climax Manufacturing Company would have been pleased to acknowledge it. A second-hand boiler from an ex-NSWR F-class locomotive and a vertical twin-cylinder marine engine from a Sydney Harbour tugboat were mounted on a heavy steel frame. The marine engine drove through a two-speed gearbox to power a longitudinal main shaft under the frame. The locomotive sat on two four-wheel bogies fitted with deeply-flanged wheels, each axle of which was driven off the main shaft through bevel gear assemblies.

A pair of rectangular water tanks were mounted on the rear of the locomotive. An extended cab offered the crew some weather protection, and a huge spark arrestor was mounted on top of a tall stove pipe funnel and held precariously in position by guy wires. The resulting contraption weighed over 36 tons, and after trials at the maker's plant at Rhodes, was taken by train to Mount George.[7]

The Mount George locals dubbed it *The Final Flutter* after its first and only run on the line in 1925. It was too heavy for the brushbox rails which snapped between the sleepers under its weight. In later years Gifford Eardley penned a colourful if somewhat embroidered account of the trip for the *ARHS Bulletin*:

"*Steam was raised and, with acrid wood smoke oozing from its gawky spark arrestor, "The Final Flutter" commenced its maiden journey to the logging depots. Waddling along the wooden rails, it smashed these in all directions with its great weight, while the steep grades of the mountain section gave the crew trouble, as the water inclined away from the firebox crown and the lead plugs gave out. Temporary repairs were made but the crushing of the track made the return journey imperative before further damage was done.*

The descent was precipitous and "The Final Flutter", out of control, raced down-hill. Strangely enough, it did not leave the rails but the panic-stricken crew left the engine. Although fitted with brake shoes to all eight wheels and actuated by a chain arrangement, this mechanism was torn away when the brakes were locked by the swinging movement of the bogies…"[8]

More realistic recollections from ex-employees indicated that the locomotive only got as far as Black Flat Lane, about 2.5 kilometres from the mill and well short of the mountain section. Having already broken 28 sleepers and 14 rails the trip was abandoned.

The locomotive was taken back to Mt George, never to run again. It was dismantled at the sawmill with the steam boiler later re-used to power a bush sawmill up on Knodingbul Ridge. The heavy steel frame was returned to Tullochs' works at Rhodes where it was incorporated into a wagon traverser. The aftermath of the Final Flutter's one and only outing was reported by the *Gloucester Advocate* in July 1925:

The Rhodes Timber Company has ceased work on the tramline owing to the heavy locomotive in use having to be dismantled or perhaps replaced by a lighter and more suitable engine. The work will proceed in a few weeks, when it is possible to convey the rails to the new cutting for the purpose of tapping new timber country. Quite a few men have been employed by the company and several of them are doing bush work until the works open again.[9]

The Nattrass Rail Tractors

After the failure of The Final Flutter the Company persevered with the FWD lorry to haul logs to the Mount George sawmill. But the little lorry struggled on the steep grades up Knodingbul Ridge. The main ascent consisted of three kilometres of 1 in 10 grade with some pinches as steep as 1 in 7½. Steel rails were installed on the steeper sections and bridges, and this was where the FWD came undone. It had enough adhesion on the wide 5in x 5in wooden rails to haul empty log bogies uphill, but lost traction on the normally wet, and sometimes frosty steel rails. The driving wheels slipped and spun causing the consist to slide back downhill. The situation was serious enough to close the mill due to lack of logs for some nine months during 1925 and 1926.

In March 1926 New Zealand entrepreneur Howard Nattrass began promoting his patented Nattrass Rail Tractor to Australian sawmillers and timber men. The Nattrass tractor was in essence a standard 22hp Fordson farm tractor fitted with railway wheels and a rear driveshaft coupled to a trailing log bogie. The tractor's front wheels were chain-driven off the rear wheels, while the log bogie's four wheels took their power from the drive shaft and another drive chain. Standard Fordson components were utilised for ease of maintenance and availability of spare parts. The resulting eight-wheel drive machine was light-weight – the tractor unit weighed under two tons – economical to operate, and extremely effective on steep and roughly laid timber tramways.[10]

Howard Nattrass was a colourful character with a penchant for large cigars and a talent for selling Cadillac cars. He also possessed considerable inventive skill and was adept at organizing demonstrations and gaining publicity. He shipped a 3ft (914mm) gauge tractor to Australia and demonstrated it in March 1926 to a group of sawmillers on Herman's steel tramway at Warburton, resulting in three Victorian sales. A few months later Howard demonstrated a tractor on the standard gauge Mount George tramway, making sure that newspaper reporters and photographers were on hand to publicise the event. Among those invited was a reporter from the *Manning River Times* who caught the train down from Taree to attend. He wrote a lengthy and enthusiastic article about his day out, including these sections concerning the Nattrass tractor:

Mr. H. Nattrass, of 23 Darlinghurst road, Sydney, from whom our invitation to attend was received, undertook to give a public demonstration of the work that could be done by the ordinary Fordson tractor when fitted with an appliance which he has patented. He has had wide experience in the mountainous timber country in New Zealand, where his patent is extensively used. On the ordinary motor vehicle the power is only attached to one pair of driving wheels, and when they skid the other pair of a four-wheeled chariot remains inoperative. Briefly, his attachment to the Fordson tractor consists of harnessing together by a chain drive the two wheels on each side; but Mr. Nattrass goes further and carries his differential and gearbox back to the leading wheel truck, the four wheels of which are harnessed in a similar way, so that when the engine starts and the motor is in motion eight wheels are gripping the rails, thus eliminating the possibility of skidding. In short, that constitutes Mr. Nattrass' contrivance. He claims that this system utilizes the dead weight carried on the rear bogey for tractive force, economy in transport as one of its chief features, one case of petrol per day provides power equal to 12 horses, tramways need not be ballasted, bridges can be lighter and need no decking, expensive culverts need not be made to ease the grades, as the tractor can haul a load up any grade which can be braked with safety.

In submitting for sale one of these to the Rhodes Timber Co, Mr. Nattrass' brother a fortnight ago, arrived on the job with his machine. Since then about 10 logs have been hauled down, but most satisfactory of all is the fact that the tractor pulls the empty trucks up the grade without a hitch. The demonstration on Wednesday bore this out fully. About 25 visitors made the trip up the mountain and all grades were negotiated without a hitch. When the last pinch of 70 or 80 yards came, the wheels of the trailing trucks were braked and the tractor dragged them up to the summit with the wheels locked – truly a severe test. Mr. Nattrass provided a splendid lunch on the top, nearly 1000 feet above the flat country only 1¾ miles away, and the appetite-sharpening effects of the upper air made the meal a most enjoyable one.

Mr. Tulloch, principal of the Rhodes Timber Co, was of course the most interested spectator, and his subsequent purchase of the tractor tells of his satisfaction.

Owing to the number of visitors to be carried, only one log was trucked – the tractor usually takes three, or a load of about 3500 feet – for the home trip, which was accomplished in good time, the train running at 6 or 7 miles an hour on flat country. All who witnessed the demonstration were satisfied and surprised at the wonderful work which can be done with a Fordson tractor fitted with the Nattrass patent.[11]

Constructing the Top Mill branch line on Knodingbal Ridge in 1932. The line on the left is the logging tramway going downhill to Mount George with a FWD lorry just visible in the background. The structure behind the workmen is the closed Rhodes Timber Company's 1927 bush sawmill. Its access sidings have been cut through by earthworks for the branch line. New wooden rails for the branch are stacked ready for laying. *Photo: FC NSW 5 courtesy of Jim Longworth*

Preparing to rail the steam log hauler boiler to its new site at the end of the 1km Top Mill branch line. Judging by the bushes growing on the derelict Top Mill rail sidings several months have passed since the first photograph was taken. A Nattrass rail tractor with empty log bogies is sitting on the main line, while the boiler and an unidentified rail tractor are on the branch line. Photo: FC NSW 4 courtesy of Jim Longworth

The Company purchased one Nattrass tractor and apparently were pleased enough with its performance to acquire a second unit a short time later. But even with eight-wheel drive the Nattrass tractors were prone to slipping in winter. A little ingenuity and two rail trucks of sand from Sydney solved this problem. The sand was burnt on a red hot plate to remove moisture, loaded into a container mounted over the wheels in front of the tractor, and fed onto the line through small pipes.

Short trains were the order of the day with the Nattrass tractors usually hauling two loaded log trucks on each run back to the mill.

When the Mt George plant was offered for sale in 1934 the list of assets included four rail tractors. In addition to the two Nattrass units and the FWD lorry the fourth tractor appears to have been a Tullochs-modified Fordson farm tractor fitted with railway wheels and front-mounted sandboxes.

The benefits of standard components were demonstrated in this 1927 newspaper report:

On Tuesday last an accident occurred to the Fordson tractor at present used for haulage up and down the mountain, through the crankshaft snapping while descending the hill with 4000 feet of sawn tallow-wood. Owing to the machine being standardised, the management will be able to replace it before the weekend, and business will be resumed as usual.[12]

The Knorrit (or Top) bush sawmill

In October 1926, shortly after acquiring its first Nattrass tractor, Rhodes Timber Company announced its intention to put a secondary sawmill on top of the Knodingbul Ridge. Dressed timber from this mill was to be taken direct to the Company's private rail siding by rail tractor. By November 1927 the mill was in operation with this description being given in the *Manning River Times*:

The Rhodes Timber Co., which for a good many years has been spending large sums of money in the Mount George district, recently completed a new Mill on Knorrit State Forest, as an adjunct to the one at Mount George. Their tramline goes some eight miles into the mountain spur, rising about 900ft. right into the big timber in the State forest. It had been the practice to bring the logs down with a tractor, but the new move is to cut the logs on the hill and rail the sawn timber down to their siding on the railway line. At the new mill some 36,000ft of logs are cut weekly. The logs are drawn to the tramline by a powerful hauler, which operates for distances up to 50 chains, pulling the logs out of the gullies and ravines to where they can be trucked for the mill. At the present time there is not a bullock team working for this mill, the hauler being sufficient to supply a capacity output, keeping the mill constantly going. Sixteen men are at present engaged thereabouts. Under ordinary circumstances water would provide a difficulty so far from creeks, but Mr. W. J. Sinclair (Manager) informs us that they were successful in locating a spring which gives more water than is required and it gravitates to the mill through 65 chains of 2-inch pipe. This supplies the hauler as well.[13]

At the spring the company put in a small dam, the remains of which can still be seen today, though the pipeline has long since disappeared. A second steam log hauler was installed beside the main line about a kilometre downhill, water for it being piped from Knorrit Mill, and its purpose was to supply the Mount George sawmill with logs. With two log haulers in action the Company expected to be able to keep both mills running at full capacity and dispense with bullock teams altogether.

The Knorrit Sawmill, also known as the Top Mill, was a small bush mill with a capacity of 30,000 superfeet of sawn timber per week. It was managed by Ray Fiddock, a local man from Mount George. The mill was in an exposed location on top of the narrow ridge, alongside the present day Knodingbul Road,

and open to all weathers. It would have been a bitterly cold place in winter for the small handful of men who lived and worked there during the week.

The steam log hauler at the mill site had a twin-drum winch housing a heavy tow rope and a lighter tail wire which could reach up to ¾ mile down either side of the ridge. Big pulley blocks weighing up to half a ton were used where the main tow rope changed direction. Spider lines radiated 200 yards out from the main rope and were pulled to individual trees by bullocks. Operations were controlled by a series of whistle signals. A second steam log hauler followed in 1927. Bart Madden, one of the Simsville Climax locomotive drivers, came up to Mount George as the first hauler driver.

Initially sawn timber from the Knorrit Mill was stacked on log bogies and free-wheeled down the mountain to the Woolshed Creek flats far below. Mill manager William Sinclair is said to have made the first run. At the bottom of the run they were collected by rail tractor and taken to the company's private rail siding at Mount George.

One of the brakemen was Frank Baume who recalled that it was a hazardous operation and trucks would jump the line occasionally. 'You had to stand at the back of the log truck and haul as hard as you could on the brake rope. The rope pulled on bell brakes – shaped wooden brake blocks between the wheels – to slow the truck, and you had to keep this up all the way down the mountain, about three miles.'

The Knorrit Mill only operated for a couple of years. Forestry Commission photographs of the Top Mill branch line under construction circa 1932 show the mill with its overgrown rail sidings cut through by branch line earthworks. After it closed all logs were once again taken by rail tractor down the mountain to Mount George mill for cutting.

Closure of the Woolshed Creek Tramway

By the mid-1930s much of the timber accessible from the main tramway had been cut out and Tullochs contemplated pulling out of Mt George altogether. In April 1934 and again in January 1935 advertisements were placed in the For Sale columns of the *Sydney Morning Herald*:[14]

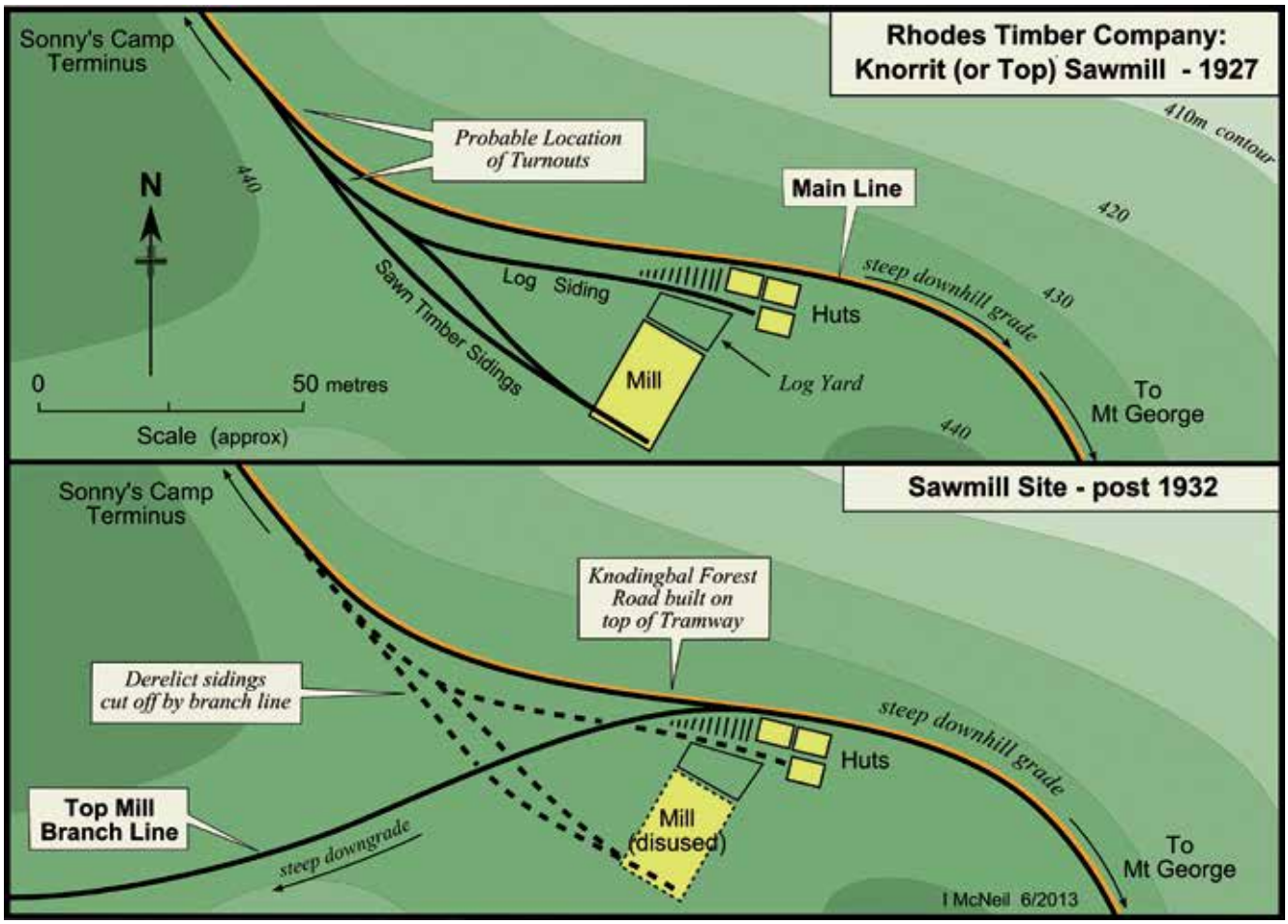
The Rhodes Timber Company, Mount George.

Tenders are invited and will be received at the office of the undersigned up to Saturday the 9th February 1935 for the purchase of the following:

- *One hardwood sawmill (capacity 100,000 feet per week) situated on the main north coast line.*
- *Approximately ten miles tram line to bush.*
- *Two log haulers and boilers, complete with ropes and blocks.*
- *Four motor rail tractors, with bogies and log trucks.*
- *One hardwood sawmill (capacity 30,000 feet per week) situated in the bush.*

Further particulars on application to Tullochs Phoenix Ironworks Ltd., Rhodes.

There were no acceptable bids and the company stayed on at Mount George. The focus of timber-getting was shifted to Connollys Creek, 7 kilometres northwest, where large stands of good quality timber were still to be found around the headwaters.



Rhodes Timber Company put in a small bush mill with a capacity of 30,000ft of sawn timber per week on top of Knodingbal Ridge in 1927. The narrow ridge left little room for the mill which only operated for a couple of years. The sidings were already derelict when they were cut through by the construction of the Top Mill branch line in 1932.

The Woolshed Creek Tramway was closed. The tramway leases which had been transferred to the Forestry Commission in 1928 were not renewed and were formally revoked by the Lands Department on 16 November 1934.

The Move to Connollys Creek

The new base of operations was some four kilometres up Connollys Creek from Nowendoc Road. Access was not easy with the rough track leading to it fording the boulder-strewn bed of Connollys Creek no fewer than 16 times. After heavy rain the crossings required considerable repair, all by hand, before log trucks could get through again.

The two steam log haulers were loaded onto sleds and dragged off Knodingbul Ridge down to Connollys Creek. One was hauled down the steep slopes by a bullock team, the other by an early model crawler tractor. It was a risky operation and drag chains were wrapped under the sled skids to stop them over-running the bullocks and the tractor.

To provide water for the site, a small concrete dam was constructed across the creek, the remains of which are clearly visible today. The men who built it chiseled their names and the date – 30th October 1935 – into the top of the 30cm thick wall, a nice archaeological touch in the best 'Time Team' tradition that precisely dates its construction.

Adjacent to the dam was the terminus of a standard-gauge wooden-railed logging tramway which eventually extended for some three kilometres northwards up the narrow creek valley. The tramway was quite substantially built, initially climbing steadily beside the creek on a ledge cut into the hillside. Over a dozen sturdy pigsty and trestle wooden bridges spanned side creeks along the way. The last kilometre of track was down at water level and little of this section has survived. Both rail nails and small dog-spikes have been found embedded in remnant moss-grown sleepers along the right-of-way, suggesting that a mixture of wooden and steel rails were used on the tramway.

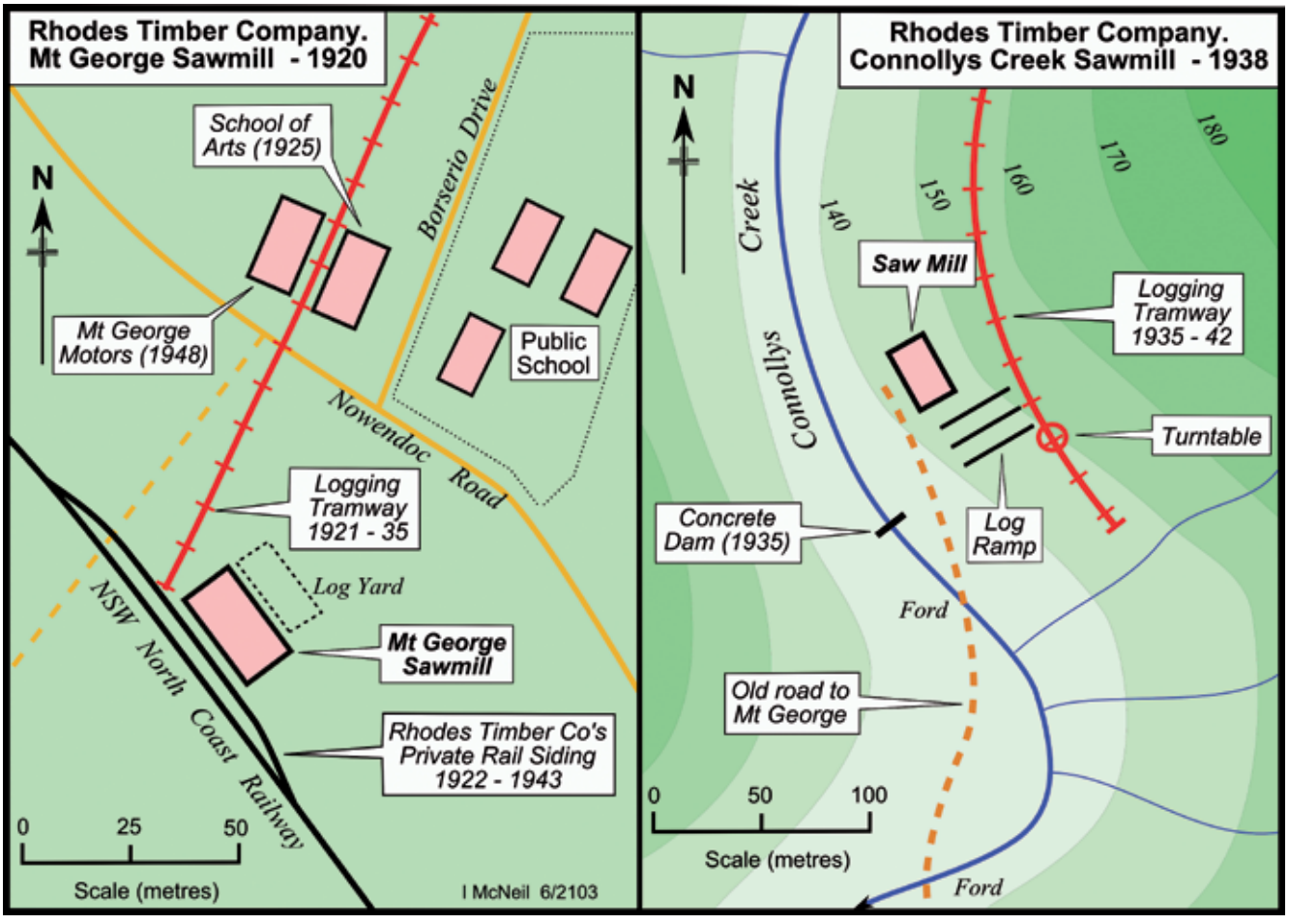
At least one of the company's Nattrass rail tractors was brought down to operate it. An unusual feature of this tramway was the provision of small turntables at either end of the line to turn the tractors. Measurements taken at the site of the southern turntable indicated a structure about 5 metres in diameter pivoting on an 8cm diameter shaft.

The steam log haulers may not have been effective operating within the confines of the steep sided creek valley as in October 1935 the company invited tenders for hauling logs in the bush with a Caterpillar tractor. Later, in March 1939, they advertised to lease, with option to purchase, a 40 to 60hp diesel caterpillar tractor for the job. Logs hauled down the tramway by rail tractor were loaded onto road trailers at the southern terminus and hauled by lorry over the abysmal access track to the company's Mount George sawmill for cutting.

Left: *Hard yakka! Installing the steam log hauler boiler at the end of the Top Mill branch line circa 1932. Workmen have excavated a bench about 1 metre above track level and are building a pigsty of timber baulks to seat the boiler. Photo: FC NSW 3 courtesy of Jim Longworth*

Below left: *A twin-cylinder steam logging winch is hauled up over wooden slides to its prepared bench some three metres above tramway level circa 1932. The location is probably at the end of the Top Mill branch line. Photo: Murray Brown collection*

Below: *The layout of the tramway sidings at Mount George sawmill is not known as subsequent land use has comprehensively removed all traces. Anecdotal evidence suggests there was a simple run-around loop and one or two storage sidings for log bogies at the mill. At the Connollys Creek sawmill site are the remains of a rail tractor turntable and the formation appears wide enough for either a storage siding or a simple loop.*



Connollys Creek Sawmill

In April 1938 this small item appeared in the *Wingham Chronicle* newspaper:

A new mill has recently been erected by the Rhodes Timber Company at Connolly's Creek, the object being to eliminate excessive hauling costs, as it is necessary to go farther back to secure good milling logs.[15]

The new mill was established at the southern end of the Connollys Creek Tramway. A log ramp beside the tramway allowed logs to be rolled straight down to the mill log yard. Substantial concrete foundations were provided to support the boiler, steam engine, frame saw and saw benches. Water was pumped up from the adjacent dam through a 3 inch cast iron pipe to supply the mill. A small number of mill workers and their families lived in relative isolation near the mill, with the foreman Jack Keppie coming into Mt George once a week to pick up the men's wages.

The establishment of the Connollys Creek sawmill spelled the end of the company's mill at Mount George. Sawn timber from the new mill was now taken directly to the company's private siding to be railed to Sydney. Mill machinery that had not been requisitioned for Connollys Creek was dismantled, loaded onto rail trucks and shipped back to Tullochs' works at Rhodes in Sydney. The wooden mill building at Mount George was abandoned, and the site was taken over by Hawkins Brothers after the war for their own sawmill.

Rhodes Timber Company's finale

World War II closed the curtain on Rhodes Timber Company's involvement in the Mount George district. Around 1942 Connollys Creek mill ceased operations, the mill machinery was unbolted from its concrete foundations and was most likely shipped back to Rhodes. In connection with the company's private rail siding at Mount George, NSW Railways advised in March 1943 that:

The points have been spiked and the Rhodes Timber Company's Siding has been put out of use.[16]

The siding and its connections were subsequently removed in November 1944. No records later than this have been found of Rhodes Timber Company at either Mount George or at Rhodes. Presumably the company's identity was dissolved and all of Tullochs' subsequent timber requirements were purchased directly from other suppliers.

Extant remains

Sawmills

There are no traces left of Rhodes Timber Company's mill at Mount George. Hawkins Brothers put their own mill and extensive timber yards on the site, and the rail siding was pulled up after the war. Today it is just an open paddock.

Little more can be seen where the Knorrit sawmill perched high on the ridge alongside Knodingbul Road. Only rusted steel fragments of the mill chimney identify the site. A small concrete dam is still in situ across a side creek, from where water was gravitated down for the mill's boiler.

By comparison Connollys Creek mill site is very well preserved due no doubt to its remote location and difficult access. The timbers of the inclined ramp are still in situ where logs were rolled off tramway bogies down to the mill's log yard. At the mill site proper, a small forest of 1½ inch diameter threaded bolt heads project from the substantial concrete foundations of the mill. Large concrete wall sections lay askew in the bed of Connollys Creek a short distance away, the flood damaged remnants of the mill dam.

The Nattrass Rail Tractor en route to the Mount George sawmill with a load of logs. The well-dressed driver is believed be Howard Nattrass' brother who spent two weeks at Mount George demonstrating the machine in July 1926. The man in the overcoat next to the tractor is mill manager William Sinclair. *Photo: Bruce Macdonald collection*

Above: *The only surviving trestle bridge on the Mount George logging tramway is high up on the western side of Knodingbal Ridge, about 2km south of the Top Mill. The bridge is 24m long x 6m high, has a single central trestle and was built from logs up to 80cm in diameter. Rampant lantana thickets were cleared away by hand during field mapping in mid-2011. Photo: Ian McNeil*
Right: *A surviving girder log at one of the three bridge sites on the 1932 Top Mill branch line. A row of 15cm long hand-forged iron nails on the underside indicate that structural decay has caused it to rotate upside down. Iron spikes up to one metre long fixed the girder logs to key and bed logs. It was an effective economy design for the light axle-weight rail tractors. Photo: Ian McNeil*

Tramways

North of the village the formation of the Woolshed Creek Line can be followed with some difficulty through open scrub and cleared paddocks. Some stretches could only be located with the aid of Google Earth satellite views, but most creek crossings were able to be identified by the presence of fragmentary remains of bridge timbers.

Towards the upper reaches of Woolshed Creek and on the climb up Knodingbul Ridge most of the ledges and side cuttings survive but are heavily overgrown by that curse of the NSW North Coast – rampant lantana. Surveyor Sharpe's zig-zag line up Knodingbul Ridge never progressed past the trial survey stage. Much effort was expended searching for it, using Gifford Eardley's detailed line-side description as a guide[17], before the realisation dawned that it had never been built.

On the western side of Knodingbul Road, just past The Saddle, the formation is more open and the going is easier. A two kilometre section, with easy car access at both ends, makes an interesting bush walk along the tramway ledge with trestle bridge sites, log hauler bays, sleepers and the occasional wooden rail in situ. One trestle bridge was still substantially intact in 2012.

The Connollys Creek Tramway formation is also well preserved, moreover the undergrowth is almost sparse by comparison. As well as moss-covered sleepers, rail nails and dog spikes, the remains of a tractor turntable are recognisable near the old mill site. The northern end of the line is difficult to reach, the most practical route being down the suicidally steep Turner Fire Trail – not recommended for the faint of heart.

Acknowledgements

The author gratefully acknowledges the substantial assistance of co-researcher Mick Allison during field mapping in very rugged country north of Mt. George. Field investigations along Connollys Creek was greatly facilitated by local resident Lyle Turner whose bush-driving skills were second to none.

Information concerning Tullochs Phoenix Ironworks and the Tulloch family was generously contributed by David Jehan and Barry Tulloch.

Thanks are also due to Arthur Cooper, Mark Fry, Jim Longworth, Bruce Macdonald and Jeff Moonie for encouragement, assistance and photographs.

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J.L.N. SOUTHERN AWARD

For excellence in published research of light railway subjects

Emu Bay Railway No.13 (BP 6581/1929) on No.5 train running special, stationed at Primrose 3 Feb 1937. The 3ft 6in-gauge EBR purchased three of these impressive Garratts in 1929. With a tractive effort of over 42,600 lbs (@ 85%) and weighing around 133 tons, they were well suited for the heavy ore traffic on the Tasmanian West Coast. The design was a copy of the metre-gauge Kenya–Uganda Railway EC-class of 1926 (the pioneering 4-8-2+2-8-4 Garratts), the only real differences being the gauge and the EBR locos carrying 1000 gallons more water and a slightly higher boiler pressure. No.13 was withdrawn and scrapped in 1961. Photo: J.L.N. Southern

The Council of the Light Railway Research Society of Australia wishes to provide encouragement and recognise the efforts of researchers, and reward the production of high quality articles published in the *Light Railways* magazine or other publications.

The J.L.N. Southern Award is the culmination of much consideration by the Council and is intended to be a prestigious award for outstanding efforts in the field of light railway research – something we are all passionate about.

Prior to his passing on 30 September 2001, former LRRSA member JLN (Jack) Southern, at the suggestion of his long-time friend Bruce Macdonald, generously made available to the Society some of his large collection of railway books and photographs for disposal. At the time, it was proposed that the funds from the sale of these items be used to set up the JLN Southern Endowment. The interest earned on this endowment was to be used to award a prize (The J.L.N. Southern Award) as a reward for excellence in published research for magazine articles dealing with Australian light railway subjects.

The following criteria will be used by the Judging Panel to determine the award winner:

- Research to be substantially original and make a significant contribution to the body of knowledge of light or industrial railways
- Work to be well presented and appropriately referenced
- Work to be of a high standard of readability and interest for the reader
- Work normally expected to be of at least 1500 words

In addition, the following considerations will also be given weight where appropriate:

- An examination, if relevant, of the broader context of where, when and why the railway operated
- The use of maps and diagrams
- The use of photographs and other illustrative material

Process for nominations and award

All articles published by the LRRSA either in *Light Railways* magazine or electronic media will be automatically considered.

Any member of the LRRSA (including members of Council as individuals) may nominate any article published by other persons or organizations during the calendar year in question for consideration. A notice will be published each year in *Light Railways* magazine calling for nominations that are to be submitted to the Secretary for consideration by the judging panel.

The judging panel will be asked to give reasons for its choice in order for others to learn what the characteristics of excellence are considered to be in this field of publishing.

The prize to be awarded will be a framed certificate and the winner's choice of any book or books on a railway related subject. The council will determine the budget for the award on an annual basis. The book/s will include an inscription that will state that the prize was presented to the recipient as a consequence of having won the JLN Southern Award.

If practical, the winner will be invited to receive the award at a formal ceremony in conjunction with the Society AGM in August. The presentation will be made by the President or other Council member and if the winner cannot attend the AGM, the announcement will be made to the attendees. In any case, the result will be published in the October issue of *Light Railways*.

Nominations of non-LR material (all LR articles are automatically included) for the 2013 calendar year are invited and may be forwarded to the Hon Secretary, Light Railway Research Society of Australia Inc., PO Box 21, Surrey Hills Vic. 3127

The 416½ Mile Condensers beside the ever-lengthening Trans Australian Railway. This slightly elevated view of the site, some 11 miles east of Ooldea, appears to have been taken from the embankment of the new line, just north of the site. It shows a busy scene of bore water being distilled into pure water. Saline bore water obtained at the site, was precipitated into steam in wood-fired condensers. This process separates salt from the saline water and once the steam re-condenses, the end product is extremely pure water, suitable for human consumption, not to mention eminently suitable for use in locomotive boilers. Long rows of firewood stacks can be seen on the right, and this is the firewood harvested south-west of the condenser location. It was brought into Ooldea on the 2ft gauge tramway and transhipped to standard gauge wagons to complete the journey. The location today can be easily recognised by rubble and rusting metalwork, and by a large stone and sand baker's oven. Photo: National Archives of Australia: B3104, Volume 4

The Ooldea firewood tramway

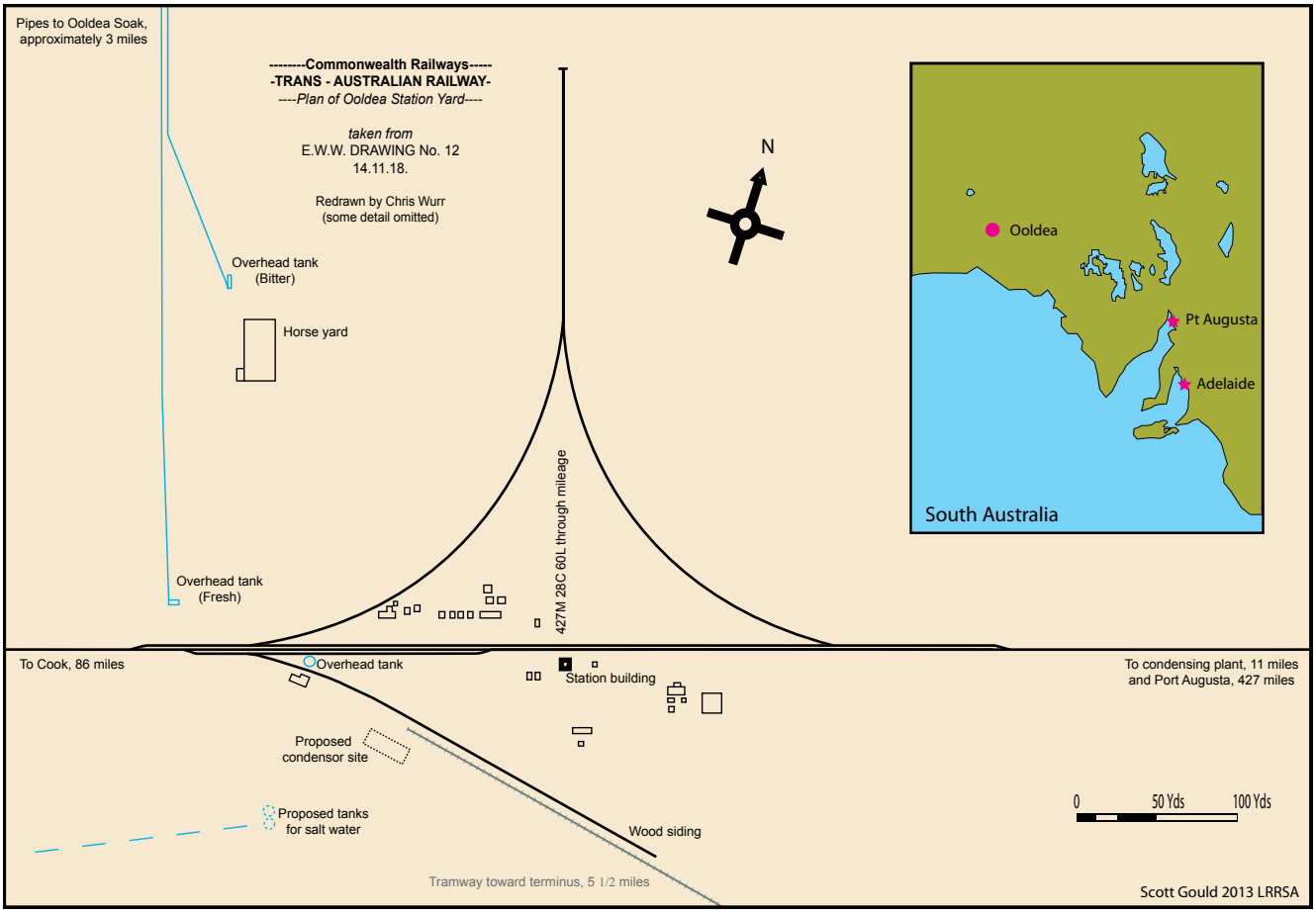
by Chris Wurr

In conjunction with the advent of the Trans-Australian Railway from Port Augusta to Kalgoorlie from 1912 to 1917, one of the greatest hurdles to be overcome during construction and in later years of operation was the lack of good quality water in many areas through which the new line ran. Ooldea, situated at the eastern edge of the Nullarbor Plain, became a strategic location in the quest for the precious liquid. There is no surface water nor intermittent watercourses to be found anywhere on the Nullarbor Plain and drilling through the solid limestone that underlies the plain has always been an extremely inexact venture. There is no certainty that water will be found, and if perchance it is found, its quality can vary widely from potable to totally unusable.

Surveyors deciding the course of the new line were always on the alert for any halfway usable water source and readily took the advice of any local aboriginal people they encountered. Ooldea Soak, 3⅓ miles north of where the new Trans line was to run, had been a reliable source of water for Aboriginal people for thousands of years. Railway surveyors were willingly led there by the local people, who had had very limited contact with Europeans up to this point and were quite willing to share this resource. Little were they to know that this would come to have a dramatic impact on their nomadic lifestyle centred around Ooldea Soak. Once the prolific water output of Ooldea Soak was realised by the railway department, no less than 53 bores were sunk into the area and the lifeblood for the local Aboriginal people was literally sucked dry.

Prior to the arrival of the railway, a large condensing plant had been set up on the railway route just over 11 miles east of Ooldea Siding at 416½ miles to treat the water and make it usable for the construction gangs.[1] Firewood to fuel the plant was discovered to grow in abundance in an area some five and a half miles almost due east of Ooldea. This area was to the south-west of the condensing plant, but sand ridges run roughly west to east in the intervening country, thus preventing easy transportation of wood directly to the plant. The solution was to build a tramway running parallel with the sand ridges slightly south of east from Ooldea Siding to the cutting area. This would enable firewood to be railed to Ooldea Siding and then transhipped onto standard gauge wagons for on-shipping to the condensing plant, once the railway arrived. No doubt firewood was also railed the 86 miles west to another condensing plant set up at Cook.

Returns for the 416½ mile plant covering the last fortnight in November 1917, one month after the joining of the line, provide an insight into the operation. 122,500 gallons of salt water pumped yielded 75,100 gallons of condensed water. Of this, 2,500 gallons was issued to the construction camps which were consuming water at the rate of 200 gallons per day, while twenty camels consumed 2,800 gallons for the fortnight. 40,000 gallons was released to revenue traffic, 12,500 gallons to construction, and 17,000 gallons was shipped west for use between Deakin and Cook.[2]



Side tipping skips are being used to remove the spoil from a cutting during the construction of the Trans Australian Railway. Whilst it is unknown where this photograph was taken, the sandy, scrubby terrain is exactly as found in the sandhill country east of Ooldea.

Photo: State Library of South Australia PRG625_1_20

Construction

The tramway was constructed to high standards, as is evidenced by what remains today. 14lb rail was used, spiked to wooden sleepers which were spaced precisely at two foot intervals, for the entire 5 miles 54 chains 60 links[3] from the Ooldea transhipping sidings to the outer end of the line. An Ooldea station yard layout plan of 14 November 1918 shows the tramline and the standard gauge siding flanking either side of the transhipping area. The 2ft gauge line was single throughout with a dead-end siding at about 3 miles out from Ooldea, and a crossing loop at about 4½ miles out. At the outer end of the line, the terminus consisted of two dead-end roads. All sidings and the crossing loop were 45 yards in length. A formation of built up clay provides a base for the entire length of the line, indicating the substantial nature of its construction.

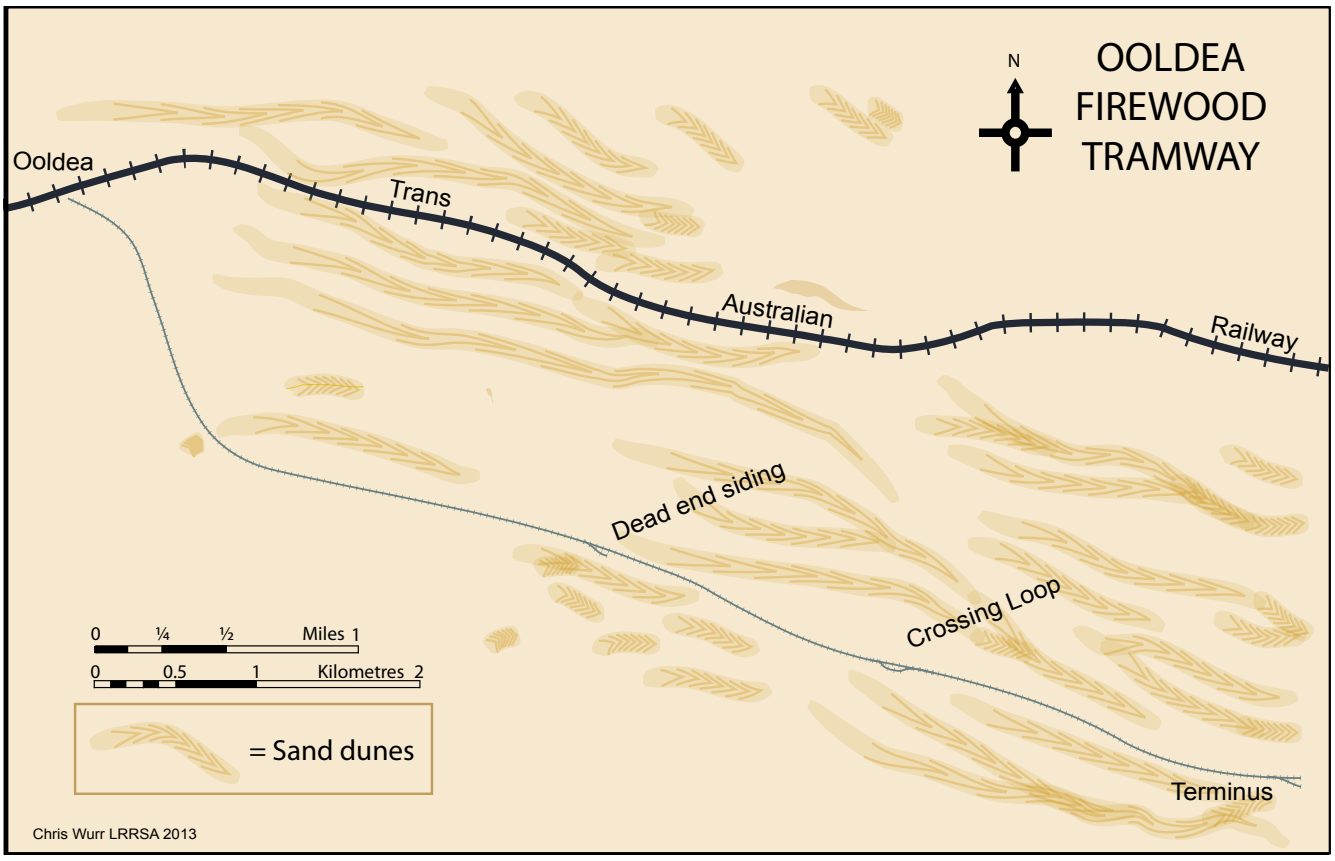
State versus Federal politics

Surprisingly, despite its utter isolation, the tramline was the subject of some controversy in its early years. A veritable paper trail of to-ing and fro-ing exists in connection with the line and the associated denuding of the area at the cutting site.[4] It began with a letter to the South Australian Premier from Tom Brown, dated 13 December 1918. Tom Brown (in conjunction with the Willis brothers) had established Nullarbor Homestead to the south of the Ooldea area in 1887 and was quite familiar with the area. He complained that there was wholesale felling of black oak and other species in the Ooldea cutting area and that this area was sandy and liable to drift when denuded of its natural covering. He even warned at this early stage, that the Ooldea Soak was in danger of exhaustion or becoming saline if overdrawn. He queried if the South Australian government had any power to stop or regulate the cutting down of timber on the railway route.

It appears the South Australian government handed Brown's concerns on to the Federal government, since the construction and operation of the Trans-Australian Railway was a Federal initiative. In a classic example of government spin and tactics which would equal anything seen in the 21st Century, the Secretary for the Commonwealth Surveyor General, Lands & Surveys Branch, replied basically that the whole concept of a Trans-Australian railway would be in dire jeopardy if access to limitless amounts of firewood for lighting up locomotives, condensing water and fuel for employees was cut off. Brown noted that the laws of the State of South Australia *do not permit of the felling of green timber on Crown lands and the firewood licences issued by the state only allowed for the removal of dead or fallen timber.* This trifling hiccup was easily solved by annexing a specifically surveyed area encompassing the Ooldea cutting area to the Commonwealth of Australia! A copy of a rough-drawn plan of the area in question indicates an elongated oblong area with an angle part-way along, of seven miles in length and one mile wide consisting of some 4526 acres. This plan does not show the entirety of the tramline from Ooldea, but mentions *the light railway constructed about 4 mile long* which would tend to indicate that the overall length of the line was subsequently lengthened as timber felling progressed outwards. Perhaps the location of the crossing loop was the original terminus.

In a letter to the Premier of South Australia from the Acting Prime Minister, dated 10 March 1919, the federal government's presumption that South Australia would have no choice but to acquiesce for the sake of the national good, is contained in the words *It is desired that your State will agree to grant this area to the Commonwealth under the terms of Section 3 of the Trans-Continental Railway Land Act.*

South Australian Premier Archibald Peake's reply of 1 May 1919 indicated concern that the annexed area *would for all time interfere with the sub-division of the land for pastoral purposes and destroy the approach to the railway.* He also highlighted the removal of *very large quantities of timber* already, and again pushed Brown's point regarding the tendency of the land to drift. In the last paragraph, Peake sticks the knife in and twists it, saying *It has been reported to this government that a light line of railway from Ooldea Station has been constructed by the Commonwealth Railway*



Anthony Gladstone Bolam, author of "The Trans-Australian Wonderland", was stationed at Ooldea siding from 1918 until 1925, firstly as a Porter and after 1920, as the Station Master. He took many photos during this time and they are immediately identifiable by his hand-written captions in white. His photograph here of the "Head of the Woodline" shows a scene which is almost identical today, such is the isolation of the locality.
Photo: State Library of South Australia WB45287_8

authorities for the purpose of carting wood but without licence from Crown Lands. I shall be glad to be furnished with a reference to the authority for the construction of this railway.

The Federal Government got really annoyed at this needling and dropped the whole bunfight in the lap of Norris G Bell, Commonwealth Railways Commissioner, who had also been the constructing Engineer-in-Chief for the Trans Australia project. He delegated the exercise to his best 'spin doctor' and the reply dated 16 May was worthy of any spin industry award! Bell's come back was to basically reject all points. The tramway and timber cutting area would not interfere with access to the railway. It was *practically valueless land* anyway! Besides building the Trans railway had increased the value of the land! Cutting down all the timber would not cause sand drifting. The trees being cut were only the larger ones and they are cut down near the ground where they will send up new growth from the stumps. He suggested that the reader have a look at the re-growth along the Trans line already! Indeed the whole tone of the reply was that this was a project of national importance and we will do what we like!

With specific reference to the tramway, we read *With regard to the so called light railway built at Ooldea, this is simply a rough portable tramway about 4 miles long, laid down temporarily to cheapen the cost of bringing firewood into Ooldea Station, and it was never contemplated that there would be the slightest difficulty or opposition by the South Australian Government to willingly grant* ("*part of*" crossed out) *the land required, seeing that it is of no use to the State at present, and that this request either for the land or for the right to cut timber on it, is such an absolutely reasonable and necessary one for the working of the railway*.

Bell closes with the suggestion that he and the Commonwealth Surveyor General should proceed to Adelaide and *interview* the SA Premier, reasoning that this would be the only way of settling the matter. Apparently this 'interview' did occur sometime just prior to 12 August 1919 with the suggestion that the SA Surveyor-General should visit the site, and an agreement *that subject to certain restrictions the Commonwealth would be granted the right to cut certain timber for firewood*.

The final leaf in my copies of the paper trail is a 20 May 1920 reply from SA Premier Henry Barwell, who had replaced Peake early that year, to The Right Honourable, The Prime Minister William Morris (Billy) Hughes. Barwell's Surveyor-General had reported that in his opinion, *the large timber reserve asked for is not now necessary and that the Commonwealth has immense quantities of timber suitable for firewood within the ¼ mile reserve along the railway*.

And so presumably, the whole issue concluded. However Norris Bell's assertion regarding the standard of the tramline cannot go unchallenged. His description of the line as a *rough portable tramway* and being *laid down temporarily* is total fabrication. Even 90-odd years later, the high standard of construction can still be quite easily seen. This was no bush tramway slapped together just for the job at hand. The formation of the sub roadbed, the meticulous spacing of the sleepers at 2ft intervals, the use of more than adequate dimension sleepers, seemingly brand new steel rail, appropriate sized point timbers, the prodigious use of quality dog spikes and the lengthy dead straight tangents all indicate a tramway built to a very high standard. Indeed, at the terminus is a tree stump which has had a flat edge adzed into it to form a surveyor's benchmark!

Daisy Bates

Ooldea was of course, also the home of the eccentric Daisy Bates. She made a camp just north of the siding in 1919 and tended, completely at her own expense, to the welfare of the local Aboriginal people for 16 years. There are many treatises available on Daisy and her life at Ooldea and further east at Wynbring which readers with an interest in her history are encouraged to seek out.

The only other detail about Daisy Bates which is relevant to this article, is that despite the pipeline bringing water from Ooldea Soak to the railway passing her camp by a mere 170 yards, no provision was allowed for her to tap into it to obtain water for her endeavours. She and her aboriginal friends were required to walk to the railway water tanks with 4 gallon kerosene tins to secure the precious life-giving liquid. The daily trudge was just over one mile return, over the sand hills and uphill from the station with the filled tins.

Sandalwood

That the construction and operation of the firewood line was a Commonwealth Railways responsibility seems fairly certain. It would also appear quite likely that once the Commonwealth had no real further use for the tramway for carting firewood it was then used by contractors for hauling sandalwood for railing to Port Augusta and export to China. Sandalwood also grows in the area where firewood was harvested, and was, and still is, a valuable export for South Australia. This would have had the result of creating revenue-earning traffic from Ooldea. Monte Luke captioned a photograph of the Cook condensers in his Commonwealth Railways history *Riders of the Steel Rails* as: *A light railway was built due south from Ooldea by timber cutters. Sandalwood was a by-product of their endeavours*.

The South Australian Division of the Australian Railway Historical Society's publication *The Recorder*, in its July 1983 issue, ran a letter from Bernie Morris seeking any details regarding the tramway. The follow-up August 1983 issue had a letter of reply and two photographs from Tom F Chambers. The by-line at the head of the reply described Tom as *a noted authority on the operations and history of the old Commonwealth Railways*.

Chambers stated that the light railway did exist at Ooldea and that it was operated by a *wood cutting private contractor.* He goes on to say that *permission was given by the C.R. for the line to enter the C.R. reserve at Ooldea, to facilitate loading onto C.R. trucks*. This tends to suggest to the author, that Chambers thought that the tramway was only ever used for sandalwood traffic and only operated by a private contractor. He makes absolutely no mention of firewood for the Trans Australian Railway condensers. Interestingly one of the two photos accompanying the reply is of a light rail V crossing, which Chambers states came from the line and *is mounted on a steel plate and has been retained at Port Augusta by the A.N. District Engineer.* All of this adds to the evidence that sandalwood traffic was carried by the tramway at some stage of its life.

What is there left to see?

At the time of a field trip in April 2010, the area of the transhipping sidings of both gauges is unrecognisable. A short distance along the tramline amongst scrub and red sand is a scattered stockpile of what were once 14lb rails. The few sections of rail lying around on the sand are scattered and badly eroded. This stockpile of rusting rails was run through by a bulldozer ripper in the 1980s, when the fibre optic cable was being laid from east to west. One can only guess at what went through the bulldozer driver's mind when he un-earthed that lot! Along the entire length of the line, many sleepers still remain in situ, but there is absolutely no rail left. Apparently, with the exception of the few lengths remaining near the start of the line, the rail was reclaimed by the Commonwealth Railways, but the dog spikes were of no use whatsoever. There are literally thousands of them along the length of the formation. The high standard of construction of the roadbed was clearly evident. Nowhere was there any evidence of coal, clinker or ash, but a few 4-gallon fuel tins were found scattered near the line.

Above left: *The woodline about one mile south of Ooldea siding where it levels off after a climb over a very low rise. Looking towards Ooldea, the telecommunications tower can be seen on the horizon.* ***Left:*** *The "Head of the Woodline" in 2010, in the direction of Ooldea. The two dead-end roads extend behind the photographer. The dark upright post on the right of the line in the distance, is a tree stump which has a blaze cut into it, for use as a surveyor's bench mark.* ***Above:*** *Points at the two road terminus of the line. The very last sleepers can be seen beyond the bigger tree on the left. Photos: Chris Wurr*

Another of Bolam's photographs, this one taken in 1919. Careful perusal of this scene is required. It shows two teams of camels drawing wagons. A siding is seen behind the teams and behind the rear of the first wagon is a Commonwealth Railways steel B open hopper wagon. Bolam's caption notes "Sand Loading", so it appears that the camel teams have brought sand in, to be transhipped into the B wagon. A stack of wood is seen behind the siding and it then becomes clear that the B hopper is standing on the standard gauge side of the transhipping area for fire/sandal wood from the 2ft gauge tramway. Incidentally, at least one of the B type four wheel hopper wagons passed from Commonwealth Railways ownership to BHP and was used as a ballast hopper on the standard gauge Port Lincoln to Coffin Bay Tramway. An extant example now lives at the railway museum at Port Lincoln station. Photo: State Library of South Australia B45287_21

Although this could tend to suggest that some form of internal combustion locomotive was used, it is much more likely that camels were the motive power. The lack of run around loops at either end of the line also tends to indicate camel power.

Remnants

It appears that the Commonwealth Railways lifted the rail when the line was of no further use, and re-used it for other purposes. For example, Bernie Morris relates that the framework of the track gang's motor trolley shed which once stood at O'Malley, some 39 miles further west from Ooldea, was constructed of light rail. Two lengths of light rail were also found by our team at the site of the prisoner of war camp between Watson and O'Malley. Bernie also reports that he came across a couple of lengths about 3 kilometres north of Cook some years ago. How they got there and what they were doing there is anybody's guess.

Another later discovery by the author, of more tramway rail, seems to indicate that the Commonwealth Railways made extensive re-use of the rails far and wide. To the east of Tarcoola is the rainwater harvesting area and the dams for the town water supply. As at April 2012 the area is still in use and surrounded by a sturdy Ringlock fence which is supported by tramway weight rails. One could reasonably draw the conclusion that the water supply was also a Commonwealth Railways initiative, and that therefore, the fence posts are also from the dismantled Ooldea firewood tramway.

Acknowledgements

I am greatly indebted to Bernie Morris of Kalgoorlie for the impetus to explore what he was sure was to be found at Ooldea and further out. Equally, I am also indebted to Murray Collins of Ceduna, for participating in our explorations, giving guidance and for providing the South Australian/Federal government paper trail.

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Left: *The crossing loop looking west. It is most likely that this was the original terminus of the line before woodcutting extended further eastwards.*
Right: *The dead end siding at about 3 miles, looking east. The substantial nature of construction can be judged from the depression in the roadbed where the point timber once laid. Photos: Chris Wurr*

Stars of Sandstone 2014

12TH - 21ST APRIL 2014




The Sandstone Heritage Trust has a long and distinguished record with respect to running international events in the Eastern Free State. Normally 1,000 visitors, most of whom come from around the world, join us for our week of non-stop Steam, Military, Agricultural, and Transportation Heritage activities. Every year is different; every year we inaugurate newly restored machines which when matched with different consists are a joy for photographers and onlookers alike.

Above all this is a select event. It is for people who have a love of this country's Heritage, who find old machinery fascinating, and who would like to take a step back in time in order to become more familiar with the way in which the industrial revolution developed and the way in which Agriculture, the Military, and the Railways used the various technologies available to them to the benefit of their communities over a period extending more than 100 years.

Such is the march of time that very often the item that you are looking at is over 100 years old but still in perfect working order. More importantly it is set against the magnificent backdrop of the Eastern Free State, which is a 200 million year old landscape in its own right.



For details of costs of attendance for the whole event or for a daily rate please contact Babita Hira at babitah@sandstone.co.za.

The shiny new locomotive in full cry, complete with steam effects. *Photo courtesy Dreamworld*

Dreamworld dieselises

by John Browning

The well-known Dreamworld theme park, situated at Coomera to the north of Queensland's Gold Coast, was the personal creation of John Longhurst, who developed it along Disneyland lines from 1974.

Believing that his theme park should have a steam railway, a 3km 2ft gauge railway line was planned. To provide motive power, Longhurst acquired Baldwin 4-6-0T 45215 of 1917, which Bruce Macdonald had rescued from Racecourse Mill in 1972. Longhurst sent it to an engineering workshop at Rydalmere in Sydney, from where it emerged in 1976 as a tender locomotive burning diesel oil, with the tender chassis originating from Isis Mill. The locomotive was beautifully presented in American 'Wild West' style to a reasonable level of tastefulness. It was fitted with a timber cab and was painted red, numbered 4, and carried the name *REG. COLTER* as well as *CANNONBALL EXPRESS*. Three large toastrack style coaches were made for the line, which had been built and equipped by 1977, although the park did not open until 15 December 1981. The track was a twisting circuit of about 1.5km involving a stiff climb at one point.

Following the start of operations, it didn't take long to realise that having a second steam locomotive would be desirable. In August 1982, the park purchased Perry 0-6-2T 5643.51.1 of 1951 from Paul Simpson of Panania in Sydney. Bruce Macdonald had acquired this for his Goulburn Museum collection in 1974 from Bingera Mill near Bundaberg, where it was named *PERRY*. Paul had owned it since 1977.

The Perry entered service at Dreamworld in December 1984, as 5 *G.R.CLAPTON & CO*. It remained a tank locomotive but received a new timber cab and a cowcatcher, together with liberal quantities of brass beading. It was immaculately finished in green paint with red domes and cowcatcher. It was fired with coal and wood but was soon converted to burn diesel oil.

A two-train service operated during busy times as another three bogie cars had been constructed freight wagon-style, lettered *DREAMWORLD FREIGHT LINES*. In the meantime, a Motor Rail 'Simplex' 4wDM (21543 of 1956) had been obtained from Kalamia Mill in 1983. It was later given new bodywork and for a time was used to haul the second passenger train when one of the steam locomotives was unavailable. Latterly, only one train has operated, using the original carriages. One steam locomotive was in constant use 364 days a year with the other normally withdrawn for maintenance. Train capacity when full is around 160.

The need to constantly update attractions, as well as changes in ownership, led to changes in the railway. Timber sleepers gave way to concrete. New stations were opened and some track deviations were made. Timber loco cabs made way to steel of similar design. A new covered bogie carriage (known to some as the 'pizza cart' because of its design and colours) was built to provide air braking and to accommodate wheelchairs and prams. There was talk of a line to link with the QR at Coomera. A cane diesel was obtained in 1998 for possible future use, and sold in 2003. The train was regarded as being a professional, reliable and immaculately-presented operation.

Even though the steam railway remained the most popular ride in the park, a number of pressures repeatedly put its continuing operation in question. These came from accountants striving to reduce costs as well as from park management looking on the railway as just another ride rather than a proper transportation system.

Fuel costs were one major issue. The locomotives were alleged to go through up to 400 litres of diesel fuel a day at a cost of well over $200,000 a year. Steam locomotives are expensive to run in terms of maintenance, with periodic mechanical overhauls and boiler inspections required. Drivers had to be appropriately qualified steam operators. Replacement parts

often had to be hand made in the machine shop. There was a need for extensive cleaning daily in order to present the locomotives in spotless condition. The locomotives deposited oil on the sleepers, creating a stormwater pollution issue in wet weather. It was said that continuous running was difficult to achieve because of the need for locomotive servicing. There was latterly a 30-minute schedule, with a one hour stop in the middle of the day, possibly as a fuel-saving measure.

The imagined alternative was a clean, simple-to-drive diesel locomotive that could operate all day at a fraction of the fuel consumption, driven by rostered ride operators with basic training, and with spare parts that could be supplied off the shelf. Rumours of changes began to circulate, and in early 2013 a report appeared in the British Magazine *Narrow Gauge World* that an Italian steam outline diesel had been ordered.

The prospect of steam haulage ceasing was confirmed when the decision was made that from May 2013, the railway was to operate only on weekends and in school holiday periods. In late August, the new arrival was seen on test by visitors, and steam operations ended on the Monday 7 October public holiday when the Baldwin handled the crowded trains for the last time.

From the following day, the new locomotive, *DREAMWORLD EXPRESS*, started operating services. It was built by CandS srl of Reggio Emilia in Italy, best known as dodgem car manufacturers. They built two similar locomotives in 2000 for Gardaland, a theme park in Italy, although these are on a wider gauge, probably 845mm. CandS have also refurbished four other park train locomotives – one now in India, one in Indonesia and two in Algeria. The serial number allocated to the Dreamworld locomotive is stated to be TR-6.

The locomotive has a 4-4-0 wheel arrangement and is fitted with a 72hp 4-cylinder John Deere diesel engine with a Saur Sundstrand hydraulic pump, a Volvo hydraulic motor and a final drive that fits snugly between the driving wheels. It weighs 9.8 tonnes and has locomotive air brakes with a vigilance 'dead man's' pedal. Entry to the cab is through a rear platform. The driver can also apply the train brakes at stations or in an emergency. Designed to operate at a maximum speed of 13km/h, the loco has air sanding and an air whistle. It can generate fake steam and can make steam locomotive sounds, although the latter feature was not in use initially. An electronic speed indicator display is fitted.

Appearance wise, the most obvious shortcoming of the locomotive is that it has no tender and therefore has somewhat of a 'toy train' look about it. This is accentuated by the toy like appearance of the fake cylinders and running gear, the red painted smokebox and the curiously shaped red chimney. Having said that, lowering and widening the running boards and widening the front buffer beam/cowcatcher would go a long way to improving the overall proportions of the locomotive, which has a boiler with a diameter significantly greater than those of the steam locomotives it is replacing. A surprising aspect is the design of the leading truck. It appears to follow the Gardaland locomotives in being a steel box on wheels that pivots on the bottom of a heavy vertical supporting strut by means of a spherical bearing. The truck appears to have no springing and therefore probably requires very high quality track standards, as any significant twist or dip in the track might well lead to a derailment.

Observed in operation on a very busy day in its second week in service, the locomotive was being very carefully driven by a recently-trained ride operator. The maximum allowable speed was said to be 8km/h although it appeared that the locomotive was capable of hauling the full train of four carriages at a faster speed. The official schedule had been accelerated to a 25 minute interval, but even a half hour service was proving impossible to maintain given the prevailing train speeds. It was reported that fuel consumption had been reduced by 90% compared to the steam locomotives.

What of the future of the steam locomotives? Dreamworld seem tight-lipped but have stated that they are reviewing options to relocate them to good homes.

Thanks to Bob Tan of Dreamworld and to Giancarlo Bellotti of CandS for their assistance in providing information to assist in the preparation of this article. It is hoped that those involved in the operation of the Dreamworld Railway will be able to produce a more complete history at some time in the future.

Pictured at Dreamworld's Central Park station two months prior to replacement by the new diesel outline loco, REG. COULTER *(Baldwin 4-6-0 45215 of 1917) sits waiting for the next departure.* *Photo: Mark Gough 10/8/13*

Industrial Railway NEWS

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Special thanks to contributors to the LRRSA, and Locoshed e-groups and the *Sugar Cane Trains/Navvy Pics* 2ft Facebook page.

NEW SOUTH WALES

GLENCOE AGRICULTURAL TRAMWAY, Southern Tablelands

(see LR 231 p.20)
610mm gauge

In May, the line's two locomotives, Tulloch 4wDM (003 of 1959) and the Days 0-4-0PM were operated together for the first time. They are the only operating examples of their type and gauge in the world and provide an interesting contrast in narrow gauge locomotive development in Australia. Although the Tulloch is described as a 40hp machine and the Days 10/20hp, the reality is that they develop similar horsepower and haul similar loads. However, the Days has a much higher centre of gravity and a longer wheelbase.
via Editor 6/13

QUEENSLAND

BUNDABERG SUGAR LTD, Bingera Mill

(see LR 233 p.22)
610mm gauge

During the 2013 season, EM Baldwin B-B DH *MOORLAND* (5565.1 10.74 of 1974) was rostered on day shift Monday to Friday in the area around the old Fairymead Mill. It was also used frequently by the crews of other locos on night shift when they needed to service the light lines around Fairymead.
Geoff Driver 9/13

DOWNER EDI RAIL PTY LTD, Maryborough

(see LR 230 p.20)
1067mm gauge

Mary Valley Heritage Railway have a contract for transfers on the line between the old Walkers factory and the QR at Maryborough West using their ex-QR English Electric Australia Co-Co DE 1632 (A.153 of 1967).
Bruce McLean via Bill Hanks 9/13; Royal Historical Society of Queensland Bulletin 10/13

Top: *The contrast between the Tulloch (L) and Days (R) locomotives is very apparent as they pose together on the bridge on the Glencoe Agricultural Tramway in southern NSW in May 2013.* ***Centre:*** *Bingera Mill's EM Baldwin B-B DH* MOORLAND *(5565.1 10.74 of 1974) hauls a rake of cane towards Fairymead on the Tantitha line, approaching the junction with the Gooburrum line, on 12 September 2013. Photo: Lincoln Driver* ***Above:*** *End of the line? A 'Stop' sign at McDonald Road at the top of South Johnstone's 8-Mile Range could denote the end of operations on one of the most famous sections of cane railway in Australia. 4 November 2013. Photo: Luke Horniblow*

MSF SUGAR LTD, Mulgrave Mill
(see LR 233 p.22)
610mm gauge
Refurbished Clyde 0-6-0DH 13 (64-316 of 1964) re-entered service in late October now named *HAMBLEDON*. It has been fitted with a Cummins C series engine an Allison automatic gearbox. The new engine is noticeably quieter than the Cummins L series fitted to some other locos. It also has sloping front cab windows and an extra window in the lower cab rear sheet.
Walkers B-B DH *GORDONVALE* (595 of 1968, rebuilt Bundaberg Foundry Engineers 1995) has had some engine problems and it is planned to fit a Scania V8 engine during the coming slack season.
Carl Millington 11/13; Tom Porritt 11/13

MSF SUGAR LTD, South Johnstone Mill
(see LR 232 p.21)
610mm gauge
Clyde 0-6-0DH 18 (56-83 of 1956) has been used as the yard shunter at the mill this year while Clyde 0-6-0DH 15 (66-491 of 1966) was being used for ballast haulage in September. Com-Eng 0-6-0DM 27 (AI5711 of 1975), which was previously the main navvy loco, and Clyde 0-6-0DH 13 (59-203 of 1959) had been put aside in the storage shed.
During September, Clyde 0-6-0DH 12 (55-60 of 1955) was being rebuilt, with a new engine and bonnet fitted and a new cab under construction.
The old section of track down the 8-mile Range to Japoon now appears to have been closed to rail traffic having been replaced by the new route through the Liverpool Creek area some years ago.
Shane Yore 9/13; Luke Horniblow 11/13

RIO TINTO ALCAN, Weipa
(see LR 216 p.19)
1435mm gauge
A visit on 30 July 2013 found Co-Co DE R1006 (Downer EDI Rail 08-1764 of 2009) hauling bauxite on the 19km line between the mine and the wharf.
John Phillips 10/13

Top: *Bingera Mill's EM Baldwin B-B DH* MIARA *(8988.1 6.80 of 1980) heads a loaded train from Wallaville back towards the mill over the Sheep Station Creek bridge on 12 September 2013. Photo: Lincoln Driver* ***Centre:*** *Mulgrave Mill's newly refurbished and named Clyde 0-6-0DH 13* HAMBLEDON *(64-316 of 1964) in the mill yard on 30 October 2013. Photo: Carl Millington* ***Above:*** *Rio Tinto Alcan's standard gauge Co-Co DE R1006 (Downer EDI Rail 08-1764 of 2009) heads back from the Weipa port area to the bauxite mine with empties on 30 July 2013. Photo: John Phillips*

Industrial Railway NEWS

THIESS PTY LTD,
The Narrows LNG Tunnel, Gladstone
(see LR 231 p.23)
762mm gauge
By early September, the tunnel had reached 2.3km in length and it was extended a further 500m during the following month. A rail switch has been installed in the tunnel allowing the loading of a second muck removal train immediately following the departure of the one before it. Work has been going on to prepare the reception shaft on Curtis Island where the 4.3km tunnel will terminate.
Gladstone Observer 6/9/13 & 8/10/13

TULLY SUGAR LTD
(see LR 23 p.23)
A new small spot tamper machine was noted on 23 September. It is painted orange and has a canvas canopy. It appears to be quite similar to some European types. It carries branding *R-H MACHINE* and reportedly was manufactured in China.
The new Walkers B-B DH conversion, *TULLY-3,* was in service by 21 September.
Luke Horniblow 9/13; Patrick Keef 10/13

WILMAR SUGAR (HERBERT) PTY LTD,
Herbert River Mills
(see LR 233 p.23)
610mm gauge
Victoria Mill's Clyde 0-6-0DH *CANBERRA* (65-433 of 1965) was sent to Macknade on about 10 September following the failure of Macknade's EM Baldwin 0-6-0DH 14 (6/2490.1 7.68 of 1968) with final drive problems. *CANBERRA* was first put on 14's duties hauling raw sugar but after a few days, because it requires a two-man crew it was moved to cane haulage duties, being replaced by EM Baldwin B-B DH 19 (7070.3 4.77 of 1977) which can operate in remote control and driver only modes. 14 returned to service on about 12 October so 19 went back onto cane with *CANBERRA* remaining at Macknade for the time being.
On 17 September, Macknade Mill's EM Baldwin B-B DH *DARWIN* (6171.1 9.75 of 1975) failed on the Victoria Mill side of the river and was taken to the Victoria Mill loco shed for attention, while Victoria Mill's Clyde 0-6-0DH *PERTH* (69-682 of 1969) was sent to Macknade to replace it. Both locos returned home on 19 September.
The Victoria Mill raw sugar loco, Walkers B-B DH *CLEM H McCOMISKIE* (605 of 1969 rebuilt Walkers 1991 and Solari 2004) broke down on about 10 October and its duties were taken over by EM Baldwin B-B DH *WALLAMAN* (6400.3 4.76 of 1976).
Late on 15 October, Victoria Mill's Walkers B-B DH *VICTORIA* (599 of 1968 rebuilt Tulk Goninan 1994) was derailed on the Stone River line with 30 full bins. It came to rest leaning at a 45 degree angle and had to be lifted by two cranes for removal

Top: *Tully Mill's new Chinese-supplied spot tamper, 23 September 2013. Photo: Luke Horniblow* ***Centre:*** *The newest addition to Tully Mill's fleet of rebuilt Walkers DH-class B-B DH locomotives,* TULLY-3, *shunts fulls at Daveson Road, El Arish, on 21 September 2013.* ***Above:*** *Interesting experimental 'corridor connection' between two Invicta Mill bins, designed to accommodate the needs of elevator tipper loading and increase per-bin tonnages, September 2013. Photo: Canegrowers Budekin Limited*

Top: *At Mackay Sugar's Calen depot by night. Security lighting allows this striking shot of Plasser Model KMX-12 tamping machine TTAMP 5 (376 of 1990) on 15 September 2013. Photo: Steven Jesser* ***Centre:*** *Helping out at the end of the season at Plane Creek Mill, Invicta Mill's EM Baldwin B-B DH* BURDEKIN *(10215.1 7.82 of 1982) between Karremal and Tedlands, south of Koumala, with 61 loaded bins on 2 November 2013. Photo: Scott Jesser* ***Above:*** *Is there a pot of gold nearby? Mulgrave Mill's Com-Eng 0-6-0DH 26* MERINGA *(AK3675 of 1964) at the mill yard on 4 September 2013. Photo: Scott Jesser*

to the mill for inspection. 150 metres of track were damaged and the line was closed for two days. The locomotive was back in service on 23 October.

Macknade Mill's EM Baldwin B-B DH 20 (7070.4.4.77 of 1977) was over at Victoria Mill for a few days from 19 October to cover for loco shortages there.

Victoria Mill's Hudswell Clarke 0-6-0 *HOMEBUSH* (1067 of 1914) gave passenger rides as usual at the Maraka Festival on 19 October.

Chris Hart 9/13, 10/13; Steven Allan 10/13; *Herbert River Express* 19/10/13 via Chris Hart

WILMAR SUGAR (INVICTA) PTY LTD, Invicta Mill, Giru

(see LR 233 p.24)

610mm gauge

In order to facilitate the delivery of cane at the siding from elevator-tippers and increase loadings, Invicta Mill has experimented with a flexible gusset connection between the ends of at least one par of cane bins, which are painted yellow and pink for recognition purposes. It is understood that Mackay Sugar carried out a similar experiment some years ago.

Canegrowers Burdekin Ltd 9/13; Mark Gough 9/13

WILMAR SUGAR PLANE CREEK PTY LTD, Plane Creek Mill, Sarina

(see LR 232 p.22)

610mm gauge

Walkers B-B DH 2 *KARLOO* (630 of 1969 rebuilt Bundaberg Foundry 1995) failed on 18 October and was expected to be out of service for two weeks. Not too long after, EM Baldwin D12 (6890.1 10.76 of 1976) suffered a season-ending converter failure. This resulted in the transfer of Invicta Mill's EM Baldwin *BURDEKIN* (10215.1 7.82 of 1982) to Plane Creek to see out the crush. It had arrived by 2 November.

Central Telegraph 24/10/13; Scott Jesser 10/13; Brian Millar 11/13

Industrial Railway NEWS

VICTORIA

INITIATING EXPLOSIVES SYSTEMS PTY LTD, Deer Park
(see LR 215 p.30)
762mm gauge
Orica has donated the locomotives and a quantity of rolling stock that had been out of use for some years to the Walhalla Goldfields Railway. Greenwood & Batley 4wBE locomotives, BL115 (420363.1 of 1974) and BL116 (420363.2 of 1974) and 25 four-wheel wagons were delivered to the WGR in May with a quantity of 20lb rail.
Tom Porritt 11/13

WESTERN AUSTRALIA

BHP BILLITON IRON ORE PTY LTD
(see LR 233 p.24)
1435mm gauge
Following the delivery of Progress Rail Co-Co DE Model SD70AC/Ici locomotives 4403 to 4414 on 3 May, numbers 4415 to 4420 arrived on 30 July and 4421 to 4431 on 23 August. These deliveries allowed the withdrawal on 1 September of the remaining GE Co-Co DE Model AC6000CW locomotives.
The following GMEMD Co-Co DE locomotives were scrapped in June and July:

No.	B/n.	Built
3081	786170-75	1979
3082	786263-31	1979
3083	786170-2	1979
3084	786263-35	1979
8335	786175-9	1979

The Goldsworthy line reopened on 1 September following several months of closure due to flood and derailment damage.
MotivePOWER 9-10/13

THE PILBARA INFRASTRUCTURE PTY LTD
(see LR 233 p.24)
1435mm gauge
On 12 September the Western Australian Economic Regulation Authority (ERA) reduced by 45% the proposed maximum cost that The Pilbara Infrastructure Pty Ltd (TPI) could impose for access to its rail network. The determination was for a minimum annual amount of $84.7m and a maximum of $316.9m.
Fortescue Metals Group, the parent company of TPI argued that it should not be forced to negotiate access with Brockman Resources because Brockman could not show it had the financial resources and the managerial capability for its proposed development, and claimed that the ERA had made errors in fixing the floor and ceiling access prices. On 7 October, it announced an appeal against the ERA decisions to the Western Australian Supreme Court.
GMEMD Co-Co DE Model SD90MAC-H locomotives 901 (976833-1 of 1999) and 904 (976833-28 of 1999 built by Super Steel Schenectady) have been rebuilt with 4300hp engines to make them Model SD90MAC.
West Australian 13/9/13, 7/10/13; *MotivePOWER* 9-10/13

PILBARA RAIL
(see LR 233 p.25)
1435mm gauge
New General Electric Co-Co DE locomotives 8187 to 8196 were delivered from the United States in mid-July and in service by the end of the month. They are builder's numbers 61846 to 61855.
The project to automatically control iron ore trains totalling 10,000 wagons on 1500km of track requires a $518m investment and is planned to be in place in 2015. On board systems will check speed signals and control braking, with the control centre based in Perth. An obstruction detection system will use laser scanning to monitor the track for any obstructions.
MotivePOWER 9-10/13; *Montreal Gazette* 2/10/13

ROY HILL INFRASTRUCTURE PTY LTD
(see LR 231 p.24)
1435mm gauge
NRW Holdings has been awarded a $620m contract from Samsung C&T to build the 330km formation for the main line between the Roy Hill iron ore mine and Port Hedland. Scheduled completion will be January 2015.
Construction of the railway will be done by John Holland under a $257m contract. Five trains per day are planned, with 3 locomotives and 232 wagons hauling a payload of 31,450 tonnes of ore per train.
International Railway Journal 17/9/13; *West Australian* 19/9/1

Top: *Bingera Mill's EM Baldwin B-B DH* MIARA *(8988.1 6.80 of 1980) enters Bungadoo crossing loop on its trip from Wallaville to the mill on 12 September 2013. Photo: Lincoln Driver* ***Above:*** *Mossman Mill's EM Baldwin B-B DH* DAINTREE *(7303.1 7.77 of 1977) shows off its new Mackay Sugar livery as it backs its rake into the mill yard on 6 August 2013. Photo: John Phillips*

OVERSEAS

FIJI SUGAR CORPORATION

(see LR 233 p.25)

610mm gauge

FSC locomotives have been fitted with GPS devices to enable their position and speed to be monitored.

Ex-Millaquin Mill Clyde 0-6-0DH *DAMO* (65-441 of 1965), refurbished in Innisfail by IBS Engineering, has been allocated to Labasa Mill and arrived there about 10 September. It was put on haulage duties on the main line to the east serving Wainikoro, Daku and Bucaisau.

Pressure has continued on FSC from native landowners to reopen the cane railway serving the Cuvu and Sigatoka area, as cane growing has declined substantially in the area since the connection was severed following floods in 2009.

The Fiji Government has announced that it will buy out the private shareholding in Fiji Sugar Corporation, which amounts to about 32%. It seems that it is intended to achieve this by converting the government loans to FSC into equity, leading to compulsory acquisition of the privately-held shares.

The impending end of the crushing season brought the usual complaints from farmers that a shortage of cane trucks was preventing them from harvesting all their cane.

Fiji Times Online 29/8/13, 16/9/13, 18/10/13, 2/11/13; Fiji Broadcasting Corporation 23/9/13; Patrick Keef 11/13

Book Reviews

CLIMAX – a locomotive resurrected

32 pages A4. Available from the LRRSA on line bookshop - $10.00 plus postage ($9.00 for LRRSA members)

Much has been written recently about the return to service of Climax locomotive 1694 on the Puffing Billy Railway – and rightly so. The locomotive has a special place in the history of the LRRSA and it has been our official logo since 1967.

The booklet has been published by the Puffing Billy Preservation Society to celebrate the second return to service of the locomotive. Originally written by Hugh Markwick, the booklet has been revised by Peter Charrett from the PBPS and consists of a collection of articles from its "Narrow Gauge" magazine together with much extra information. Many fascinating photographs including some previously unpublished and a detailed map of the Tyers Valley Tramway also feature.

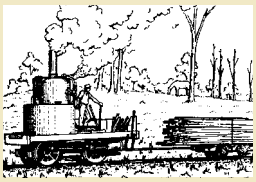
The Climax locomotive was used on the Forests Commission of Victoria 2ft 6in gauge Tyers Valley Tramway from 1928 until 1949. When the line first started, motive power was provided by two TACL tractors, and with the increase in loadings the FCV sought a more powerful locomotive. The initial solution was a special locally manufactured "Harman" locomotive that commenced operations in 1927. After only a short amount of use, it was quickly realized that it was totally unsuitable for the task. The FCV then sought a proven locomotive design from the USA and thus the Climax locomotive was purchased.

Climax locomotive 1694 was shipped to Australia in boxes and assembled at the Victorian Railways Workshops in Newport. The locomotive entered service at Collins Siding on the Tyers Valley Tramway in September 1928. Right from the start, the locomotive experienced problems with its axles and crankshaft and the locomotive would often be stranded out in the bush in a disabled condition. The unusual design of its crank mechanism no doubt contributed to the issue. Also, virtually all of the narrow gauge locomotives manufactured by the Climax Company were for 3ft and 3ft 6in gauge operations and the FCV version was adapted, perhaps unknowingly creating the axle and crankshaft problems. The locomotive continued at Tyers Valley until 1949 when operations ceased. The locomotive was stored at Collins Siding until 1965 when it was transferred to the Menzies Creek Museum under the ownership of the PBPS.

The locomotive remained on display at the Museum until 1982 when a small band of dedicated volunteers restored it to operating condition and it entered service on the Puffing Billy Railway in October 1988. It is interesting to note that the drivers at that time noted that whilst it was very slow (approximately 6 miles per hour) it was quite powerful and could pull 12 carriages. It remained in service until April 2001 when it was withdrawn as it required an "extensive overhaul".

After being stored and not in use for another 3 years, restoration again commenced in November 2004. The first major task was to completely restore the boiler and this was undertaken free of charge in the USA. As part of the second restoration a thorough investigation into the issue of the axle and crankshaft design was undertaken. This included a detailed design investigation utilizing state of the art "Finite Element Analysis" and the results are published in the booklet showing a fascinating diagram of the stress distribution on the axles and wheels. In hindsight it is easy to observe why it had so many problems with axle breakages.

The 32 page A4 booklet is well presented with many excellent photographs and an easy to read commentary of the life of Climax locomotive 1694. Highly recommended. *Richard Warwick*



LRRSA NEWS

MEETINGS

ADELAIDE: "Christmas Film Show."

Trevor Triplow is providing the program at his residence. Space is limited; contact Les Howard on 08 8278 3082 before 1 December if you are coming. News of light rail matters will be welcome from any member.

Location: Unit 50, The Reserve, 100 Sir James Hardy Way, Woodcroft.

Date: Thursday 5 December at 7.30pm

BRISBANE: "Christmas Supper and Members' Photo Competition."

General Reports followed by supper (bring a plate of goodies for Christmas). Members' Photo Competition – limit of 3 photos, slides, etc per person – to finish the night.

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 20 December at 7:30pm

MELBOURNE: "Wandong and Mount Disappointment"

Colin Harvey will be giving a presentation on the sawmills and tramways in the Mount Disappointment area, to the east of Wandong. This will include discoveries made in the post-2009 bushfire surveys. Some adventures in the eventful life of Baldwin 0-4-0ST locomotive No.7556 will also be included.

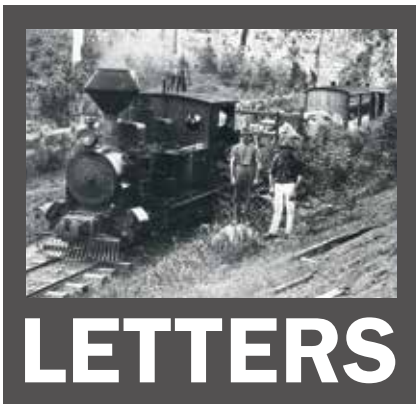
Location: Ashburton Uniting Church Hall, Ashburn Grove, Ashburton.

Date: Thursday 12 December at 8:00pm

SYDNEY:

The NSW Division's next meeting will take place in February 2014.

See the February issue of *Light Railways* for details, or contact Jeff Moonie, on (02) 4753 6302.



LETTERS

editor@lrrsa.org.au

Dear Sir,

Powelltown Tramway centenary publication

Thought to myself – "That´s a thick package – Must be two issues in one!" But no – what a pleasant surprise, an LRRSA `extra´ and one of some particular interest to me. Having a Forestry foreman father – well he was until a work mate was killed by a falling tree in the post-`Black Friday´ recovery work. He thought it might be time to `join up´, it being in the early days of WW2, but was knocked back for army service and went instead to essential services work at the wool stores, of all places!

However the Powelltown tram was part of the family folk lore of those early days, though long gone by the time I got my own `wheels´, I nevertheless, had an Atlantic road map which showed the line and later was given some photos and then too, I had some friends who´d moved to Yarra Junction and living along the Noojee Road, showed me the old formation at the bottom of their garden.

I remember, back in the early 70s, reading the by-then improved but still `Gestetner´ printed LR editions and thinking that surely, the day would soon come when there´d be little left to write about our small railways and what then?

The continuing line-up of articles is as impressive as it is magnificent – Carry on!

Dave Moyle
via email

Dear Sir

Aveling & Porter Locomotives (LR 146, 147, 148, 149, 150, 204)

The 3ft gauge Aveling & Porter locomotive at George Raff's Morayfield Sugar Mill has tentatively been identified as 211 of July 1866. This was one of the earliest design of traction engine locomotives from this manufacturer, with chain drive to both axles taken off a countershaft on which the flywheel was also mounted, as per the illustration in LR 147. However, unlike most such machines, Raff's locomotives had the chain drive sprocket wheels fitted on the axles outside the driving wheels because of its narrow gauge. The locomotive was noted in the Aveling & Porter records as supplied to the order of A. Redfern & Co.[1] Trove Newspapers now allows us to correctly identify this London agent as Redfern, Alexander & Co. who sent an Aveling & Porter traction engine to Tasmania in 1865.[2] A link between Redfern, Alexander & Co and George Raff is indicated by a press report of 1868 showing that the London agent had forwarded a sample of Morayfield rum for appraisal to an English rum trader – with a very positive response.[3] Thanks to Derek Rayner in England for assisting with source material.

1. Hutchinson, Ian K, 1981. Traction Engine Locomotives. Road Locomotive Society (UK)
2. *The Cornwall Chronicle*, 11 January 1865 p.4. http://nla.gov.au/nla.news-article66460050
3. *Warwick Examiner and Times*, 22 August 1868 p.3 http://nla.gov.au/nla.news-article8209688

Mt Bischoff (LR 126, 130 & 204)

Recent correspondence from Mark Fry in Tasmania confirms that the internal-combustion locomotive that was used during World War II on the 3ft gauge line at Mt Bischoff, operated by the Minerals Production Division of the Commonwealth Department of Supply and Shipping, was built by Russell Allport & Co Pty Ltd of Hobart in 1943, as previously suggested by Colin Harvey. A Russell Allport diagram confirms that it was a petrol locomotive and was allocated job number 3753. A reversing gearbox powered a chain drive onto the rear axle, which in turn was also connected to the front axle by a chain drive.

John Hood Pty Ltd of Hobart offered an '8-10 ton diesel locomotive' for sale in June 1945, along with what appears to be the Mt Bischoff Baldwin-Westinghouse electric locomotive, suggesting that the Russell Allport might have received a replacement engine.[1] However, when the locomotive was offered for auction at Mt Bischoff by the Commonwealth Disposals Commission in October 1948, it was described as having an International engine, suggesting that it had retained its original petrol engine and that Hood was mistaken.[2]

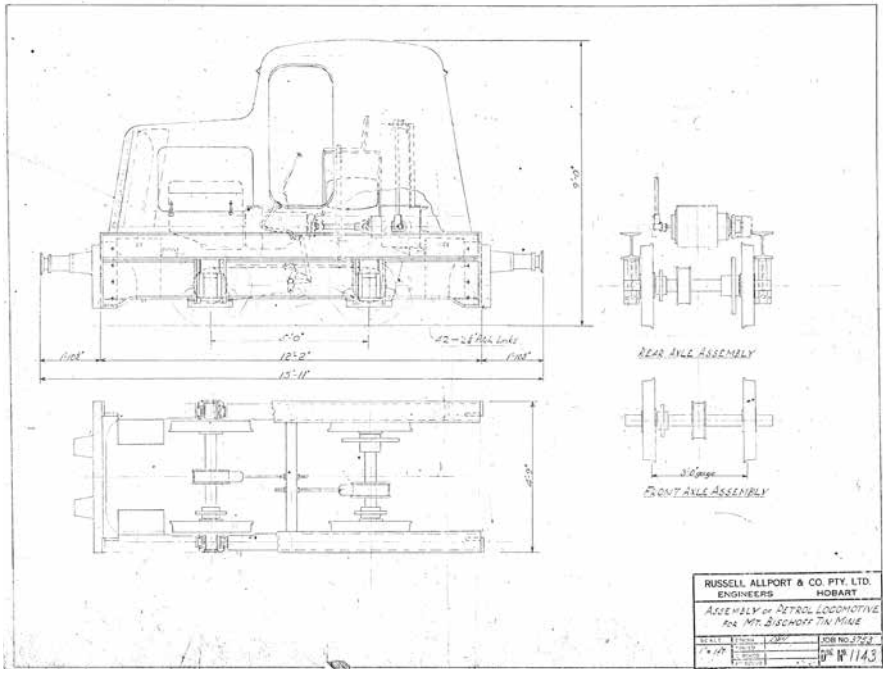
Russell Allport was a most interesting locomotive builder, producing a wide variety of steam and internal-combustion locomotives for use in Tasmania for a period of over 40 years. Little seems to have appeared in the pages of LR so far about these products so hopefully in the future this omission will be remedied.

1. *The Argus*, 20 June 1945 p.11. http://nla.gov.au/nla.news-article979464
2. *Hobart Mercury* 17 September 1948 p.7 http://nla.gov.au/nla.news-article27756610

The Narani–Forster–Ulverstone locomotive conundrum (LR 57, 142, 144, 147, 153, 155, 156)

Questions have been raised for many years about the identity of one of the 3ft 6in gauge locomotives used by Richard Hungerford on his Forster breakwater contract from 1898. It now seems well established that the second locomotive concerned, Andrew Barclay 211 of 1879, came to Myall Lake new for use by Hudson Brothers on their Narani timber operations and was later purchased by Hungerford before being used on his contracts at Forster in NSW and Ulverstone in Tasmania. The question of the first locomotive was raised in detail in LR 153 by Ron Madden and examined further by Jim Longworth in LR 155. It went to Ulverstone in Tasmania in 1903 for use on the harbour works there, and afterwards remained there at least up until 1914, when its last boiler inspection took place. After that, it seems to have disappeared from the record.

The only known photo of the locomotive, taken at Forster, was published in LR 153. This showed that it had probably been much altered during its existence, leading Ron to suspect that it had once had a saddle tank. No obvious identification among any of the British locomotive builders proved to be possible. Whatever the origins of the scanty weather protection mounted above the boiler backhead, it seems that a cab canopy had been added to the locomotive at some stage of which little remained.



Russell Allport assembly drawing of petrol locomotive for Mt Bischoff tin mine. Mark Fry Collection

A tarpaulin could possibly have been rigged up on its remnant framework during inclement weather.

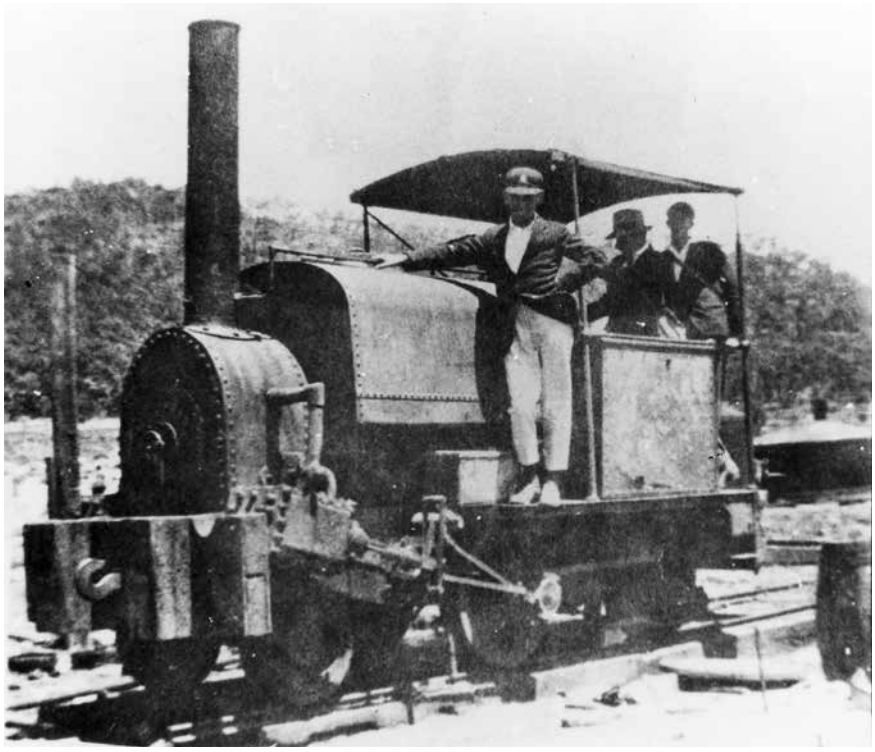
The obvious possibility to consider was that the mystery locomotive was the first one at Narani and that it followed the same path as the Barclay. Mark Langdon indicates that the first locomotive used by Hudson Brothers was built by the Mort's Dock & Engineering Co Ltd in 1878. This was their builder's number 31, and the first one they made for industrial use, with previous locomotive production consisting of the assembly of main-line locomotives from kits of parts supplied from Britain.

The handful of subsequent industrial locomotives from Mort's Dock all seem to have been of conventional horizontal boiler type. However, the possibility of the mystery locomotive at Forster being the Mort's Dock loco from Narani was discounted by Ron and Jim because local oral history sources indicated that the Narani loco had a vertical boiler. Based on its appearance, the idea of the locomotive at Forster having been converted from a vertical boiler type seemed very unlikely.

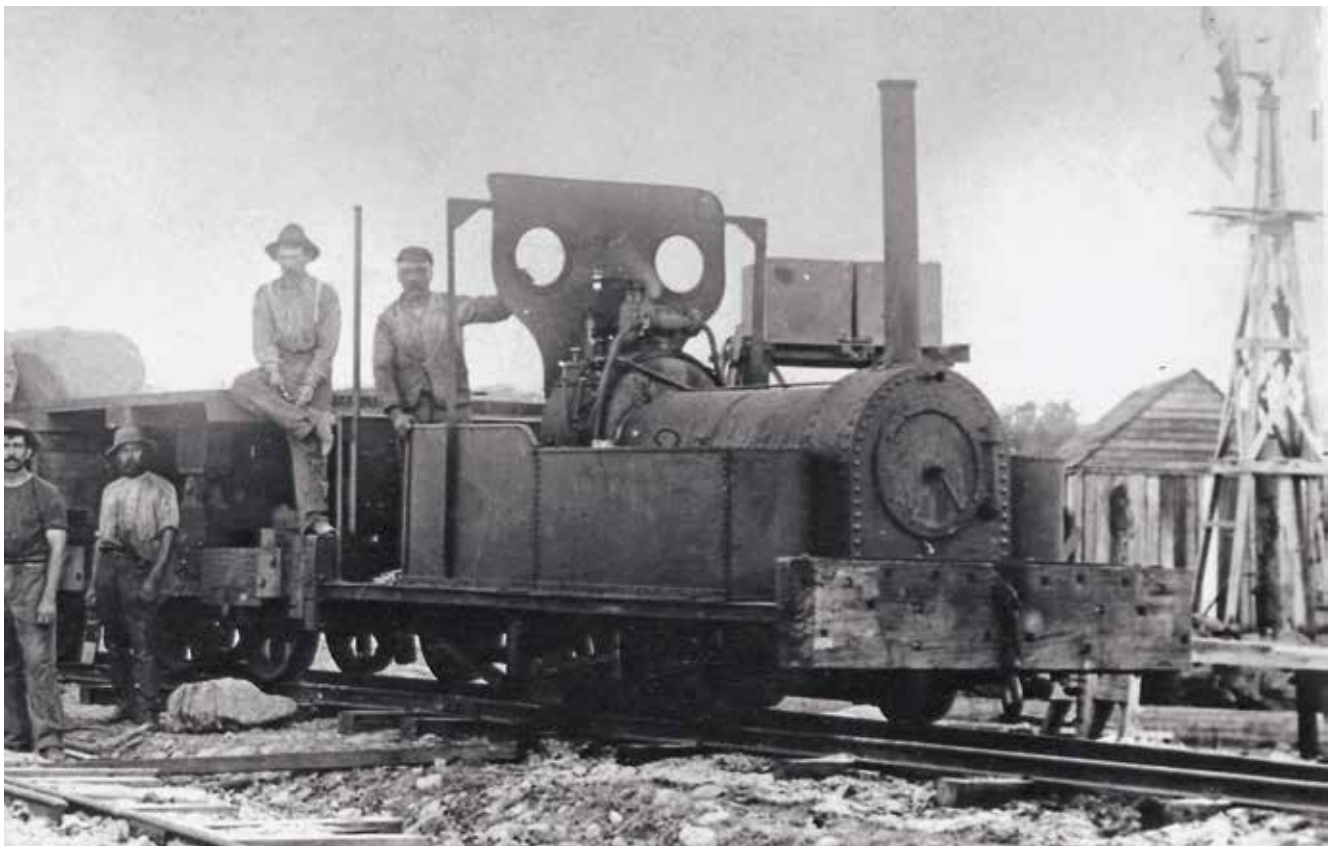
The second industrial locomotive from Mort's Dock was a metre gauge 2-4-0ST, constructed in 1879 for the NSW Shale & Oil Co, Hartley Vale. A photograph appeared in *The Shale Railways of NSW* (on p.23 of the 2000 edition) and is reproduced here. Comparison between this photo and the one of the mystery locomotive at Forster reveals some important similarities in the smokeboxes, showing that it is likely they came from the same builder. They share very similar lines of distinctive rivetting along their edges, as well as having smokebox doors with a raised ring around the circumference and somewhat similar tall stovepipe chimneys. At the very least, this suggests that the Forster locomotive carried a Mort's Dock boiler.

Given the other circumstantial evidence, it seems highly likely that the mystery Forster locomotive is the Mort's Dock locomotive from Narani, built with a conventional horizontal boiler and with its original saddle tank removed and replaced by side tanks. While these findings fall short of certain proof, perhaps the much anticipated study of Mort's Dock & Engineering by Mark Langdon will assist in further clarification.

John Browning
Annerley, Qld.



The Mort's Dock 2-4-0ST (31 of 1879) at Hartley Vale.
Photo: Giff Eardley Collection, ARHSnsw Railway Resource Centre 017675



The 'mystery' locomotive at Forster. *Photo: Bruce Macdonald collection*

Field Reports

Please send any contributions, large or small, to fieldreports@lrrsa.org.au or to P.O. Box 21, Surrey Hills, Vic 3127.

Glenrock Colliery Railway, Glenrock, NSW

1435mm gauge

(see map LR 210 p.5)

In early September our Scout Group had its family camp on the sunny shores of Glenrock Lagoon (at the Glenrock Scout Camp). There does not appear to be vast quantities of information on the internet about the railway which formerly passed through the site, and you have to have a trained eye to pick out the formation. Newcastle and Hunter Region Scouts have mounted a wheelset from a wagon on a plinth with a plaque as a memorial to the coal mining heritage of the location. Other than that, there is very little to show of the mining past, except for a poppet-head gin-wheel mounted on the wall of one of the training-centre halls, and a few historic photos. I photographed the embankments on either side of the lagoon where a wooden bridge crossed the lagoon and, remarkably, there are still some remnants of the timber piles and abutments. The bridge crossed the lagoon at a narrow part and at an oblique angle, before swinging around and following the beach north to Merewether.

At least until a few years ago, there was lots of evidence of the formation from this point on, which was traceable for much of its length (at somewhat above beach level), and the other industrial area some distance north of the lagoon is also viewable. Unfortunately the tunnels are sealed. Of course there is virtually no trace once suburbia is reached at Merewether. There is also quite a deal to be seen around the Glenrock site including the remains of Burwood Colliery, and even the footings and ash pit of the loco shed.

Kevin Sewell, September 2013, with additions by Eddie Oliver and John Shoebridge

The inland and coastal bridge abutments where the Glenrock Colliery Railway crossed Glenrock Lagoon between the Glenrock and Burwood Collieries. Photos: Kevin Sewell

Mount Ainslie Quarry, Canberra, ACT

610mm gauge?

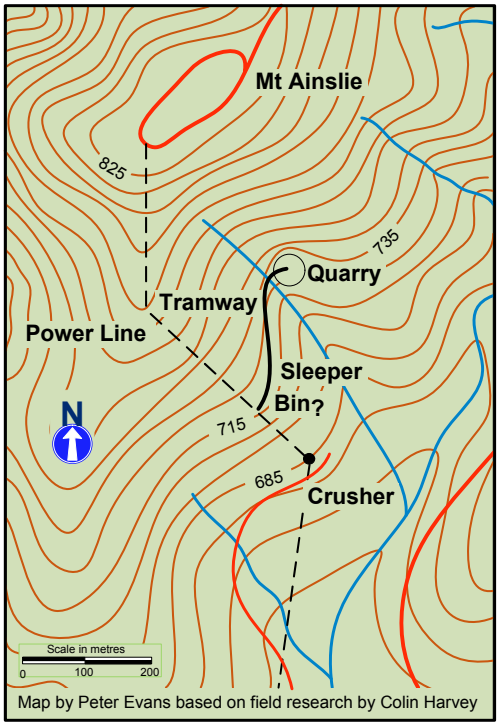
One hundred years ago this year the foundation stone of the national capital, Canberra, was laid. Most construction work for the new city was delayed until after the First World War. By the 1920s there was a substantial demand for crushed rock for concrete and road metal to meet for which a quarry was established on Mount Mugga Mugga, about 8 km south of the city. The quarry contained a network of 2ft gauge tramways feeding a four-rail balanced incline to a crushing plant near to Mugga Lane. From here crushed rock was conveyed to where needed by road.

In 1930 the Mugga Quarry was closed due to the nature of the rock, quartz porphyry, causing concerns about the health of workers (silica dust exposure could only be eliminated by expensive filtration) and the deleterious effects of its hardness on the crusher jaws. A search for an alternative source of rock was undertaken and suitable stone was located at Mount Ainslie, just 3 km from the city. The rock at Mount Ainslie contained iron pyrites and was suitable for road making but not concrete. The workers' health was expected to not be as affected other than that "*slight irritation of the mucous membranes of the nose and throat may occur from the sulphur content but this probably acts in a beneficial manner in causing the inhaled dust to be coughed up.*" An additional benefit was the much reduced cost of cartage to the city.

In January 1932 approval was given by the Minister of Home Affairs to proceed with a new quarry on Mount Ainslie. As stockpiles at Mugga were almost exhausted, the new quarry was required to commence operations before October 1932 to meet the requirements of the next construction season. The existing plant at Mugga was dismantled, reconditioned and re-erected at Mount Ainslie.

From the new quarry, a tramway was used to transport rock around the hillside for about 200m, on a slightly descending grade, to above the crusher. Instead of an incline tramway it appears that chutes and conveyors were used for the last stage of the journey. The quarry operated in this location until 1939 when cheap metal in large quantities became available from Blue Metal Quarries (Sydney).

From 1926 until 1935, W J Mildenhall was official photographer at Canberra. His photographs are now held by the National Archives of Australia and are available on these websites: http://mildenhall.moadoph.gov.au and http://photos.naa.gov.au A number of images in the collection show the Mugga and Mount Ainslie quarries in operation; however some of the currently assigned captions are incorrect.



Map by Peter Evans based on field research by Colin Harvey

A visit to the Mount Ainslie quarry, within the Canberra Nature Park, in September 2013 revealed the tramway formation to be easily followed from the quarry to a point on the hillside above the concrete foundations of the crusher. Evidence for the arrangements for feeding rock between the tramway and crusher has been obscured by later construction of a power line. At the quarry one length of about 10kg/m rail was located (MGA 696513E 6094667N) and at least one sleeper remains in situ along the tramway route (MGA 696476E 6094561N).

Colin Harvey

Sources:

- Department of Home Affairs, Mt Ainslie Quarry file (NAA: A1, 1931/8449)
- *The Canberra Times*, 1 February 1930
- *The Canberra Times*, 21 November 1939

Sun Ray Salt, Lake Gerahmin/Lake Daytrap, Swan Hill, Victoria

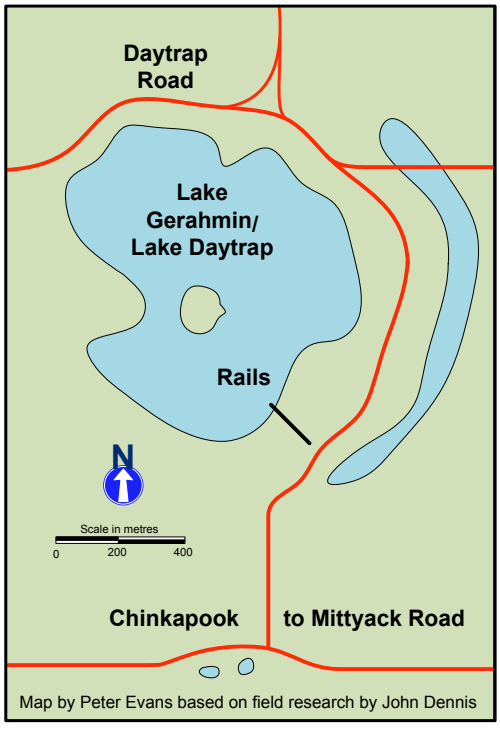
610mm gauge?

On 15 May 2013 I visited Lake Gerahmin (aka Lake Daytrap) where, following reports of tramway remains, I made an inspection. There are about eighty metres of rail which appear to have been pulled off the sleepers, and moved five or ten metres to the side.

There is about 100 metres of formation, clearly defined, with some sleepers (or remains of) visible. The rail looked to be quite heavy, as were the sleepers, which suggests that it might date from closer to the end of operations in 1970 than earlier. From my photographs the heavily corroded rail is about 115mm high, 105mm across the base, and 65mm across the head. These dimensions suggest something like 60lb rail – possibly sourced from the VR.

John Dennis

Clockwise from bottom left: *A section of rail from the Mt Ainslie Quarry tramway. • Looking north along the tramway formation towards the quarry. • At the foot of this photograph (and almost obscured by the tussock) is a remnant sleeper on the tramway formation. Photos: Colin Harvey • Abandoned rails across the flats at Lake Gerahmin/Lake Daytrap. Photo: John Dennis*



Map by Peter Evans based on field research by John Dennis

RESEARCH

Please send contributions to research@lrrsa.org.au or to P.O. Box 21, Williamstown, Vic 3016.

Future Digital Developments

In recent Light Railways, we have reviewed some of the newer digital resources available to researchers, including online mapping resources (LR231), using satellite and aerial imagery and GPS (LR232) and the Field Reports article on the Powelltown tramway (LR233). This issue, I look at the future to try and predict what tools *Light Railways* researchers may have at their disposal in the coming years.

Lidar (Light Radar), uses rapid pulses of laser to measure the height of terrain below the Lidar unit. As the multiple laser pulses bounce off both foliage, structures and the ground, later processing of the data enables foliage to be penetrated and actual ground levels (or tree heights) determined with a great deal of accuracy. This makes Lidar an ideal tool for archaeological surveys looking for ground disturbances, such as tramways. Its ability to penetrate forest canopy has led to the discovery of features that were not distinguishable through traditional geo-spatial methods and are difficult to reach through field surveys[1].

This year, an expedition in Cambodia has discovered the lost city of Mahendraparvata[2], a much older city than its more famous cousin, Angkor Wat. Another recent discovery was in Honduras, where the legendary city of Ciudad Blanca may have been found[3]. While the capture and analysis of Lidar images is still expensive, it is becoming more widely used as the resulting data can have multiple applications.

Now, Governments[4] and research centres are starting to make Lidar data publically available (open access). As the Lidar data in its raw format requires specialist software to create viewable images, it is not possible for the average user to view open access data. One source of open access data has created a series of Lidar images that can be loaded into *Google Earth* and viewed[5].

The accompanying Lidar images are from a recent series captured by VicForests for use in forest management. The top images are overlaid with the route of the former Forest Commission of Victoria Thomson Valley Tramway at 'Little Boys', a construction and maintenance camp. While the satellite images show glimpses of the former line, mainly due to modern roads built along some of the tramway route, the Lidar image clearly reveals the full extent of not only the tramway, but also the benching at the site of the camp, plus an array of bulldozer tracks hidden in the scrub. Armed with this knowledge, ground proving can confirm which tracks are tramways, while being aware of other tracks which often lead researchers astray.

Given that *Google Earth* has only been in existence since 2005 and has seen massive growth in that time, it seems highly probable that another decade will see significant Lidar coverage in this format. For examples of Lidar images in *Google Earth*, see http://tinyurl.com/LRRSA-Lidar234.

1. http://www.lidar-uk.com/usage-of-lidar/ Retrieved 02 Nov 2013
2. http://www.smh.com.au/national/jungle-surrenders-its-lost-city-20130614-2oa9b.html Retrieved 21 Oct 2013.
3. http://www.livescience.com/32017-lost-city-honduras-images.html Retrieved 21 Oct 2013
4. http://lidar.cr.usgs.gov/. Retrieved 28 Oct 2013
5. http://opentopo.sdsc.edu/gridsphere/gridsphere?cid=geonlidar&format=ge. Website of the The OpenTopography Facility, based at the San Diego Supercomputer Center at the University of California, San Diego. Retrieved 28 Oct 2013

Stuart Thyer

Tulloch History

Dave Jehan is trying to complete his book on the history of Tulloch and is seeking colour photos of some rolling stock. While not all are within the scope of *Light Railways*, our readers often have a broad range of interests. He is seeking:

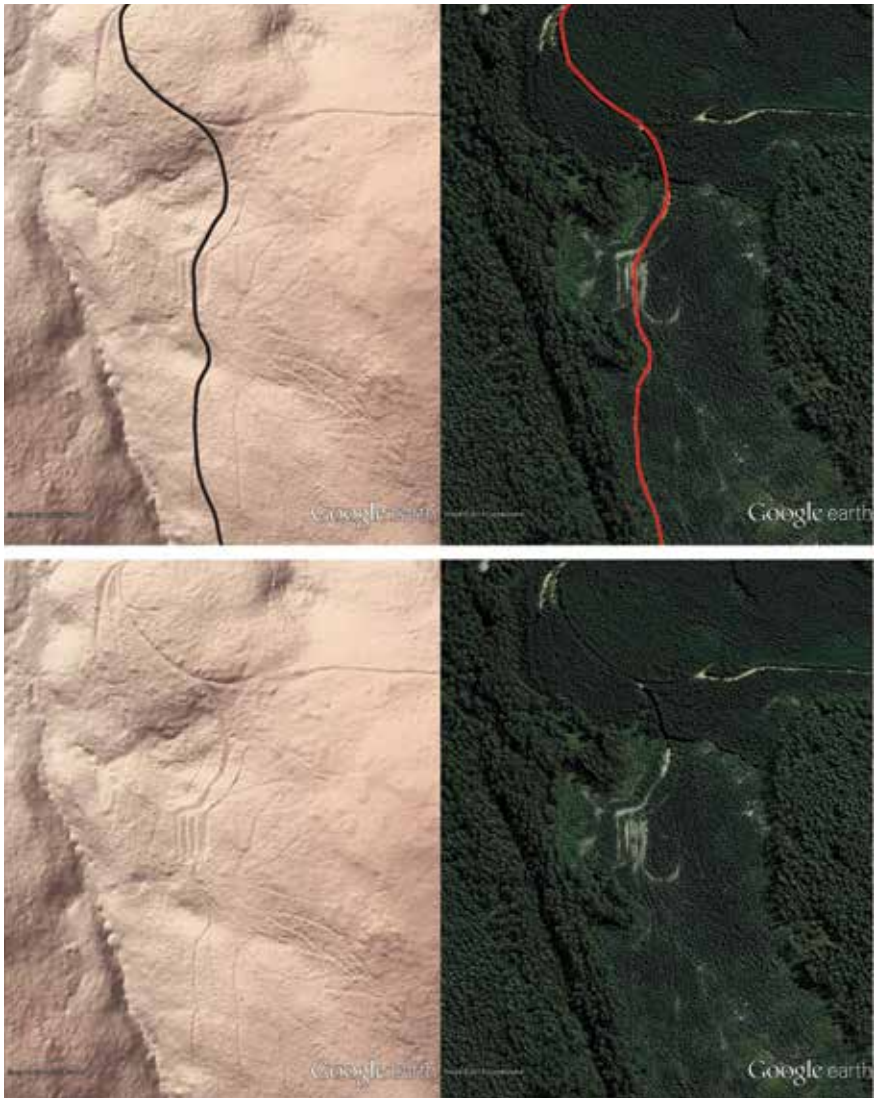
- South Maitland Railway railcars
- Coal Cliff Colliery No. 5
- Victorian Railways W class locomotives
- Tasmanian Government Railways W class locomotives
- Victorian Railways 'DRC' railcars

Any reader with images that they would be willing to have published, please contact him on email – davidjehan69@yahoo.com.au. He is looking to have the project completed before the end of the year, so prompt replies would be appreciated.

Dave Jehan

South East Queensland Tramways

Queensland based researcher Peter Cokley has taken a different approach to publishing findings on his chosen area of research. His ongoing research is posted both to the LRRSA yahoo groups page (see LR231 Research) and to the Railway Archaeology section of



Lidar images (left) and satellite views (right) of 'Little Boys' camp, Thomson Valley, Vic.
Photo: Courtesy Google, Digital Globe and Forest Commission Victoria.

Railpage Australia under the title 'South Coast QLD Historical Tramways sugar timber road construction etc'. http://www.railpage.com.au/f-f29.htm

His research takes in the Nerang Central sugar mill, Carrara and Rushton Nerang River sugar cane punts and associated tramways, Neranwood timber line, road building tramway between Southport and Burleigh Heads and the former Pleasure Island amusement park tramway at Carrara. Peter is also researching the QR steam era South Coast Line to Southport and Tweed Heads.

Peter is taking the approach of publishing his progress reports on internet forums so discussion further enriches the topic. He notes that it has the added advantage of flushing out extra information as other researchers and local historians pass on bits of information. Rather than risk not completing an article, he has chosen to publish and constantly update.

The following short article on Pleasure Island amusement park is one example of new media assisting in research, some of his material was discovered on *Facebook*.

Stuart Thyer

Pleasure Island Amusement Park, Qld

Pleasure Island amusement park, a small scale version of Disneyland, operated at Carrara on Queensland's Gold Coast from 1959 till closure in 1962. It included a 48 passenger capacity tram on a half mile long 2ft (610mm) gauge tramway on tracks purchased from Queensland Railways [QR].[1,2]

The tram carried the title *Funlander* on the locomotive's nose and *Pleasure Island Railway,* in black lettering, on the carriages' sides. The tram title was reminiscent of QR's long distance air-conditioned trains such as *The Sunlander.* The locomotive is described as a ¾ ton diesel costing £2000, so it is assumed it and the carriages were built for the venture. Its appearance resembled a QR 1200 class diesel electric locomotive as used on some of these QR trains. The fully enclosed orange carriages, mounted on 4 wheel fixed wheelbase frames, had cream window surrounds and a mid-car height broad cream horizontal stripe.[3]

A static exhibit at Pleasure Island was Fowler 0-4-0WT (16249 of 1925), originally from Rocky Point Sugar Mill, Woongoolba, Qld. After Pleasure Island closed, the Fowler was displayed at George Gilltrap's Auto Museum, Kirra. It later became a static exhibit at Dreamworld theme park, Coomera, before eventually returning to Rocky Point sugar mill where it was restored as a static exhibit.[4,5]

Another Pleasure Island exhibit was the 'Nautilus' submarine, purchased from director Stanley Kramer after he'd finished making the movie *On the Beach*. Other exhibits included a vintage fire engine, a stage coach painted in Wells Fargo livery, paddle boats and miniature jeeps. McRobbie wrote that he had the stage coach built by a Toowoomba firm of coachbuilders from "various old and new parts" for $1500. He sold it to Gilltrap's Auto Museum for $400 who repainted it as Cobb and Co. It was later noted at various Gold Coast parades billed as an authentic Cobb and Co Coach and claimed to be priceless.[6]

Pleasure Island was opened 12 December 1959 by Alexander McRobbie, Ellis Hinds and Geoff Styant Browne. They bought 10 acres of land at Carrara on the eastern side of Keith Williams' Surfers Paradise Water Ski Gardens, on the southern bank of the Nerang River. The Water Ski Gardens eventually reappeared as the now famous Seaworld theme park. Pleasure Island only lasted until 1962 when it closed due to financial difficulties.

Ned Kelly bushranger style re-enactment with Fowler 0-4-0WT (16249 of 1925) at Pleasure Island amusement park, Carrara, Queensland, circa 1960. Photo: Alexander McRobbie. Image reproduction courtesy of the Gold Coast City Council Local Studies Library, image number LS-LSP-CD440-IMG0009

The Pleasure Island tram, seen here partially hidden behind the firetruck, was a very smartly presented unit. Peter would like to hear from anyone with more of the history or subsequent disposal of the locomotive and carriages. *Photo: Trevor Cross*

1. McRobbie, Alexander. *The real Surfers Paradise: from seaside village to international resort,* Pan News, Surfers Paradise QLD, 1988. Pages 251ff.
2. The *South Coast Bulletin*, 9 Dec 1959
3. Cross, Trevor, "Pleasure Island Train, Carrara", image posted to Facebook, page titled 'Have you seen the old Gold Coast'. Accessed 31 Oct 2013 https://www.facebook.com/photo.php?fbid=618214908221448&set=a.618214868221452.1073741934.280745045301771&type=1&theater
4. Browning, John. *Preserved Australian Sugar Cane Locomotives*, http://www.lrrsa.org.au/LRR_SGRc.htm Light Railway Research Society of Australia Inc.
5. Webber, Brian. *Exploring Queensland's Railways – South from Brisbane*, ARHS [Q] 2007, Page 111
6. McRobbie, Alexander. *The real Surfers Paradise: from seaside village to international resort,* Pan News, Surfers Paradise QLD, 1988. Pages 251ff.

Peter Cokley

Cooloola Tramway, Qld

Further to the possible heritage listing of the Cooloola tramway (see LR230 Research), readers may be interested in an allied site at the State Library of Queensland http://tinyurl.com/LRRSA-Cooloola234.[1] The site details a number of research sources and includes a photo of *Mary Ann* (Walkers 1/1873), which would have made a fitting addition to John Kerr's *Tall Timber and Tramways Queensland* (LRRSA, 2009).

1. http://blogs.slq.qld.gov.au/jol/2013/08/13/william-pettigrew-and-the-cooloola-timber-tramway/ Accessed 28 Oct 2013

Phil Rickard

Langley Vale Tramway, NSW

A great film clip of the Langley Vale tramway (LR226, 227) can be found at http://www.youtube.com/watch?v=64RSnXNdDEs. The film features great footage of many of the facets of logging often read about, but rarely seen in action. The many hazards faced by timber workers, including the use of timber jacks, are clearly seen. The clip is believed to have come from a mid 1920's film shot for or by the NSW Forestry Commission but provenance is unclear.

Stuart Thyer

Heritage & Tourist NEWS

News items should be sent to heritagetourist@lrrsa.org.au Digital photographs for possible inclusion should be sent direct to Scott Gould at editor@lrrsa.org.au including the name of the location, the name of the photographer and the date of the photograph.

QUEENSLAND

Friends of Archer Park Station and Steam Tram Museum Inc., Rockhampton

610mm and 1067mm gauges

Future management of the museum is the issue which concerns The Friends most at present. In recent months, the Rockhampton Regional Council has decided to change the management of community facilities to community control. This involves heritage assets such as Archer Park Rail Museum and others. The main reason is to reduce costs to Council and therefore ratepayers. General Manager Michael Rowe addressed a gathering of Friends and Volunteers on 9 August to explain the change procedures.

For Archer Park Museum, Council favours a Management Rights Model which allows another party to manage/operate the facility under agreed conditions. The facility will remain the property of the Council which will be responsible for its overall maintenance and upkeep. The status of the Friends' Association and volunteers in the new operation is unclear but as "stakeholders" they may be considered in negotiations with any favoured tenderer and he/she may enter into an agreement with The Friends for help in operating the Museum as they currently do.

Tenders have recently been called for Expressions of Interest in operating the Museum and the closure date is now 23 October 2013. Council Officers expect that, if satisfactory tenders are received, an agreement can be finalised to allow Council staff, with their equipment, to vacate by Christmas and the new operator to commence from 2 January 2014. If no satisfactory tenders are received other options will be considered.

Closure of the Museum is not an option for Council. So, for The Friends, it is "business as usual" looking after their customers and carrying out repairs and maintenance. Friends' executive has registered with Council and taken out a set of documents to keep up with what's happening but it is very unlikely that the Association will be tendering.

Meanwhile the mannequins on the platform have now been repaired by the contractor – mostly it's a good job.

The major works at present are the re-sleepering of track by John Kennedy with assistance from his nephew Ryan and particularly John Cole. John Kennedy has taken weeks of leave from his regular job to undertake this arduous work; the work with old equipment is much harder than his regular job.

The sequenced sound system which goes with the mannequins includes typical sounds from a Railway Station of old, voices of staff and passengers and the clatter of trains. The system computer and some of the peripherals have given a few problems recently (it's getting old too). The system has now been all but completely repaired by an RRC expert. The volumes of the repaired systems are now quite loud.

Pick up of coke fuel from Bowen for the Tram has been an issue in recent times; a private truck operator has now been arranged to do the job for a reasonable price. Out the front, the problem of townies filling up the car park is being addressed. Council is installing a series of four hour parking limit signs. Those working at the museum and needing to park for the day will get permit stickers for their cars.

Tram Tracks 10/13

Dreamworld theme park, Coomera

610mm gauge

The last steam hauled services at Dreamworld, Coomera, Gold Coast, ran on 7 October. The Baldwin 4-6-0 4 *CANNONBALL EXPRESS* (ex 4-6-0T 45215 of 1917) and Perry 0-6-2T 5 *G.R.CLAPTON & CO* (5643.51.1 of 1951) were noted in the shed on 19 October, with Motor Rail 4wDM 21543 of 1956 on the maintenance train outside.

The new replacement locomotive is *DREAMWORLD EXPRESS*, a 4-4-0DH steam outline loco built by CandS srl, 2 Via Zoboli, 42100 Reggio Emilia, Italy. It features imitation smoke and steam and has no tender. It hauls the same load as the steam locos. However, there were difficulties in maintaining the timetabled schedule on 19 October, seemingly because of over-cautious driving by inexperienced staff, and a speed limit of 8km/h. See report on page 20 for more details.

Elsewhere in the park is displayed *LITTLE PUFF,* a heavily modified Ruston & Hornsby 4wDM, 218002 of 1943.

John Browning 10/13

PETRIE *(E.M Baldwin 2300 of 1968) on temporary display near Moreton house, Nambour. The Nambour Heritage Tramway Group are working with local council to establish a tourist tram along Howard street between the Moreton mill and marshalling yard sites, both now occupied by supermarkets. Photo: Clive Plater 9/13*

Nambour museum and Nambour heritage tram project, Nambour

610mm gauge

On 24 September *PETRIE* (EM Baldwin 6/2300.1 6.68 of 1968) was delivered by Bundaberg Sugar to Nambour, having been gifted to the Nambour community for use on the Heritage Tramway along Howard Street. *PETRIE* was unloaded and displayed on a grassed area adjacent to Moreton House (the former mill manager's house) from Tuesday until Sunday morning. This period coincided with the opening of the new Coles shopping centre known as Nambour Mill Village. Volunteers from the Nambour Heritage Tramway Group set up a display and canvassed feedback from the community on what style of tram people would like to see operate in Nambour. The group reported much positive feedback and *PETRIE* was a great attraction, especially when the horn was sounded long and loud at noon on a couple of the days.

On Sunday 29 September *PETRIE* was relocated across the road to the Nambour Museum for safe keeping until such time as it is required for the Howard Street heritage tramline. The move went without a hitch and once on the museum's short track, *PETRIE* was started up and driven into the museum's workshop area to take up position beside the *SHAY.*

PETRIE will be 'given exercise' occasionally to move the museum's other locos and will feature prominently with *EUDLO* [John Fowler 16207 of 1925] when the Nambour Museum holds a special open day on 30 November to mark the 10th anniversary of the Moreton Mill's closure. 30 November will also see the launch of the museum's new book, *Locomotives of the Moreton Central Sugar Mill* written by museum president Clive Plater.

Clive Plater 10/2013

Durundur Railway, Woodford

610mm gauge

NETHERDALE (Bundaberg Foundry 6wDM 13 of 1954) has now reached the point where it can be used on the passenger train – a fantastic effort by all involved. Ryan Thomas replaced worn and broken air hoses to the front sand boxes and tested the air hoses to the front sand boxes.

While taking longer than expected, work is still progressing with 0-6-2T steam locomotive 'Bundy' (Bundaberg Foundry 5 of 1952). The front tube plate and rust pit holes in the boiler barrel have been pad welded, but it needs more welding by a boilermaker. Bob Gough ground the welding as directed by Paul Slater and wire brushed the boiler belly.

Sunday 22 December is the centenary of the opening of the QGR railway from Woodford to Kilcoy. While the main Centenary celebrations were to be held in Kilcoy on 20 November, the Australian Narrow Gauge Railway Museum Society will celebrate the actual date with an Open Day at the Woodford site.

Terry Olsson, Bob Gough, *Durundur Railway Bulletin* 11/13

Normanton to Croydon Railway

The '13' mile plate off the 13 mile peg from the Normanton Railway has been stolen, possibly between 24-31 October this year.

It is a State Heritage Listed item and therefore protected by heritage laws.

Whilst others have been stolen in the past, the 13 mile marker is original and one of the most significant of the railway.

The railway was originally intended to go to Cloncurry, however the discovery of gold in Croydon changed that, and the Normanton–Cloncurry Railway Act was amended to include the Croydon 'branch', but the Cloncurry 'mainline' was never built. The first 13 miles is in common to both surveys, before the Croydon branch veers eastwards. The marker represents a pivotal moment in the railway's fate and history. Any information regarding the current location of the marker would be appreciated.

Ken Fairbairn, OIC Normanton Railway

New South Wales

Zig Zag Railway, Lithgow

1067mm gauge

The Zig Zag Railway has suffered an estimated $3-4 million worth of damage when it was devastated by bushfires on October 17.

At the time of going to press it was unclear whether an offer of assistance by the Defence Department to help the fire-damaged community would extend to the ZZR.

The State Mine Fire started when dry grass was ignited on a range at Marrangaroo army depot west of Lithgow during a live munitions exercise. The fire quickly spread, destroying seven homes and nearly 50,000 hectares of bushland.

The ZZR, seemingly within weeks of re-opening after closure due to compliance issues last year, suffered extensive damage. ZZR general manager Michael Forbes told ABC Sydney radio it would be a least a year before they could consider re-opening the railway.

"*I just can't see how we can possibly repair that burnt out ruin and get enough carriages up and going in under12 months. I really hope I'm wrong.*"

Earlier this year the railway suffered damage through flooding.

ZZR spokesman David Honer reported "*All four of our standard gauge (accommodation) sleeping cars, six of our narrow (3ft 6in) gauge wooden revenue carriages and one Rail Motor (ex QR 2016), all stored in the depot confines were destroyed, bringing the total loss to 11 vehicles. Only one steam locomotive suffered heat damage.The workshop office was destroyed and the burning remains dropped onto the machine shop below it.*

The carriages and locomotives inside the shed survived as did the Bottom and Top Points stations and signal boxes. The relay hut for an outer home upper quadrant signal and associated wiring had been gutted, putting it out of service. Track damage is estimated at approximately 1000 burnt sleepers and four sets of point timbers. We lost several containers of spare parts including flue and boiler tubes. Insurance will help us recover from some losses, but certain historic items are just irreplaceable."

The railway has made requests for help including donations of money and equipment on its Facebook site.

Donations should be sent to:

Bank: Westpac Lithgow

Zig Zag Railway M & P Account

BSB: 032 829

Account: 104692

Until a few months ago the ZZR had three industrial (ex Kemira colliery) locomotives within its mainly ex Queensland Government Railway stock. However it sold two non-working locos for scrap two months ago to help raise funds toward its re-opening.

These were the only survivors of the batch of 16 Australian-built 0-6-0DM flameproofed locos built post war for underground work in Australian Iron & Steel's Illawarra collieries.

The aftermath of the bushfire which destroyed much of the Zig Zag railway's operating rolling stock and accommodation carriages. *Photo: David Honer/Zig Zag railway*

They were built by Malcolm Moore as Model 26-204 with power packs obtained from Drewry in England. Malcolm Moore had built a solitary 0-4-0DM in 1942 for the same customer.
It is believed that these were the first flameproofed diesels in Australian collieries.
The two sold for scrap are believed to be 26-204 3 of 1958 and 26-204 11 of 1951. The third loco, in working condition, thought to be 26-204 6 of 1948, has been sold to Mario Mencigar.
David Honer, Zig Zag Railway Facebook and website, ABC radio website 10/13, John Browning

State Mine Heritage Park, Lithgow
1435mm gauge
The Lithgow State Mine Heritage Park also came under attack from the bushfire on October 16-17. Buildings and historic machinery were saved by the vigilance and action of museum volunteers, and the extraordinary efforts of local RFS crews. The ember attack on Thursday was particularly difficult to counter with winds constantly changing direction. Significant documents and original photographs, including the Charter for the 1886 Royal Commission into the Lithgow Valley Colliery disaster were removed from site on the Thursday morning. The site was placed on a watch and act status with principal threats coming from the potential combustion of coal dumped during the operational life of the colliery.
Ray Christison, President, The City of Greater Lithgow Mining Museum Inc. via Bob McKillop 10/13

Berrima District Historical Society – Mount Gibraltar trachyte quarry, Bowral
930mm gauge
Work is continuing on the cleaning and painting of the trolley believed to be from the Mount Gibraltar trachyte quarry. The wire brushing of the underside of the trolley has now been completed and the rust converter applied, along with two coats of metal primer. Work will now be concentrated on getting the wheels into a fit state for priming. Although much work has been carried out on the wheels they are proving particularly difficult to clean owing to there being a rock hard residue on them of what seems to be grease and mineral dust.
Little is known of the trolley's history. It is of welded construction which suggests it is not as old as originally thought. The wheels have the words "David Bros. Wollongong" imbedded in them. David Bros. foundry in Wollongong closed around 1980.
The trolley is the chassis and wheels of a coal skip recovered from the western side of Mount Alexander during excavations for the Hume Highway by-pass. In this vicinity anthracite coal mines were established, first to supply the FitzRoy iron works in the 1870s via a steep tramway using horses, but soon abandoned as the coal was unsuitable. Mining took place again during the 1940s in the vicinity and the trolley would date from that time.
Phil Rickard reports that the trolley looks about three-feet gauge, the same gauge as recorded in Jim Longworth's notes in LR137 on a ballast quarry that was on Mt Gibraltar.
An internet search by Phil revealed there were at least six quarries on the mount at different times over a hundred years period. Thus the trolley might not relate to the quarry mentioned in LR 137. (http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=5060563)
Gil Wheaton, Berrima District Historical and Family History Society Inc. Newsletter, number 453, David Burke, Phil Rickard 9/13

ACT

CANBERRA RAILWAY MUSEUM, Canberra
1067 mm gauge
Life imitated an episode of *Thomas & Friends* at the Canberra Railway Museum in October with Thomas the Tank Engine (Perry Engineering *KLONDYKE* 271 of 1927) from the Bellarine Peninsula Railway) forced to undergo repairs for a broken whistle. Children turned out in droves for a glimpse of *Thomas*, seemingly unaware of the ailment of the 13-tonne working engine visiting Canberra for the SPIN festival. While the engine belched smoke as Thomas posed for photos, his characteristic whistle was silent.
"*Unfortunately today they broke the lever for the whistle, so we've got to try to repair that tonight*," caretaker Shaun Barker said. It could have been worse for the staff. "*Thomas did have an episode where his whistle wouldn't stop blowing!*"

Ex-Kemira colliery Malcolm Moore (26-204 6 of 1948) operating a plant train at Top Points on the Zig Zag railway. *Photo: David Honer 4/08*

A spectacularly restored 12A at Gembrook on its third day back in regular traffic after an extensive reconstruction. A post restoration feature is "decorative" glued on rivet heads applied to the new, welded side tanks. *Photo: Graeme Daniel 10/13*

The former quarry engine turned cane train turned *Thomas* was trucked from his home in Queenscliff in Victoria, but the loading ramps to get him on and off didn't come with him.

"*We had to hire two cranes to lift it off the truck and put it on the track that we laid*," Mr. Barker said. "*Laying the panel of track took us about two hours; getting Thomas off the truck took about four.*"

The Canberra Times, 10/13

VICTORIA

PUFFING BILLY RAILWAY, Belgrave

762mm gauge

On 5 October Puffing Billy Railway switched over from their old analogue radio system to a new digital system. All rail safety workers and others who use radios have been trained in its use and it is now in operation. At present only one channel is being used but the other channels will come into use in the future as the system evolves. The clarity of the new radios is startling as was made clear at the recent Thomas weekend when the two signalmen at Emerald made full use of the system.

Engine 12A has now been outshopped after a significant ground-up overhaul, resplendent in a new Canadian Pacific red paint scheme, and reported to be steaming well. The loco went into service on 1 October, for the first time in seven years.

As a result of the Puffing Billy Railway establishing a workshops blog on their website, http://www.puffingbilly.com.au/about-puffing-billy/workshop-updates/ there has been some discussion on the Welsh Highland Yahoo Group about the two railways.

Clive Briscoe, a WHYG member posted that, "*we do have good relations with them (PBR) but one thing I've suggested doesn't seem to have come to pass yet. I made a suggestion that their operations staff pay us a visit in their quiet period, May to September, and our operations staff pay them a visit during our quiet period – October to March. We could each learn a great deal from each other (for instance, their regular dining train is simply stunning – can we do similar?). We're similar in that PBR is a statutory company like the FR, having a loyal team of volunteers to keep it running. I suggested the possibility of a trust fund being set up with the objective of international rail ops learning/sharing experiences to help pay for the fares.*"

Frank Stamford, Puffing Billy website 10/13

WALHALLA GOLDFIELDS RAILWAY, Walhalla

762mm gauge

Diesel engine DH72 is safely stored at Loy Yang following its purchase from QR in July 2012. The mechanical team is slowly but surely developing a list of works for both of their DH locos in order to see them enter service. DH37 is started on a regular basis and runs on its short length of track at Walhalla. Funding for the re-gauge and restoration is a top priority for the WGR board. At about $300,000 per loco this is a big ask but it's vital for the future growth of the WGR.

The WGR has been donated two Greenbat Electric (battery) locomotives and 25 trolleys from the Orica works at Deer Park. A group of WGR members went to the Deer Park site to inspect what was on offer in April and the locos and trolleys were delivered to Walhalla in May. One of the locos has been repaired to operational condition. It's intended, if it proves suitable, to use it for Way & Works purposes. The other loco will most likely be used for spares and then loaned as a static display to the new Puffing Billy Narrow Gauge Museum at Menzies Creek as an example of industrial narrow gauge in Victoria. A number of trolleys will be utilised for Way & Works purposes.

A truckload of 20lb rail also came with the donation but this has deemed surplus to requirements and has been passed onto the Alexandra Timber Tramway who propose to use it to extend their line.

On Track, 9/13

The former "Big Grape" train sits idle at Swan Hill's Hilltop resort. *Photo: John Dennis 5/13*

Hilltop Resort, Swan Hill (formerly The Big Grape)

610mm gauge

A visit to the site following up on a photo found on Flickr taken by Rob Lee in 2011 led to the following information. When the owners purchased the property 13 years ago, the train was on site, and they believe it was used at the vineyard which previously existed here before it was converted to a resort. The owner stated that the train had not run since 2006, when insurance premiums doubled, but her husband drives it a few metres forwards and backwards every so often to ensure it still runs, and that there had been a couple of people wanting to buy it. However the property is on the market and the train is listed as part of the sale.

The locomotive seems to be 610mm gauge and superficially looks to be 'home made'; the wheelbase looks to be on the long side for anything with industrial origins. The chassis is fabricated, not cast, so it is not a former battery loco.

The 'false' driving wheels and connecting rods obscure the running gear details.

There was a Ruston & Hornsby that was originally on hire at the Big Grape from 1982 until 1985, so this locomotive probably dates from after then. Any further information appreciated.

John Dennis, John Browning

TASMANIA

WEST COAST WILDERNESS RAILWAY, Queenstown

1067mm gauge

The Tasmanian Government is struggling to find an operator for the troubled Abt Railway on the State's west coast. The heritage railway, which closed in April, is likely to reopen in time for summer but without a permanent operator. The tourism venture is likely to be run by the State Government while talks continue with two potential operators. The railway is being refurbished with a $6 million grant from the Commonwealth.

Infrastructure Department secretary Norm McIlfatrick said that while there have been two expressions of interest, it is unlikely either bidder can run the tourist railway alone.

"*I'd have to say that it's unlikely that we will have a full operating model where the Abt Railway Corporation can step back and let someone else operate it*," he said. "*We're talking to both those expressions with a view to perhaps involving them over the 2013-14 season in a different way...and we all recognise that probably the best way forward is to get the rail back up and running. That's our first objective, to get tourists back onto the railway then look for a long-term operating model.*"

Cradle Coast Authority Executive Chairman Roger Jaensch said he was not surprised about the delay."*It was always a bit of a lottery going to the market.*"

Luke Martin from the Tourism Industry Council is confident about the attraction's future. "*It's better than the alternative which is essentially for the train to be left in the jungle.*"

But Strahan tourism operator Annette Deverell has some concerns. "*I'm not certain what I think of the Government running it, but I guess as long as it's running it's good for tourism.*"
Work on the railway experienced difficulties in late August-early September following a landslip on the Queenstown side of Rinadeena Station. There were further difficulties because the area has limited accessibility.
Geotechnical experts were engaged to assess the extent of the landslip and design necessary retaining structures.
ABC news report 9/13, Tasmania Department of Infrastructure, Engergy and Resources website 9/13

SOUTH AUSTRALIA

COBDOGLA IRRIGATION AND STEAM MUSEUM, Cobdogla

610mm gauge
A new LED headlight has been fitted to L1 *MARGARET* (Bagnall 1801 of 1906) and a crane has been fabricated and installed to lift the start up burner onto the footplate. Work continues on the installation of the Perkins engine in L2 *PETER* (Simplex 9861 of 1953) with some of the wiring completed and the air filter installed. Modifications are being made to enable a temperature gauge sender and an oil pressure gauge to be fitted.
The new works wagon W20 has been completed apart from painting.
In the workshop, the air compressor has been bolted down and air lines fitted with outlets in the workshop and loco shed. The small lathe obtained from SA Water has been installed in the IC shed until the new workshop is built.
Some workers from Mission Australia have commenced work experience at the museum and have been restoring the corrugated iron roller and collecting information and photographs for the asset register.
More concrete has been added to the foundations of the Mirlees engine and the electric starter motor for the No. 1 Southern Cross engine has been installed.
The trailer, ex the mobile welder from which the Perkins engine was removed for L2 *PETER* has been totally stripped down so it can be rebuilt as a general purpose trailer. It will also be capable of carrying the ride-on mower and spray trailer.
The Fowler Z7, the Pasquali tractor and the Lister auto-truck were taken to the Waikerie Hit N Miss rally on 14 and 15 September. The Z7 was again used to haul back the tractor pull sled after each tractor had its turn. This saves the organizers a lot of time as it takes only one to one and a half minutes to reposition the sled after it is unhooked from the competitor's tractor. It is also good training for the Z7 drivers, not to mention a bit of fun, and of course winching is what the Z 7 does best.
Cobdogla Clarion 9/13

WESTERN AUSTRALIA

HOTHAM VALLEY RAILWAY, Dwellingup

1067mm gauge
The Hotham Valley Railway continues to operate the Etmilyn Forest train, the Steam Ranger train and the Restaurant train from Dwellingup. Following the removal from the Pinjarra depot, the Steam Ranger service operates from May to October from Dwellingup down the valley to Isandra Siding, well short of Pinjarra.
Ian Willis, General Manager of HVR, said that the railway chose to cease operating from Pinjarra mostly due to insurance costs for the 1.8km section of mainline needed to connect to the branchline to Dwellingup, plus the levels of operational requirements to run over that mainline section. The change also allowed the railway to provide a product more suited to families etc. because the train is no longer an all day outing and there are choices of morning or afternoon travel.
Although all HVTR trains will now depart from Dwellingup, Hotham Valley Railway will still have a major operational presence in Pinjarra for some time, utilising the infrastructure there associated with storing and maintaining HVTR's

Pichi Richi Railway ex Western Australian Government Railways W 916 (Beyer- Peacock 7393 of 1951) was returned to service in April 2003 in the guise of Silverton Tramway Co. W22 'Justin Hancock'. The original 'Justin Hancock' (Beyer Peacock 7418 of 1951) is also owned by the railway, but due to the poor condition of its boiler, restoration was not feasible. It was previously displayed at Puffing Billy's Menzies Creek museum, before changing owners in 1999. Photo: Bill Hanks 9/13

Henschel 0-8-0T Brigadelok 498 and Avonside 0-4-0T SEZELA No.3 *with military vehicles and a vintage Chevrolet on show at Sandstone, 27 March 2012. Photo: John Browning*

locomotives and rolling stock. Overall the change has been very successful and HVR is quite happy with the result as are the passengers.
Ian Willis, 10/13

OVERSEAS NEWS

WISCASSET , WATERVILLE AND FARMINGTON RAILWAY MUSEUM, Alna, Maine, USA

610mm gauge

A successful working bee was held over the weekend of 12-13 October with people working Friday through Monday. On Saturday, there were more than 80 people on hand. On Friday, about 50 were on hand, about 40 were around Sunday and 20 or so on Monday.

On Friday two large pieces of machinery were unloaded from flatcars. The first item was a pinch riveter, a machine to install rivets inside a tank or boiler. That item was hung from the ceiling over a disused lathe in the old shop. Later, after shifting a bunch of equipment around and clearing space in the shop, we unloaded an old bull riveter that had been modified into a brake for bending steel. That was unloaded onto a custom-made dolly. The balance of the day was spent helping to lower engine No. 9 (Portland 0-4-4 'Forney' 622 of 1891) down onto its wheels. This was done using manual screw jacks, and it took numerous re-sets of the jacks to bring it down. When it was safely down, it was rolled outside for photographs.

On Saturday, No. 9 was rolled outside again and switched from track one to track two in the shop. Once inside, a swarm of volunteers began work. One gang began sorting out and installing the rear truck brake rigging, while another crew continued work on the loco's cab. A third team worked on the front end, drilling holes for rivets and bolts. A small team was gathered to work at installing the grate bearers and grates in the firebox.

Elsewhere on the property, a crew framed up a three-vehicle garage and got the roof on. Another crew did a lot of surfacing, lining and dressing track on the main line. Another crew surveyed the track layout and staked out the center line of all tracks. Last but not least, a crew of folks prepared meals for the volunteers throughout the weekend.
Wayne Laepple, 10/13

Stars of Sandstone, April 2014 Hoekfontein, South Africa

Most readers are already aware of Sandstone Estates in South Africa and the magnificent annual galas that are held there. Not only is there an extensive collection of 2ft gauge steam locomotives operating over the lengthy railway through the week-plus event, but many vintage road locomotives and traction engines, cars, trucks, buses, tractors and military vehicles are demonstrated too. Visitors are assured of a most memorable and enjoyable experience.

The visitor experience is excellent, with growing numbers of repeat international participants each year. Sandstone is a reasonable drive by road from Johannesburg or Bloemfontein. There is a selection of B&B and hotel locations within easy reach, and details can be supplied.

The 2014 *Stars of Sandstone* gala is being held from 12 to 21 April. Visitors may attend for the whole time, or for a shorter period, and family rates are available. A limited number of "footplate experience" places will be available for the first time, at a modest additional cost.

Some people may feel hesitant because of the distances involved or their unfamiliarity with the country. In this case, why not organise a group of friends to travel together? Perhaps you would like to be put in touch with others from Australia who might be happy to travel in a group (and may have already made the journey).

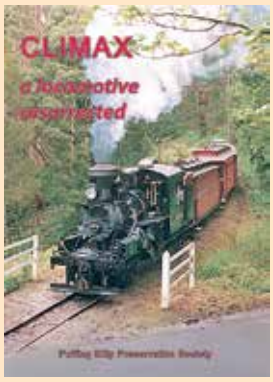
Each year, a number of Australians play a very important role by joining the railway operations staff to run the trains for the gala. Qualified/accredited drivers, firemen, guards and controllers, either professionals or volunteers from heritage railways, may be eligible for this opportunity and for those involved there is usually accommodation available at the farm with board and lodging provided. If you are interested, please feel free to contact recent participant Graham Black on (02) 4955 1904 or wenbl1@bigpond.com.

If you are interested in attending and would like to find out more details of costs, accommodation, transportation options, the possibilities of shared travel arrangements, and opportunities for joining the train operating staff, please contact joannewest@btinternet.com or register an expression on interest online at http://www.sandstone-estates.com/index.php/stars-of-sandstone-registration
John Browning

New from LRRSA Sales ...

Climax a locomotive resurrected

Compiled by Peter Charrett
Published by Puffing Billy Preservation Society



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Includes a potted history of Climax locomotive No.1694, the Tyers Valley Tramway, the locomotive in service on the Tyers Valley Tramway and Puffing Billy Railway, and photographs of the Tyers Valley Harman and TACL locomotives.
39 photographs - 24 in colour, four-colour map of Tyers Valley Tramway
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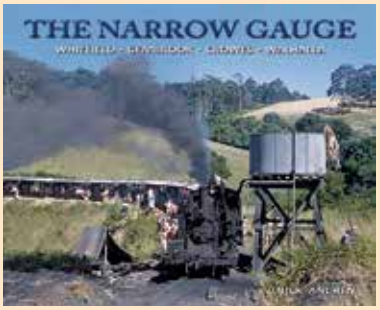
The Narrow Gauge

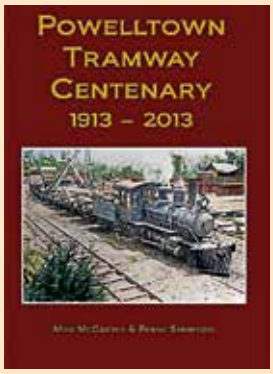
Whitfield – Gembrook – Crowes – Walhalla
By Nick Anchen
Published by Sierra Publishing
216 pages, 300mm 240mm landscape, hard cover, about 300 photographs



Includes details of locomotives and rolling stock, recollections of railwaymen and residents, and a guide to remains.
Price $75.00 plus postage
($67.50 to LRRSA members)
Weight 1,800 gm

Powelltown Tramway Centenary

1913 – 2013



By Mike McCarthy & Frank Stamford
Published by the LRRSA.
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A pictorial history of timber-getting in Western Australia
By Jack Bradshaw
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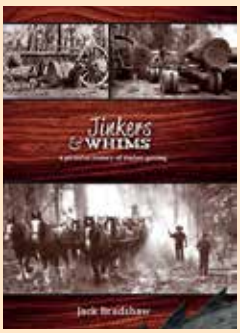

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