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#### **LIGHT RAILWAYS**

Australia's Magazine of Industrial and Narrow Gauge Railways

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#### **Conversions:**

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

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### Comment

The closure of Moreton Mill, Nambour, might be thought of as inevitable. The small crop size and encroachment on sugarcane land prevented the crushing of enough cane to make the mill profitable. There were also other factors. A high percentage of the cane was grown in areas that the tramline could not reach The mill site was cramped and landlocked. All cane had to be shuttled by rail, expensively, down a busy street. The mill was owned by a foreign company and there was an unseemly relationship between growers and miller. The tramline could not survive closure of the mill because absorption by a neighbour was not possible.

Unfortunately, more mills seem likely to follow Moreton. Mourilyan is the least well endowed Bundaberg Sugar mill in the Innisfail area, where there is not enough cane for three mills. Mossman, another small landlocked and isolated mill, is under extreme financial pressure. Stand-alone grower-owned mills seem particularly vulnerable at present. Uneconomic operation over time means a lack of investment in infrastructure. This only makes a mill more uneconomic in the future.

Being situated in the coastal strip makes the sugar industry also vulnerable to environmental considerations, not to mention the pressure on land for residential and tourist development.

The biggest long-term problem is the cost of production relative to world price. This is being compounded by the State and Federal governments' inability to agree on an appropriate strategy to assist the industry, with support for ethanol production a particularly obvious example.

The new world of global markets and level playing fields is indeed unpalatable when the Australian sugar industry, the most efficient in the world, is being sacrificed to the interests of grossly uneconomic US and European sugar producers. Sugar cane railways make a major contribution to the low costs of the Australian industry.

Unfortunately, it is not a matter of a few uneconomic mills having to close. The current financial position is unsustainable. The way things stand, the Australian sugar industry as a whole has no long term future. John Browning

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

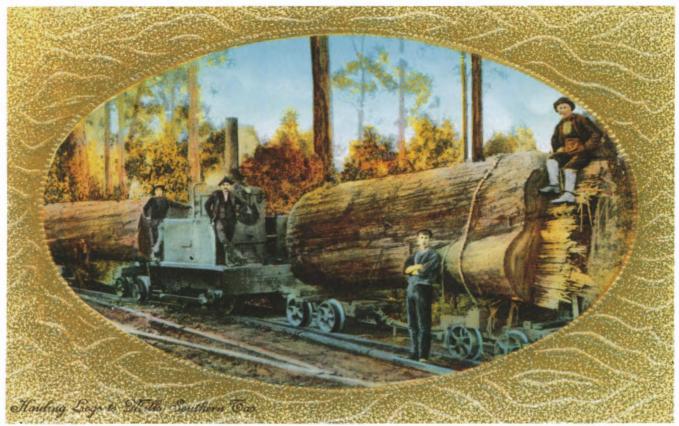
Members are actively involved in researching light railways in libraries and archives, interviewing knowledgeable first-hand participants and undertaking field work at industrial sites and in the forests.

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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 provision that the Society has the right to reprint, with acknowledgement, any material published in *Light Railways*, or include this material in other Society publications.

Cover: On 30 September 2003, Invicta Mill's EM Baldwin B-B DH BURDEKIN (10215.1.7.82 of 1982) crosses Landers Creek bridge with 132 bins in tow. Photo: Scott Jesser



This coloured postcard – "Printed in Saxony", is titled Hauling Logs to Mill, Southern Tasmania, and shows the Oliver/Markham locomotive in use on a timber tramway at Hastings, Tasmania, prior to 1914. Photo: Wayne Chynoweth collection

# The Vertical-boilered Locomotive at Tasmanian Transport Museum

# by Ken Milbourne

The 0-4-0VB locomotive displayed at the Tasmanian Transport Museum in Glenorchy is certainly the sole surviving Australian example of a once popular type, some of which saw service on logging tramways in Tasmania. As such it is surely worthy of preservation and even restoration to operational condition. Unfortunately the Museum's plan to fully restore this loco has not yet been realised, although after standing dismantled for nearly twenty years it is now being re-assembled for static display.

Apart from uncertainty regarding the engine's use during its early years in Tasmania and the absence of records for some later years, much is known of its working life. Although generally referred to as of Markham manufacture it was made by Oliver & Co. Ltd, at their Broad Oaks Works, Chesterfield, England, to the order of T.W. & J. Walker (order no.1467 dated 27 June 1889). Before delivery of the engine Oliver & Co. were taken over by Markham & Co. on 5 October 1889, hence the assumption that it was of Markham manufacture. Company records describe it as:

"one coffee pot loco, 3ft 6in gauge, wheels 7in on tread with  $2\frac{1}{4}$  in deep flange turned well back. Including feed pump & injector, with ash pan, the whole as specified to burn wood".

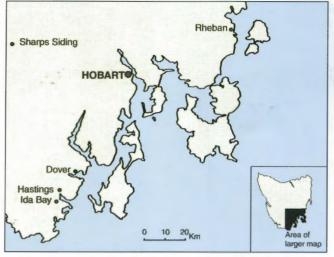
Company records show the cost of construction as  $\pounds 425$  17s 0d. As it was sold for  $\pounds 360$  it appears that the company was prepared to incur a loss in order to make the sale. Despatch date is shown as March 1890.' As T.W. & J. Walker do not appear among the names of known sawmillers in

Tasmania it appears that they were agents but whether they were Australian based or not, is not known.

The first documented presence of the engine in Tasmania is in 1898 when it was purchased by Hay and Chopping to work on their expanding tramway network at Hastings. For several decades the Hay family had worked the timber and coal resources of the Hastings region. In 1897 John Hay (the third member of the family to bear that name) entered into partnership with Captain JH Chopping.<sup>2</sup> It has been suggested that the injection of Chopping's money financed the purchase of the engine. Be that as it may, the whereabouts and use of the locomotive from March 1890, the despatch date, until its appearance at Hastings in 1898 remains unknown. Two possible scenarios have been advanced, but one is unproven and other unconvincing.

Edmund Tyler is known to have operated a steam locomotive on the tramway serving his sawmill at Wheelbarrow Bay, an inlet on the Lune River estuary. Wheelbarrow Bay subsequently became known as Ida Bay, possibly in memory of a female member of the Tyler family. A report in the Tasmanian Mail dated 19 July 1890 stated "Some time ago Messrs Tyler Bros of Ida Bay received from England a locomotive to draw logs down their tramline to the sawmill." Clearly the date of delivery in Tasmania following despatch from England in March 1890 would have been "some time ago", according to some definitions in July 1890. Unfortunately no description nor record of the make of the engine has been located. In December 1897 a bushfire destroyed Tylers' mill and tramway and damaged their locomotive. The mill and tramway were rebuilt and operated until 1903. There is no record of the date on which the locomotive was disposed of, nor of to whom or where it went. Given that Wheelbarrow Bay is very close to Hastings and the possibility that Tylers' locomotive was out of use or even damaged as a result of the 1897 bushfire there is a distinct possibility that it would be available for sale and possibly acquired by the neighbouring sawmilling/coal mining company at Hastings.

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The second possible location to which the engine went upon its arrival in Tasmania was the Kent sawmill operated by Drysdale, about one mile east of Dover. This venture had been established before 1880. It was destroyed by fire in 1886 but was rebuilt. In 1898 fire again destroyed the tramline, damaged the ten horse power locomotive and killed the bullock team. This time the damage was terminal. The locomotive was condemned but its disposal is not recorded. The absence of any reference to the identity of the locomotive or the date of its purchase leaves little positive evidence to associate it with the Oliver/Markham VB engine under consideration and circumstantial evidence points to the likelihood that it was Tylers' engine which came to Hastings..

The fact that the engine at Wheelbarrow Bay as well as the one at Drysdale's mill were damaged by bushfires probably explains why there is an absence of any reference to their use in 1898 and 1899. Anecdotal opinion asserts that the Hastings engine (i.e the Oliver/Markham locomotive), was extensively modified by a Mr McMullen about 1900. Support for this opinion was expressed in 1979 by Mr McMullen's grandson who was adamant that his grandfather had reassembled and modified the vertical boiler locomotive at Hastings.<sup>3</sup> In 1988 staff at the Transport Museum noted that the wheels, side tanks and coupling rods appeared to differ from those originally fitted.

The implementation of annual boiler inspection records in 1899 makes it easier to follow the history of this engine after that date but some unexplained gaps still occur. For example the first recorded inspection is dated November 1901. This record noted that all the vertical stays were slack and their total renewal was advised. This probably indicates that the engine had performed a significant amount of work. Further inspections were made from 1906 until 1910. The inspection the following year noted that a new boiler made by Cowley had replaced the original and that the locomotive had passed into the ownership of the Huon Timber Co. which had acquired the Hastings mill and associated tramway in 1907. In 1918 the Huon Timber Co. closed their operations at Hastings and moved the locomotive to the tramway linking their sawmill at Wielangta to the jetty at Rheban on Tasmania's East Coast. As the resident locomotive on this line came out of survey in 1919 it appears more than probable that the Oliver/Markham was its replacement.

The Wielangta sawmill was served by several wooden railed spur lines but there is no evidence to indicate that steam locomotives worked on any other line than the seven mile line down the valley of the Sandspit River to Rheban. The Oliver/Markham loco remained in service until 1924 when the Wielangta mill closed and the tramway fell into disuse. The absence of boiler records for the locomotive for the



The Oliver/Markham locomotive, partly dismantled, at the Tasmanian Transport Museum, Glenorchy in 1987. Photo: Frank Stamford

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The Oliver/Markham locomotive abandoned north of Sharpes Siding, in the Tyenna Valley (Upper Derwent), in 1974. Photo: Wayne Chynoweth

years 1925 to 1933 shows that it was out of use. For most of this period it languished near Wielangta until, in 1931, it was shipped to Princes Wharf in Hobart and advertised for sale. No buyers were forthcoming until 1934, when the Sharpe brothers purchased it for use on the tramways associated with their milling operation at Sharpes Siding, near Fitzgerald in the upper Derwent Valley. Sharpe's milling operation was a relatively small family concern but was an excellent example of the skill and tenacity of the smaller mill operator.

The mill site was linked to the railway at the siding by a 3ft 6in gauge tramline. From the railway siding this line crossed the Tyenna River before following an easy gradient for almost one mile to the mill. This line was wooden-railed and served to carry the sawn timber to the siding. For the greater part of the mill's operational life, the line was operated by a locomotive built around an International truck engine. It is possible that the Oliver/Markham locomotive did some work on this line before being placed on the upper tramway linking the mill to the forest operations. This upper tramway was over a mile in length and may have had some short-lived spur lines. It was of 3ft 6ins gauge, wooden-railed except for the outer rails on the sharper curves, and followed a steep climb for much of its length. It crossed two gullies by means of solidly constructed log bridges. The fact that the Sharpe brothers were able to construct these bridges with the aid of one draught horse is convincing evidence of their skill and perspicacity.

Unfortunately the steep gradients on this tramway proved too much for the Oliver/Markham locomotive and, after it suffered from excessive wheel slip when under test, the Sharpes sought an alternative use for their investment. The engine was moved to the outer terminus of the tramway and used as a steam source for a log hauler. Whether the loco made it to the terminus under its own power or with the aid of a draught horse or winch is not known.

Records show that the boiler was surveyed every year from

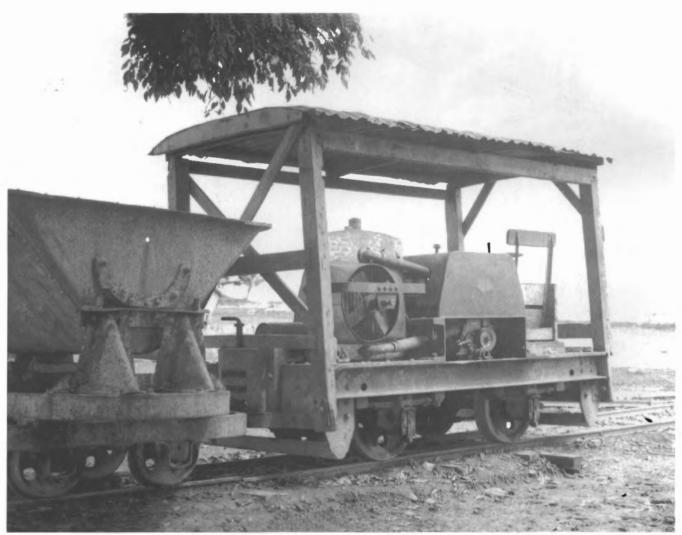
1934 until 1944. As it appears unlikely that a log hauling operation would remain at one location for such a long period, there is a possibility that the engine was relocated as need arose and possibly saw some application as a locomotive on the more gently graded upper section of the tramway.

When war broke out in 1939 the Sharpes decided to dispose of their milling operation and enlist in the military. Control of their mill, tramway and associated rolling stock passed to Chesterman & Co. Pty Ltd, but as sawmilling was classed as an essential occupation, the manpower regulations in force compelled the Sharpes to remain at work in what had been their own milling business. Accordingly, records for the period 1940 to 1942 show the Oliver/Markham locomotive under Chesterman's ownership. Some time in 1943 the mill closed and the tramway was abandoned with the vertical boiler locomotive stranded at the outer terminus of the tram line, where it was to remain for the next forty years.

Apart from the removal of some of the brass bearings and the inevitable ravages of weather, the engine remained relatively intact. By the late seventies, the funnel had succumbed to rust and the need to recover the engine to prevent further deterioration was realised. In January 1984, it was brought out of the bush and moved to the Transport Museum at Glenorchy. The initial enthusiasm for total restoration resulted in the dismantling of the engine. The need to replace the boiler halted progress until funds became available, but by the time the funding position had improved, other projects took precedence. In 2003 the boiler has been placed back on the frame and the engine restored for static display. Hopefully the future will see it restored to operational condition.

#### References

- 1. Richard Horne written correspondence
- 2. Parry Kostogiou, Historic timber getting between Hastings and Dover, Forestry Tasmania 1994, page 21.
- 3. Personal interview 1979



"Gas Construction Engine, Suva, Fiji, 18 April 1943"

Photo: John Maxwell, Maxwell Collection Negative 1754

# An unusual Simplex by John Browning

For many years, my listing of Motor Rail "Simplex" locomotives sent to this part of the world contained an annoying problem. Motor Rail 6010, 2ft gauge, a 12/20hp 4wPM, was ordered by Morris Hedstrom Ltd, London, and was despatched to Fiji with shipping markings "AHM, SUVA", on 10 October 1930. There was no further trace of it. Part of the frustration was that this was a rare type of "Simplex" locomotive. There were less than 30 of the 12/20hp type produced, mostly between 1929 and 1933, and this appeared to be the only one that was exported.<sup>1</sup>

This was the first new narrow gauge design produced by Motor Rail since the Great War. It was a special light design, weighing only two tons and with smaller than normal engine covers. 6010 was fitted with a Dorman 4MVR engine, as were most of the type, and apparently engine problems were common among them. The new locomotive design featured a number of transmission improvements that became standard for subsequent types.<sup>2</sup>

Because of the light weight, and the importing agent, it was assumed that 6010 might have been supplied for use on a plantation railway.<sup>3</sup>

There the story ended until I was browsing through the photographs available from The John Maxwell Collection, in Nevada, USA. John Maxwell was a railway photographer who was stationed in Fiji with the US Army in 1942-4. He took quite a number of photographs of Colonial Sugar Refining Company cane railway operations that can be purchased through the Maxwell Collection website (www.coloNG.com). I came across a title "Gas Construction Engine, Suva, Fiji, with rocker dump car." I added this to the selected shots I had decided to order.<sup>5</sup>

On receiving an excellent selection of photographs, I was delighted to find that the "gas construction engine" was none other than the elusive Motor Rail 6010. Fitted with a timber frame canopy structure and a corrugated iron roof, but otherwise in original condition, it stands on a length of track with a low-lying possibly swampy or foreshore area behind it on 18 April 1943. A construction skip modified to tip end-on stands next to it.

And that is all we know. Given the wartime conditions, it can be suspected that the locomotive was engaged on some kind of government construction work. Maybe it was supplied for the colonial government of Fiji or maybe it was requisitioned by the authorities from a plantation or wharf tramline.

(Since I ordered my set of prints, the John Maxwell Collection website has been developed to enable the previewing of many of the photographs available. It is well worth a visit.) Thanks to Bruce Maxwell for permission to reproduce the photograph.

#### Acknowledgements & sources

1. Builder's details provided by Bob Darvill

2. Hall, D R, & Rowlands, J A S, 2001. A Guide to Simplex Narrow Gauge Locomotives. Moseley Railway Trust, England. p.31.

3. Dyer, P & Hodge, P, 1988. Cane Train. New Zealand Railway & Locomotive Society Inc, Wellington, N.Z. p. 156.

4. Bruce Maxwell, personal communication, October 2003.

5. http://www.coloNG.com



A Hunslet operated by 1 ANZAC Light Railways on the line along the Le Sars – Bapaume Road on 19 April 1917. The train is shifting men and equipment of No.6 and No.8 Platoons, B Company, 4th Pioneer Batallion from a camp at Butte de Warlencourt to a new site at Fremicourt. Photo: Australian War Memorial WM E00469

# Hunslet 306: The train now arriving...

# by Mark Whitmore, John Browning and Mike Cecil

#### Hunslet 306 and the First World War

One hot summer day in the late 1960s the young Mark Whitmore was cycling past a scrap metal yard in suburban Brisbane when, much to his surprise, he saw a diminutive steam locomotive, apparently of British origin. He noted that it was apparently from the Queensland sugar cane railways and paused briefly to take a photograph of it partly buried by the waste. Little did he realise that its fate was not to be melted down, but to be rescued by an enthusiast and that it would eventually become an important addition to the collection of the Australian War Memorial, over 30 years later. For although the locomotive had indeed been retired after more than 40 years in the sugar industry, it was a veteran of the First World War.

In 1916 Allied transport serving the Western Front was in a state of crisis. The main French railway system was overloaded to breaking point and the British had agreed to provide men and equipment to assist. As part of this expansion the Australian government raised a section of railway troops, and ultimately expanded this commitment to six sections (later called companies).

However, the British forces faced another critical supply problem, resulting from their premature faith in the capabilities of motor transport. Trains delivered bulk supplies to railheads located about 12km behind the front lines, where they were safely out of range of artillery fire. From there, motor lorries were used to carry supplies forward to the artillery and to roadheads, where horse drawn transport from units collected material. Final distribution to the trenches was by carrying parties. Unfortunately the often poorly constructed roads collapsed under the intense traffic of trucks with narrow, solidrubber tyres, particularly in wet weather. During the Somme campaign, the motor transport system could not distribute the 20,000 tonnes of supplies required daily to support an offensive on a 20km front.

A solution to the problem was readily apparent. Both the French and German armies had been developing extensive networks of narrow gauge railways forward from the main railheads since the earliest days of the static war. With pre-fabricated 60cm gauge track and light rolling stock, they could be constructed rapidly wherever they were needed, and readily repaired when damaged by shell fire.

The first British orders for light railway equipment, including 20 locomotives, were placed in March 1916. One order was for 10 'main line' steam locomotives from the Hunslet Engine Company of Leeds. Amongst this latter batch was number 306, the Memorial's engine.

For a small company, Hunslet moved very quickly to produce the engines. By adapting a pre-war design they provided a rugged, reliable and powerful engine which retained a certain pre-war Edwardian elegance. By all accounts they were the most popular locomotives with crews and highly prized by their operating companies. Eventually 155 were produced and all but 18 survived the war and found peace-time buyers. Many, like 306, gave decades of service to their subsequent owners.

Most of the new light railway equipment was concentrated in the Somme area from August 1916 onwards, but was too late to influence the closing stages of the campaign. However by November, as part of the process of consolidating the hard won gains from the Germans, quite substantial light railway systems were being built. These were largely in and adjacent to the 1 ANZAC Corps sector of the Fourth Army's front, and a specialist unit was established to build and operate the sector's railways. Commanded by Lieutenant-Colonel A C Frewtell of the 4th Pioneers, 1 ANZAC Light Railways comprised initially half a battalion of pioneers and several field companies, but was frequently augmented by large detachments of infantry and pioneers for track laying and maintenance. Some of the first Hunslets were soon in use in this area, particularly on a line from Trones Wood to gun positions around Guillemont and Ginchy.

By March 1917 an extensive light railway system had been developed behind the 4th Army front. However the Germans retired eastwards to the Hindenberg Line which left the system up to 25 km behind the new front lines. 1 ANZAC Light Railways responded by extending a line from Martinpuich towards Bapaume, in part by re-gauging a standard gauge railway along the Le Sars-Bapaume Road. By the end of March working parties assisting the 4th Pioneers were completing track laying, and Routine Order 117 of 26 March 1917 directed the operating company to "... take Hunslett (sic) engine to Bapaume, steam to be up by 1000 ..."

Work progressed rapidly on expanding a new light railway system, based on Bapaume, and the system was ready at the beginning of May to support the Second Battle of Bullecourt. After the battle, 1 ANZAC Corps was withdrawn from the line and the light railways unit went with them, handing over control on 14 May. By now 1 ANZAC Light Railways had become a unique organisation peculiar to its corps, because elsewhere the light railways came under the control of a new Directorate of Transportation. In June the unit was re-formed as 17th (ANZAC) Light Railway Operating Company and by July was hard at work in the Ypres area.

With the disappearance of 1 ANZAC Light Railways the strong associations between the Hunslet locomotives and the Australian forces became rather more diluted. In part, this reflects the spectacular growth and reorganisation of light railways, following the delivery of equipment ordered in 1916. Between January and September 1917 the average tonnage of material conveyed weekly by light railways expanded from barely 10,000 tonnes to more than 200,000 tonnes, while the handful of steam locomotives in service in late 1916 was swelled to almost 550 within a year, mainly by American deliveries. Light railways continued to play an important role until the end of the war, and were extensively used by Australian infantry and artillery.

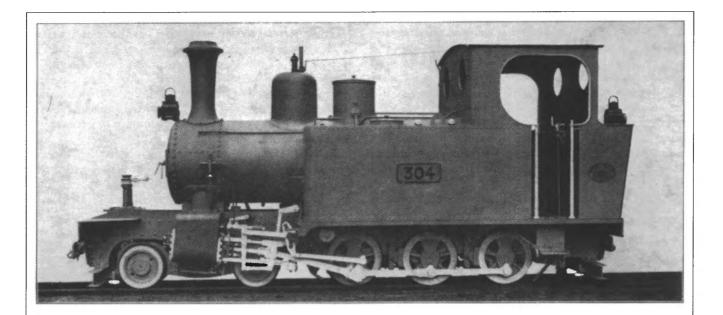
#### Civil use after the First World War

Hunslet 306 (works number 1218) was repaired by its builder in September 1918 (order number 39102). Following the end of hostilities in France in late 1918, large amounts of narrow gauge railway equipment were no longer required. Some was utilised for post-war reconstruction in northern France but much was sold off over a number of years, mostly from storage dumps established in the same area. The Hunslet 4-6-0T locomotives were very popular for subsequent use all round the world, so much so that nine more were eventually built new to the same design to satisfy post-war demand.

Fifteen of the ex-War Department locomotives were used for sugar cane haulage in Queensland, and a further one was built new. Initially, in 1920, locomotives were purchased directly from



In September 1917, a group of US troops (part of a regiment raised from the New York, New Haven & Hartford Railroad) gain 'light railway' experience working on Hunslet locomotives in the British sector while waiting for their own equipment to arrive. After hostilities ceased, locomotive 303 (1215 of 1916) was regauged to 2ft and went to Bingera sugar mill, in Queensland. Photo: US Army Signal Corps (NA-111-SC-CN9206)



# 4-6-0 TYPE SIDE TANK ENGINE

Gauge of Railway		• •••	• • •	•••	•••		•••	•••	1 ft. 11§ in. (60 cm.)
Size of Cylinders			•••		•••			• • •	$9\frac{1}{2}$ in. dia. $\times$ 12 in. stroke
Dia. of Coupled		• •••	•••	• • •				• • •	2 ft. 0 in.
,, Bogie Wl						•••	* * *		1 ,, 6¼ ,,
Rigid Wheelbase			•••					•••	5,, 6,
Total Wheelbase	(Engine)		• • •					•••	13 0 ,.
Height from Rail	to Top	of Chimr	ıey	•••					8 ,, 11 <u>1</u> ,,
	•••			•••		•••			6., 3½,,
Heating Surface-	-Small T	ubes		•••		168 se	1. ft. 👘		
,,	Firebox			•••	•••	37	12		
		Total	•••	•••	•••	205		• • •	205 sq. ft.
Grate Area					•••	•••	•••	•••	3.95 ,,
Working Pressure			•••	• • •					160 lbs. per sq. in.
Tank Capacity			•••	•••		•••	***	•••	375 gallons
Fuel Space (Coal)	• ••								15 cwts.
Weight Empty (I	Engine)	•••	•••					•••	10 tons 18 cwts.
,, in Workin	g Order	(Engine)	•••	• • •					14 ,, 1 ,,
Total Weight on	Coupled	Wheels	•••	•••	•••	• • •		•••	10 ,, 10 ,.
Maximum Axle I									3 ,, 10 ,,
Tractive Effort a	t 75 per	cent. of	Boiler	Pressu	re				5415 lbs.
Ratio Adhesive V								•••	4.34
Minimum Radius					with	ease			100 ft.
Weight per Yard			advisab	ole					20 lbs.
Load Engine will	haul on	Level			•••				286 tons
	" up	Incline						••	143 ,,
	•		1 in	50					80

#### The Hunslet Engine Co. Ltd catalogue sheet for the 'War Office' class 4-6-0T

the British authorities by the Agent-General for Queensland, but subsequently, the Engineering Supply Company of Australia (ESCA) acted as an agent in obtaining locomotives for the government and for private sugar mill operators. In Queensland, the locomotives tended to go to government-controlled mills or smaller millers at a time when more prosperous operators were purchasing new locomotives.

With their light axle load, the Hunslet locomotives were very suitable for operating on the light and rough tracks then common on many sugar mill systems and most lasted until the 1950s and 1960s. The main requirement for use in Queensland was alteration to 2ft gauge, while in service it was discovered that an extended smokebox enabled the locomotives to operate successfully for longer distances between servicing.

Hunslet 306 was reported still in France in September 1923. It was shortly afterwards one of a number purchased for reconditioning by the Hunslet Engine Company from the War Stores Disposal Board. It was rebuilt by the maker in 1924 (order number 41755). Conversion from 600mm to 2ft gauge was effected by moving out the tyres on the wheels and fitting new pattern brake blocks. The locomotive was one of seven sold by Hunslet to ESCA. It was supplied by them in 1924 to the Queensland Government for delivery to their Gin Gin Central Mill, Wallaville, still numbered 306. Over its years in service at Gin Gin Mill, the locomotive acquired an extended smokebox, lost its rear cab sheet, and was fitted with a turbo-generator and electric headlights. The buffer/coupler was turned upside down. Sheet steel motion covers were fitted. It received a new or reconditioned boiler in 1940, from Walkers of Maryborough, and after they had been patched up repeatedly, new side tanks were eventually fitted. Its appearance was not improved by the various steam outlets fitted to the dome. The locomotive was painted a shade of mid green with red edging to the running board and red builder's plates, and continued in service up to the mid 1960s.

Although the mill came into the hands of its cane suppliers in 1927, it never prospered, and the Hunslet remained the youngest of a number of mostly second-hand steam locomotives that lingered on into the 1950s and 60s. Eventually financial problems became terminal and led to the mill being taken over by Gibson & Howes, proprietors of the neighbouring Bingera Mill, in late 1965. Following the end of the 1966 season, the new owners withdrew the Hunslet from service. It was sold to a scrap merchant in the Brisbane suburb of Albion in 1967, and it was there that the young Mark Whitmore first saw it.

All was not lost, however, for the locomotive was purchased from the scrap man by Charlie McClelland, a Victorian resident of Frankston. Charlie had the locomotive transported to a wooded acreage block east of Frankston where a short railway line was built and a wooden carriage was constructed. Here in this somewhat secret location he was known to steam the locomotive and run it for the entertainment of friends. It seems the injectors had been removed or stolen before Charlie bought the Hunslet. As a result, the boiler was filled with a hose pipe. Once steam was raised, the fun lasted until the water level came close to the bottom nut, at which point the fire was dropped!

The locomotive was advertised for sale by tender in early 1994 and was subsequently purchased by David Revell, a cotton farmer and machinery enthusiast at Wee Waa in northern New South Wales, where it was stored in a roomy machinery shed on his property.

#### To the Memorial and refurbishment

The Memorial had, for many years, been anxious to acquire a First World War steam locomotive to complement the wheeled and horse-drawn transport collection, and complete the suite of First World War transport used by Australian forces. From time to time, discussions had been held with various Hunslet owners, but all were, at that stage, unwilling to part with their 'pride and joy' or the locomotive in question was unsuitable for the collection.

In 2001, David Revell made it known to the Memorial that he was willing to part with Hunslet 306 and, following mutually satisfactory negotiations, the Hunslet was purchased by the Memorial in late October. It was moved on 6 December 2001 to the Memorial's workshop facility in the Canberra suburb of Mitchell.

An inspection was then carried out in order to ascertain what works, in general, would be required to bring it to display standard in the first instance and, sometime down the track, to steaming standard. The display standard required bringing the locomotive back to the same appearance as it was during 1918, and the possibility of future steaming dictated that any work that was carried out needed to be of a functional rather than purely cosmetic nature.

Obviously, during the intervening years, there had been some major changes to the locomotive, firstly during its post-First World War refurbishment by the Hunslet Engine Company, and subsequently during its long life in the Queensland sugar industry.

The most obvious item visually was the smoke box and smoke box door. An extended smoke box had been fitted and the smoke box door had been modified while in service on the cane fields. Although the mounting ring and door were original items, the method of closing and sealing had been changed to external bolts with small steel tags at locations around the perimeter of the door. The internal locking bar and brackets had been removed, and the locking handles on the front of the door had also been discarded. A steel bolt and washers had been used to plug up the central hole, while a sheet of steel chequer plate had been used to reinforce the internal face of the original door.



Number 306 in service at the Gin Gin Sugar Mill in Queensland during August 1958

Photo: courtesy JW Knowles Collection LIGHT RAILWAYS 175 JANUARY 2004



Number 306, in its final form, set aside at the mill in February 1967.

The sheet steel steam dome cover had also suffered greatly over the years, and was in very poor condition. It had been modified with an additional outlet hole at the front, enlarged holes in the top and was corroded through in various places.

The side water tanks had been roughly replaced at some stage, with tanks that were of all-welded construction and only vaguely similar to the original tank dimensions. These had been joined to the lower frame using three external steel tags and bolts, and welded at various points onto the cabin and lower frame. Fitting the tanks had obviously been problematic, with the result that the lower plate that formed the floor of the original tank, together with the mounting brackets, had been roughly cut to accommodate the replacements. These original parts were also very badly corroded.

The sheet steel cladding plates over the boiler, and their locking rings, were in poor condition but appeared recoverable. The light sheet steel cylinder top covers were missing, as were the spring loaded brass covers on many of the lubricators.

The locomotive's cabin was missing the entire back panel, complete with two window assemblies, and the roof had been buckled downwards through the lack of any support across the rear. Fortunately, a set of rear panel brass window assemblies which had the external guard bars had been fitted to the front panel at some stage. Although these were missing some components such as a few of the guard bars and a latch assembly, they still provided a pattern for the front panel window assemblies, which were originally fitted without guard bars.

Missing from the cabin were the sight level glasses and the injectors. There was a non-original steam pressure gauge present in the cabin, along with an array of electrical cable and light fittings that had been fitted during the course of the locomotive's time in Queensland.

Also of note was the absence of one of the locomotive number plates, and the builder's plates were the Hunslet Engine Company's 1924 refurbishment plates rather than the originals. These would need to be replaced with accurate replicas.

Many problems that were not previously evident became

Photo: Jim Longworth Collection

apparent during disassembly. The front bogie spring assemblies had a number of broken leaves, with the eyes having broken off. Upon disassembly, the generally poor state of all the springs became apparent. It appeared that many of the spring leaves had been replaced at one time or another, with some very agricultural work done to slot out the spring ends. The four assemblies would require replacement with accurate replicas of the original spring leaves.

Once the front bogie was disconnected from the main frame, another major problem became evident. The vertical pin that connected the bogie to the main frame, and upon which the assembly pivoted, was roughly sheared off near the base. The only thing holding the front bogie to the locomotive was the roughness of the break, and the weight of the locomotive! The assembly was also missing the bronze thrust washers.



The original builder's plates had been replaced during the 1924 refurbishment, so authentic replicas based upon original drawings provided by the Armley Mills Museum were manufactured in cast iron. Photo: Australian War Memorial

Of major concern was the state of the main frame. Parts of this were badly wasted away due to corrosion, with the right longitudinal member having been roughly reinforced by welding. Various holes had also been cut in the cross members, and the two longitudinal members were no longer quite parallel. Of most concern was the distinct outward 'lean' of the right member. This not only had structural implications, but affected the mounting of the right side water tank as well, as the bearers bolted to the side of the frame adopted the same outward lean.

Over all of these problems and deficiencies were several coats of light green or red enamel paint, while the interior of the firebox contained its fair share of clinker, soot and ash deposits. These had absorbed moisture during the years the locomotive had been idle and had exacerbated the surface corrosion.

There were two very fortunate factors that contributed to the refurbishment from the early stages: the availability of original Hunslet Engine Company plans from the Armley Mills Museum, Leeds, in the United Kingdom, and the assistance of Ken Ainsworth of Ainsworth Engineering. Armley Mills provided the Memorial with copies of many detailed plans and Ken Ainsworth provided his enthusiasm for steam locomotives and his company's heavy engineering expertise. Ken was willing to provide technical advice and his company was able to tackle most of the more difficult contracting tasks.

While much of the stripping, repair and fitting out work was handled within the Memorial's workshop, a number of the larger tasks were contracted to experienced companies. The contracted works are detailed in Table 1. Work on the frame and fittings proceeded within the Memorial while the contractors undertook these major tasks. By careful coordination, contracted items generally arrived at the Memorial's workshop when they were required for installation. There were exceptions of course, but rearrangement of the schedule resulted in minimal overall disruption to the project. and straightening the frame, repairing the front bogie pivot and replacing the spring assemblies. Once the boiler was returned with its new smoke box and the door refurbished to the original specification, it was descaled and the rust neutralised before reinstallation. Next came the reinstallation of the refurbished boiler cladding and funnel. A delay in the delivery of the water tanks caused considerable rescheduling of works, but once they arrived and were installed, the cabin assembly was refitted, along with the replacement rear panel. Bolts with the correct head were unobtainable, so the Memorial workshop devised a method of heating and reforming the heads of hexagonal head bolts to conform closely to the originals.

While reassembly has progressed well, there are still deficiencies. Injectors of the correct type have proved impossible to locate. To overcome the obvious gap, short pieces of tube and steam valves were used to connect the piping together and at least make it look complete to the untrained eye while injectors are located.

The finished Hunslet, resplendent in its satin finish black livery and complete with number and makers plates, looks very much as it did during its service in France during the First World War.

In late February 2004, it will emerge again in the Memorial's ANZAC Hall, alongside horse-drawn wagons and motor vehicles, to represent the key role of light railways in the transportation networks of the First World War – the logistical support that allowed the allies to maintain their momentum when they finally shattered the German lines in August 1918. It will be the only restored Hunslet from the First World War light railways on public display.

Footnote: The Memorial collection also includes a 1:5 scale model of a narrow gauge Barclay shunting engine, a 1:12 scale model of a standard gauge War Department locomotive and a model of a recovery crane.

Task	Contracted Company
Manufacture and fit replacement smoke box Refurbish smoke box door to original standard, including replication of closure system	K&H Ainsworth Engineering, Taralga and Queanbeyan, NSW
Manufacture replica Makers Plates to original drawings Manufacture replica number plate	K&H Ainsworth Engineering, Taralga and Queanbeyan, NSW
Manufacture cabin rear panel to original drawing	K&H Ainsworth Engineering, Taralga and Queanbeyan, NSW
Manufacture replica set of locomotive tools to original drawings	K&H Ainsworth Engineering, Taralga and Queanbeyan, NSW
Manufacture replica window assemblies, latches, hinges and additional guard bars.	K&H Ainsworth Engineering, Taralga and Queanbeyan, NSW
Manufacture replica water tanks	Nepean Engineering, Narellan NSW
Manufacture replica steam dome cover	Historic and Vintage Restorations, Blackburn, Victoria
Manufacture front bogie spring sets	Illawarra Springs, Port Kembla NSW
Engineering drawings of water tanks, based upon original drawings and observations of surviving tanks in Queensland.	Special Engineering Services, Culcairn NSW

Table 1: Major Contracts

In general terms, the process followed was to gradually strip the locomotive down to the frame and boiler assemblies, clean and straighten the parts, then gradually reassemble. The sequence of assembly required certain reproduction parts to become available at specific times, so in parallel with the actual work on the locomotive there was continual contract coordination and liaison. While the boiler assembly was at K&H Ainsworth Engineering, work proceeded on cleaning

#### The Authors

Mark Whitmore is the Director of Collections at the Imperial War Museum, UK, and former Assistant Director of National Collections at the Australian War Memorial.

John Browning is a railway enthusiast and researcher from Queensland.

Mike Cecil is Senior Curator of Military Technology, Australian War Memorial, and managed the Hunslet restoration work





It was indeed a great thrill to be invited by Charlie McClelland to see his Hunslet in action at Cranbourne South on 30 January 1982. Here on a bushland property, he had laid a section of straight track on which 306 could haul a charming timber clerestory bogie carriage. "MLR" (for McClelland Light Railway) and the main line lamps were a small indulgence for the man who had saved this very special locomotive from the scrapper's torch. Photo: John Browning  $\Box$  The reproduction brass window assemblies turned out to be far too 'brassy' for authenticity, so they were chemically 'aged' to match the original examples.  $\Box$  Hunslet 306 as it appeared during the final stages of the restoration. Photos: Australian War Memorial



LIGHT RAILWAYS 175 JANUARY 2004

# **Hexham Engineering Pty Ltd**

# by David Love

Hexham Engineering had a long lineage that could be traced back to the 1850s when a series of buildings were constructed on land adjacent to the Hunter River in New South Wales to carry out the assembly of J&A Brown's first two steam locomotives and a fleet of coal wagons that had arrived by ship. The premises formed part of Brown's well known colliery operations and carried out much repair work in the Hunter Valley area. The workshops really began to expand in the 1910-20 period when a power station and foundry were built and the fitting and machine shops were extended. This development was mainly due to the lack of space at the main workshops at Minmi and the fact that Hexham was a more central location for the rest of J&A Brown's empire. After the death of John Brown in 1930, the formerly private J&A Brown partnership was merged with the limited liability company Abermain Seaham Collieries Ltd, creating a new company called J&A Brown and Abermain Seaham Collieries Ltd (JABAS). The activities of the new company were consolidated over a period of time and, in January 1931, Hexham became the engineering and mining headquarters.

As well as carrying out major repair work on many items of mining equipment for the various JABAS collieries, Hexham workshops supplied them with new skips and coal screens. It also designed the pit top facilities at many of the company's existing and new mines from this period onwards. Based on information in the drawing office register and index cards, and an article in the 1 August 1947 issue of *Australian Coal, Shipping, Steel and The Harbour*, it has been established that during World War II the workshops built eight 4-wheel battery electric locomotives for use in the company's mines.

The Hexham battery locomotives were closely based on American products of the Jeffrey Manufacturing Company, of Columbus, Ohio. According to the drawing register and several sketches it would appear that they were "reverse engineered" by Hexham by means of measuring the components of an existing locomotive. Abermain Seaham (and later JABAS) had been a customer of Jeffrey since 1922 and it is possibly significant that Jeffrey supplied a single 8-ton, 3ft 6ins gauge unit, builder's number 8217, to JABAS in 1941. There is no record of engineering drawings having been traced off the Jeffrey originals, although Hexham's own drawings made reference to the Jeffrey numbers for the relevant parts.

Hexham Workshops was also responsible for carrying out repairs to the company's Richmond Vale Railway locomotives and rolling stock, notably their four ex-Mersey Railway 0-6-4T locomotives and thirteen ex-War Department Great Central Railway 2-8-0s. In 1951 the name Hexham Engineering Pty Ltd was adopted.

In 1960, JABAS merged with Caledonian Collieries Ltd, a mining company with interests in the same region as JABAS. The new firm, Coal and Allied Industries Ltd, built new offices on an adjoining property. At this point, the mining side of the business was moved out of the Hexham Engineering office. The variety of underground rolling stock items manufactured at Hexham at this time included dolly cars (for use on decline haulages) and flat tops for the transport of equipment underground. This sector of activities was expanded in 1985, when Hexham bought the railway manufacturing side of the EM Baldwin business.

EM Baldwin & Sons, the well-known Sydney manufacturer

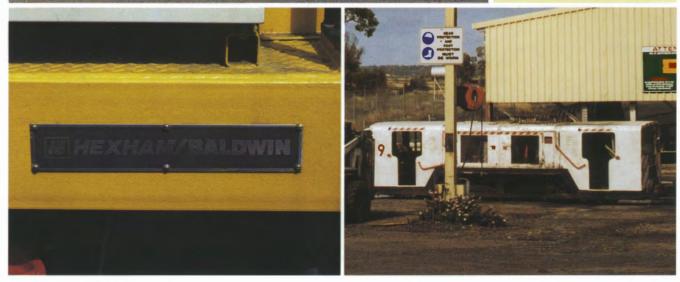


Hexham Engineering HE685 ex works at the manufacturer's premises in 1987 ready for delivery to Cook Colliery in Queensland as DL7. Photo : J Browning collection. Inset: The builder's plate from Hexham Engineering HE685. Photo: D Love





Anti-clockwise, from above: Cook Colliery's DL8, Hexham Engineering HE697 of 1988, outside the colliery workshop, shows the effects of a hard life. The engine covers are open, 14 September 1998. Photo: Ray Graf Hexham Engineering HE663 of 1986 was the first of two 2ft gauge bogie brakewagons for Isis Mill, 17 April 1987. Photo: John Browning The use of the Hexham/Baldwin brand lasted until at least 1986, as can be seen from this plate on HE663. Photo: John Browning 🗖 Cook Colliery's personnel carrier 9, Hexham Engineering HE707 of 1989, awaits on the surface for another turn of duty, 14 September 1998. This unit was not fully assembled when Hexham Engineering closed down, and was subsequently completed by Hawker Noyes in 1990. Photo: Ray Graf



LIGHT RAILWAYS 175 JANUARY 2004

HEXHAM ENGINEERING PTY LTD BUILDER'S LIST Battery locomotives built during Second World War. Diesel units built from 1985 to 1989.							
<u>B/n.</u>	Date	<u>0/n.</u>	<u>Gauge</u>	Туре	Model	Number/name	
J & A Br	own & Abermain	Seaham Col	2'10' lieries Ltd,	4wBE Richmond	(Jeffrey) Main Colliery	, NSW	
J & A Br	own & Abermain	Seaham Col	2'10' lieries Ltd,	4wBE Richmond		, NSW	
J & A Br	own & Abermain	Seaham Col	2'10' lieries Ltd,	4wBE Richmond	(Jeffrey) Main Colliery	, NSW	
J & A Br	own & Abermain	Seaham Col	? lieries Ltd,	4wBE NSW	(Jeffrey)		
J & A Br	own & Abermain	Seaham Col	? lieries Ltd,	4wBE NSW	(Jeffrey)		
J & A Br	own & Abermain	Seaham Col	? lieries Ltd,	4wBE NSW	(Jeffrey)		
J & A Br	own & Abermain	Seaham Col	? lieries Ltd,	4wBE NSW	(Jeffrey)		
J & A Br	own & Abermain	Seaham Col	? lieries Ltd,	4wBE NSW	(Jeffrey)		
HE654 Elcom Co	ollieries Pty.td., N	10001 ewvale No.1	1067mm Colliery, N	4wDH SW	DH25M Mk5	70	
HE655 Elcom Co	ollieries Pty. Ltd.,	10002 Newvale No	1067mm .1 Colliery,	4wDH NSW	DH25M Mk5	69	
HE656 Elcom Co	ollieries Pty. Ltd.,	10003 Newvale No	1067mm .1 Colliery,	4wDH NSW	DH25M Mk5	68	
HE657 Australia	n Iron & Steel Pt	10004 y. Ltd., Corde	1067mm aux Collie	4wDH y, NSW	DH25M Mk5	AIS23	
HE658 Australia	n Iron & Steel Pt	10005 y. Ltd., Corde	1067mm aux Colliei	4wDH ry, NSW	DH25M Mk5	AIS24	
	Colliery Pty. Ltd. al Pty Ltd, Angus				DH25M Mk5	DL2	
HE660 Coal & A	llied Industries Lt	10031 d., Liddell Co	1067mm olliery, NSV	4wDHR V	15DH MkV	2637 YVONNE	
HE661 Coal & A	llied Industries Lt	10032 :d., Liddell Co	1067mm olliery, NSV	4wDHR V	15DH MkV	2638 JUDY	
HE677 Coal & A	llied Industries Lt	10200 :d., Wallarah	1067mm Colliery, N	4wDHR SW	15DH MkV	2640	
HE678 Coal & A	llied Industries Lt	10224 :d., Chain Val	1067mm ley Collier	4wBER /, NSW	17BE	2761	
HE679 Coal & A	llied Industries Lt	10237 :d., Chain Val	1067mm ley Colliery	4wBER /, NSW	17BE	2762	
HE680 Coal & A	llied Industries Lt	10250 d., Chain Val	1067mm ley Colliery	4wBER /, NSW	17BE	2763	
HE685 Coal Res	1987 ources of Queens	10271-11-87 sland Pty. Lto		4wDH lliery, Q.	DH25M Mk5	DL7	
HE688 Coal & A	llied Industries Lt	10092 :d., Liddell Co	1067mm olliery, NSV	4wDHR V	15DH MkV	2639 ABBEY	
HE689 Coal & A	llied Industries Lt	10278 d., Liddell Co	1067mm olliery, NSV	4wDHR V	15DH MkV	CHRIS	
HE690 Newcom	1988 Colliery Pty. Ltd.,	10306 Cooranbong	1067mm Colliery, 1	4wDH NSW	DH25M Mk5	DL3	
HE697 Coal Res	1988 ources of Queens	10404-05-88 sland Pty. Lto		4wDH lliery, Q.	DH25M Mk5	DL8	
remained	1989 by Coal & Allied I I with Coal & Allie ources of Queens	ed Industries	l. for Lidde Ltd. on clo	osure of He	exham Engine		
HE707	1989	non elecure	1067mm	4wDHR	16MPC Mk1		
transferre	ially assembled u ed for completion ources of Queens	to Hawker I	Voyes Pty.	Ltd., Cardif	f, NSW, 1990	9	

of industrial locomotives and personnel carriers, had been forced into receivership in 1985. Hexham bought the Baldwin manufacturing rights from the receiver, as a result of which Frank and Maurice Baldwin agreed to engage only in locomotive repair work, although it is understood that following the demise of Hexham they produced a few small locomotives and some brake wagons through an associated manufacturing company. Hexham had high hopes of its new enterprise and fully anticipated taking the lead in the market as the sole Australian manufacturer able to provide a full range of rolling stock for underground mines and by further developing Baldwin's traditional markets particularly in the sugar industry. There was also confidence that other opportunities could be found in the tourism and civil engineering fields. Initially products carried the Hexham/Baldwin identity as part of the takeover of the rights.

As events transpired, fate was against Hexham and the period during which it built locomotives turned out to be very short indeed. On 20 October 1989 it closed its doors because of the depressed state of the coal industry, which had led to losses amounting to \$6 million in two years. The result was that 190 employees were laid off and Coal and Allied was left with substantial losses and \$15 million of heavy engineering equipment and capital investments to sell off. Certain assets were acquired on 30 June 1990 by Westfalia Pty Ltd (later Westfalia Becorit / Mine Technik Australia) which also subsequently produced a few locomotives.

Between 1985 and 1989, Hexham constructed ten diesel locomotives, together with nine diesel and battery personnel carriers (the last was completed by Hawker Noyes Pty Ltd of Cardiff, NSW). All the locomotives were 4-wheel 1067mm gauge diesel hydraulics of the same design (Model DH25M MK5) which went to the coal industry in New South Wales and Queensland. These were 25 tonne flameproofed locomotives with Caterpillar 3360 PCTA engines.

The company had no luck in selling locomotives to the sugar industry as had been hoped, because the period in question coincided with a severe economic downturn for sugar during which no new locomotives were ordered. Probably if Hexham had survived another 18 months or so, circumstances would have been different.

There was some success with the sugar industry, as two 610mm gauge bogie brake wagons were supplied for Isis Mill in Queensland in 1986-7. Other items of rolling stock were produced during this period for the coal industry, including a dolly car and two 40-tonne transporter wagons.

In January 2002, by courtesy of Dave Gadsby, the Maintenance Manager of Cook Resource Mining at Cook Colliery near Blackwater in Queensland, I was able to retrieve a builder's plate from Hexham Engineering locomotive serial number HE685 of 1987. Subsequent research into the origins of this locomotive resulted in this article. This machine went new to Coal Resources of Queensland Pty Ltd at Cook Colliery, which became Oakbridge Ltd in 1993 and then Cook Resource Mining Pty Ltd by 1994. The locomotive was numbered DL7 and was the first of three such machines acquired by the company. By 1999 HE685 was out of use with mechanical problems to its final drive, a problem which may have gone back to its manufacturing, as we will see later. Incidentally, the letters HE in the serial number refer to Hexham Engineering and not The Hunslet Engine Company.

Jeff Mullier was employed by Hexham Engineering as a mechanical engineering certificate trainee from late January 1987 until the firm's closure, when he transferred to A Goninan and Co. Nearly eighteen months of his time at Hexham was spent in the drawing office working mostly on the locomotives and personnel carriers, and where he was able to spend his spare moments digging through the old J& A Brown drawings. Jeff provided a considerable amount of historical information for this article and was able to enlighten me further about the final drive problem that beset HE685 and its kin.

Jeff recalls that the final drives on the first two Cook Colliery locomotives caused problems during their assembly. He remembers them sitting on stands basically in a completed state while final drive problems were being addressed. The problems were eventually put down to an accumulation of tolerances in machining done by outside contractors. Some time after the locomotives left Hexham, an axle assembly complete with gearbox off one of these locos came back for repairs as the axle had sheared right through between the wheel seat and the gearbox. This was due to an unrelated problem and was the source of much discussion between Cook Colliery and Hexham Engineering over the possible causes of the axle breaking. Dismantling the wheelset was one of the last jobs Jeff did on the shop floor before going into the drawing office. The true cause of the breakage was never fully determined, but problems with the axle design were ruled out as the cause.

Soon after arriving in the drawing office, one of the jobs Jeff undertook was redrawing the final drive gearbox arrangement drawings. Several component drawings for these gearboxes were also redrawn to address the tolerance problem. This was to rectify the difficulties before work started on HE702 SUNNY, a locomotive ordered for Coal & Allied's Liddell Colliery. Jeff believes that the redrawing was successful as there were not anywhere near the delays in completing this locomotive. However, it was not delivered to Liddell because the colliery was sold, and the locomotive spent several months sitting in the new fitting shop, eventually going to Cook Colliery.

It is amazing how an interest in such a humble artifact as a builder's plate can result in so much information coming to light, but surely using them to research history should be one of the joys in collecting such things.

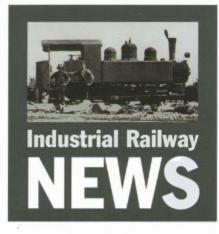
#### Acknowledgements

Dave Gadsby (Cook Colliery) • Jeff Mullier • Craig Wilson • John Browning Special thanks to the editor of the British journal *Industrial Railway Record* (Industrial Railway Society), which recently featured a similar piece on this subject.

**Note:** The author lives in the UK and has collected builders' plates for many years. He would be pleased to hear of any plates available for sale. He can be contacted at 1 St Michael's Walk, Sleaford NG34 8AY, England, or loved90@hotmail.com



An artist's impression of the Hexham Engineering B-BDH 2ft gauge cane locomotive. This unit may well have seen the light of day in 1991 had Hexham still been in business by that time. Photo: J Browning Collection



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Special thanks to contributors to the Locoshed and Cane Trains e-groups http://groups.yahoo.com/group/Locoshed

http://groups.yahoo.com/group/Canetrains

# **NEW SOUTH WALES**

**BLUESCOPE STEEL, Port Kembla** 

(see LR 174 p.18 & 173 p.18)

1435mm gauge

GEC Australia Bo-Bo DE D44 (A.272 of 1975) has had the new company identity added in light blue on white to replace its former "Hawks/Steelers/Wolves" identity. Otherwise the old red livery remains untouched.

Preserved Clyde 0-6-0ST *BRONZEWING* (457 of 1937) has had the motion disassembled for repair work. New piston rods are being made and will be chromed. The existing pistons will be re-used, even though they are slightly out of round. They will be fitted with new oversize rings to compensate as new pistons are too expensive. The crossheads and slides are being re-surfaced and squared by ABB while NSWRTM has been contracted to rebore the cylinders.

Chris Stratton 11/03 &12/03; John Garaty 12/03

#### A.GONINAN LTD, Broadmeadow

(see LR158 p.16)

1435mm gauge

There are some interesting shunting units at work at this facility. One is a Coles bogie diesel rail crane which has had its jib removed and is used as a locomotive. There are also believed to have been two "Trackmobile" rail/road units. One is numbered 75 and was seen shunting an NR class locomotive on 2 December, but it is unclear if this is the larger or smaller one previously reported. Duncan Butcher 11/03

#### SILVERTON RAIL, Broken Hill

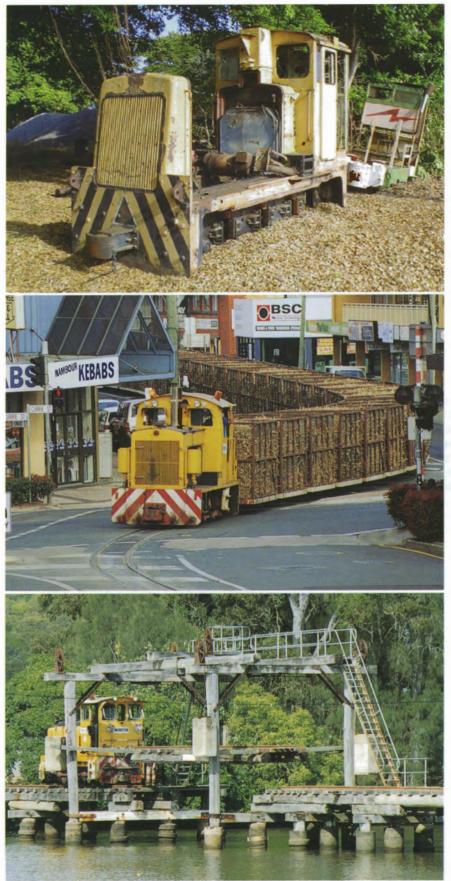
(see LR 171 p.18)

1435mm gauge

In spite of its major main line stakeholding, this company still works its traditional mineral traffic within the Broken Hill mining area. Noted hauling



**Top:** "Trackmobile" number 75 shunting at Goninan's Broadmeadow plant on 2 December 2003. It seems that this standard gauge road-rail unit was manufactured in the USA by Whiting Corporation. Photo: Duncan Butcher **Centre:** This bogie "locomotive" shunting unit at Goninan's, Broadmeadow, was originally a Coles diesel rail crane, November 2003. Further details of its history would be welcome. Photo: Duncan Butcher **Above:** This historic 2ft gauge locomotive is Bundaberg Foundry 6wDM 10 of 1953, the first Australian-built canefields diesel locomotive, originally supplied to North Eton Mill. It is pictured here on 8 November shortly before the Mackay Sugar auction. Purchased by Tom Badger, it is now at the Mackay Heritage Railway site, Mackay Harbour. Photo: John Browning



**Top:** The sad remains of Clyde 0-6-0DH IONA (DHI.2 of 1954) at Macknade Mill in December 2003. Behind it is the wreck of Motor Rail 4wDM 11255 of 1964. Photo: Chris Hart. **Centre:** On 29 November 2003, five days before the closure of Moreton Mill's tramway system, Com-Eng 0-6-0DH DUNETHIN (H1022 of 1958) makes a rare appearance as it snakes through the intersection of Howard, Currie and Mill Streets Nambour, bringing two loads of cane to the mill. Photo: Terry Olsson. **Above:** On the last day of cane haulage to Moreton Mill, 3 December 2003, Clyde 0-6-0DH MORETON (63-289 of 1963) waits for its crew to lower the centre span of the Maroochy River lifting bridge. Photo: Brian Webber

# Industrial NEWS Railway

ore from the North Broken Hill line in late November was Goodwin Co-Co DE 44s1 (G-3388-04 of 1965) in tandem with Goodwin Co-Co DE 29 (83827 of 1961). Dick Holland 11/03

#### THIESS HOCHTIEF JOINT VENTURE, Parramatta Rail Link

It is understood that spoil removal from this project will be by conveyor, not narrow gauge rail. Michael Bickford, 12/03

#### VARLEY ENGINEERING, Port Kembla

1435mm gauge

4wDH X101 (built NSWGR Chullora 1967) is reportedly on lease from CRT Bulk Haulage to this company. MotivePOWER 31

# QUEENSLAND

#### BUNDABERG SUGAR LTD,

Bundaberg district mills (see LR 171 p.19 & 174 p.19)

610mm gauge

Following the end of the crushing season, the locomotive maintenance program commenced. The bogies from **Millaquin** Mill's EM Baldwin B-B DH locomotives *CALAVOS* (4983.1 7.73 of 1973), *VULCAN* (5317.1 11.73 of 1973) and *BUCCA* (6104.1 8.75 of 1975) were removed and sent to **Bingera** Mill for attention in early November. **Fairymead** Mill's EM Baldwin B-B DH locomotives 80 MIARA (8988.1 6.80 of 1980), 82 *FAIRYDALE* (10048.1 6.82 of 1982) and Bundaberg Foundry Engineers B-B DH 91 *BOOYAN* (001 of 1991) were taken over to Bingera on 1 November.

On 11 December, EM Baldwin B-B DH *COOLUM* (5565.1 10.74 of 1974) was unloaded at Bingera Mill after being transported from Moreton Mill. It is suggested that it may be allocated to Fairymead for the run to Moorlands.

Bingera Mill's EM Baldwin B-B DH *GIVELDA* (5800.2 6.75 of 1975) is receiving further repairs after the massive accident at Bungadoo loop in October. EM Baldwin 0-6-0DH 70 (3406.1 7.70 of 1970) was noted in the workshop at Bingera at the end of October and is receiving attention to return it to service. Work will include remoying the batwing engine compartment doors and extensive strengthening of the mainframe as the result of cracking.

Work to enlarge the empty yard at Bingera Mill is expected this slack season. The full yard also needs extending.

Lincoln Driver 11/03

#### BUNDABERG SUGAR LTD, Moreton Mill

(see LR 174 p.20) 610mm gauge

Train operations on the cane railway continued following the pattern established through the season up until the last haulage of cane on

### LAST CANE TRAIN AT MORETON SUGAR MILL

#### by Brian Webber

Moreton Mill was the most southerly with a railway system still operating. It had been purchased from local interests by Howard Smith in 1976. Bundaberg Sugar acquired it in 1988 and in 1991 sold out to an English sugar company Tate & Lyle. In 2000, they in turn sold their Australian milling interests to Belgian company FinaSucre, who have sugar properties in several countries including in Africa. As at several other mills, investment in the rail system was in recent years reduced to the minimum. Moreton Mill had a very interesting fleet of older locomotives where each was different from any other. Unusually only one, *COOLUM* (EM Baldwin 5565.1 10.74), was a bogie locomotive.

Not something one would expect to see in this regulated industrial world was the street running between Howard Street yard at the east end of the town and the mill. Loaded trains were worked up the hill with a loco on each end to protect against a runaway by unbraked rolling stock. To see *COOLUM* dash from Howard Street yard to catch up with the departing train was a reminder of an earlier era. Photographing a train crossing the ancient lifting bridge over the Maroochy River was probably the aim of every enthusiast who visited the mill. There were two major river crossings, the somewhat primitive lifting span on the line to Coolum or Valdora and the road-rail David Low bridge on the major coastal road route, on the Punt line.

It turned out that Wednesday 3 December was to be the last day for the 2003 crushing season with all four locomotives that had operated regularly that season running on the final day. Before dark, the loco crews lined up the fleet for photographers, including Com-Eng 0-6-0DH JAMAICA (B1112 of 1956) and DUNETHIN (A1922 of 1958) the two locomotives that had not generally been used in 2003. The final run was to be special with two large signs attached to the last bin.

To enable the crews of all four locomotives to be part of the final run, they assembled at Howard Street, in the dark with headlights and amber flashing warning lights on, providing an emotive scene in the drizzling rain falling that night.

For a last time, just before 9.45pm, EM Baldwin 0-6-0DH *BLI-BLI* (6/1257.1 7.65 of 1965) led a loaded cane rake into Howard Street with *COOLUM* banking and Clyde 0-6-0DH *MORETON* (63-289 of 1963) and EM Baldwin 0-6-0DH *PETRIE* (2300.1 6.68 of 1968) just metres behind. The locomotive horns were blown continuously so no one in Nambour was in any doubt that an era ended as the train entered the mill yard. *Special thanks to the mill staff who allowed enthusiasts to record a day that was sad for them and their workplace.* 



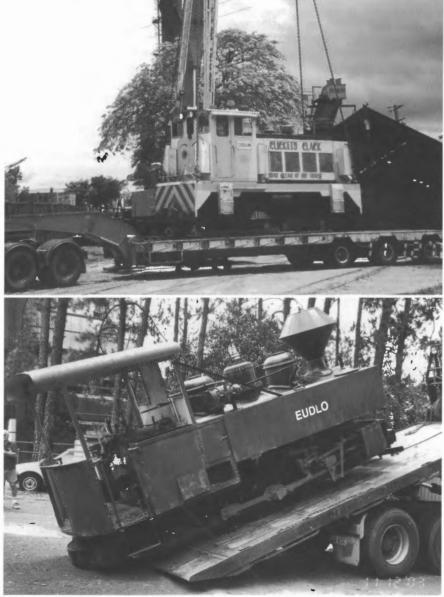


**Clockwise from top:** On Wednesday 3 December 2003, the final day of cane haulage, Clyde 0-6-0DH MORETON (63-289 of 1963) is at the head of the last loaded cane train to cross the Maroochy River Bridge. The assistant waits on the landing to wind up the bridge's lift span after the train has crossed. Photo: Terry Olsson On the same day, loco crews pose in the mill yard, flanked by 0-6-0DH BLI BLI (EM Baldwin 6/1257.1 7.65 of 1965), B-B DH COOLUM (EM Baldwin 5565.1 10.74) and 4wDM JOE (Malcolm Moore 811 of 1942). Photo: Brian Webber O That evening, just before 10pm, the last bin of the last loaded cane train travels up Howard Street, Nambour, banked by COOLUM. Photo: Terry Olsson O 0125 September 2003, ten weeks before closure, EM Baldwin 0-6-0DH PETRIE (2300.1 6.68 of 1968) rolls a train of empties headed for the Punt line off the road-rail David Low Bridge at Bli Bli. Photo: Brad Peadon

Wednesday 3 December. During the day, a photographic line-up of locomotives was organised in the mill yard. It appears that Clyde 0-6-0DH *MORETON* (63-289 of 1963) was responsible for hauling the last cane from the main line into Howard Street Yard, at about 6pm, with two shuttle trips to the mill following.

The working locomotives then assembled at Howard Street Yard for the very last run, with the train of 27 full bins arriving at the mill at about 9.45pm in light rain. It was hauled by EM Baldwin 0-6-0DH *BLI-BLI* (6/1257.1 7.65 of 1965) with EM Baldwin B-B DH *COOLUM* (5565.1 10.74 of 1974) banking in the rear. Making up the remainder of the cavalcade were *MORETON* and EM Baldwin 0-6-0DH *PETRIE* (2300.1 6.68 of 1968), travelling closely behind as separate light engines. The noise from the combined horns was deafening as the train made its way up through the town to the mill. The noise brought people to their doors to witness history in the making. At 10.10pm, *COOLUM* departed the mill with the very last rake of empty bins to be taken back from the mill weighbridge to Howard Street yard. At 11pm *MORETON* departed the mill light engine to collect empties from sidings out on the line. These were all to be brought back to mill property including Mill Farm, Howard Street Yard and the mill.

The last bin, number 765, was tipped at 1.38am carrying a sign reading *ITS ALL OVER*. At this time all the steam whistles at the mill were blown. Track removal operations commenced at Jamaica on the following day. By Monday 8 December, a work train with *PETRIE*, EM Baldwin 0-4-0DH *MAROOCHY* (6/1064.1 11.64 of 1964), and Malcolm Moore 4wDM *JIMPY* (1051 of 1943) was in attendance. At the end of the first week, the sidings at Jamaica were the only track lifted. The rails were stacked for collection by road transport together with five sets of points complete with sleepers. The removal of the mill and cane railway is expected to take 12 months to complete.



MORETON DEPARTURES: **Top:** On 10 December EM Baldwin B-B DH COOLUM (5565.1 10.74 of 1974) is lifted onto a low loader for transport to Bingera Mill, at Bundaberg **Above:** On the same day, John Fowler 0-6-0T EUDLO (16207 of 1925) is unloaded at the Nambour & District Historical Museum, following a very short journey from the mill yard. Photos: Clive Plater

LIGHT RAILWAYS 175 JANUARY 2004

# Industrial Railway

The first working locomotive to be removed was *COOLUM*, loaded for transport to Bingera Mill on 10 December, and it was forecast that the other locomotives not required for track removal would follow. All 60lb rail and usable bins were also to go to Bundaberg for distribution to other mills. As few as 500 bins were seen as suitable for dismantling for transport, with the majority being in poor condition through corrosion and likely to be scrapped.

Also on 10 December the preserved John Fowler 0-6-0T *EUDL0* (16207 of 1925) and Malcolm Moore 4wPM *SANDY* (1058 of 1943) were moved to the Nambour & District Historical Museum between Mitchell and Bury Street, adjacent to the mill (information Clive Plater (07) 5445 0054).

Shane Ferris 12/03; Ron Aubrey 12/03; Dave Kirkland 12/03; Carl Millington 12/03; Peter Newett 12/03; Lincoln Driver 12/03; Clive Plater 12/03; *Courier-Mail* 2/12/03 & *Sunshine Coast Daily* 4/12/03 & 5/12/03 via Brad Peadon

#### **CSR LTD, Herbert River Mills**

(see LR 174 p.21)

610mm gauge

Following the end of crushing, Victoria Mill's Walkers B-B DH *CAIRNS* (681 of 1972 rebuilt Bundaberg Foundry 1997) undertook remote control equipment trials during the week commencing 24 November. This involved four days of sugar box haulage between Victoria Mill and Lucinda, and one day with cane bins between Victoria Mill and Hamleigh.

Dismantled Clyde 0-6-0DH *IONA* (DHI.2 of 1954) at Macknade Mill had its wheelsets removed for further use early in December.

A number of 0-6-0DH locomotives were sent from Victoria Mill to Macknade Mill in December for maintenance work. These were Clydes *INGHAM* (64-382 of 1962) & *CANBERRA* (65-433 of 1965) and EM Baldwin *HOBART* (4413.1 7.72 of 1972).

Victoria Mill's preserved Hudswell Clarke 0-6-0 HOMEBUSH (1067 of 1914) operated on Saturday 13 December for the mill's Social Club Christmas Party.

Chris Hart 12/03; Steven Allan 12/03

#### HAUGHTON SUGAR CO PTY LTD, Invicta Mill, Giru

(see LR 171 p.20)

610mm gauge

On 18 November, with only four days left before the end of crushing, a dramatic accident took place when a train of 160 full bins derailed as it was crossing the Landers Creek Bridge. At least 60 bins crashed down into the creek bed with 40 written off, although the locomotive was fortunately not derailed. The modern concrete bridge, which is fully ballasted, is 13 metres high and 195 metres long (see front cover photo). 50 metres of track was ripped up on the bridge and many of the concrete side sills that

# Industrial NEWS Railway

retain the ballast were badly damaged. Landers Creek is about 60 kilometres from the mill and in spite of the damage it was possible to reopen the line through to the remaining 45 kilometre section to Dalbeg on 20 November.

Peter Murray 11/03; *Ayr Advocate* 21/11/03 via Bill Kerr

#### MACKAY SUGAR CO-OPERATIVE ASSOCIATION LTD

(see LR 174 p.21)

610mm gauge

The scheduled auction went ahead on 20 November, with only a moderate level of interest from prospective purchasers. EM Baldwin 4wDM ALLANDALE (4-473-1-3-63 of 1963) was withdrawn from sale. One locomotive that was added to the original sale list, Marian Mill's EM Baldwin 4wDH 10 (4529.3 11.72 of 1972 rebuilt 8860.1 8.79 of 1979), attracted a fair bit of interest and was sold to an unknown buyer for \$10,000, possibly for its engine. Other purchasers were: Hunslet 0-4-2T 1026 of 1910 -Peter Ford (Mackay); Bundaberg Foundry 6wDM 6 (B'berg Foundry 10 of 1953) - Tom Badger (Proserpine); Motor Rail 4wDM 01 L'IL TOOT (21575 of 1956) - Russell Savage (Cooroy); Pacific Construction 2-2wPMR BUMBLE BEE (1046 of 1976) - Mark Swaby; EM Baldwin 4wDH BALD1 LEO (6/2612.1.10.68 of 1968) -Kenneth Petts (Walkerston); EM Baldwin 4wDH BALD2 ROAD RUNNER (6/2612.2-11.68 of 1968) - unknown buyer; Motor Rail 4wDM 02 BARNEY BULL & PHAR LAP (9861 of 1953 and 21623 of 1957), Plasser tamping machine 90 of 1975 and Plasser track jacks 226 of 1980 and 229 of 1981 - Zebra Truck Wrecking (Gracemere). Other surplus material noted on site shortly before the auction included dismantled Com-Eng 0-6-0DM ASHBURTON (A1614 of 1956) with two brake wagons, a Clyde built in 1976 and EM Baldwin 7901.1 6.78 of 1978, all from Farleigh Mill. It is reported that these were not auctioned because they might be needed for use as brake wagons in the future. Also derelict on site were Tamper tamping machine TAMPER (4375515 of 1975) and Motor Rail 4wDM 9577 of 1951. Following the auction, it is reported that two more Com-Eng locomotives were towed to North Eton from Farleigh Mill.

The old QR steel bridge spans that had been stored in the Farleigh Mill yard for many years were also offered at the auction. Shortly afterwards they were chopped up for scrap by Transfield.

**Racecourse** Mill's Motor Rail 4wDM 21622 of 1958 was acquired by Peter McFarlane for his Sugarbowl Museum, Septimus, during the early part of 2003 after lying derelict for at least thirteen years.

Late in October, trials were held running 160 full bins up the steep Church Hill between Pleystowe and Farleigh mills, using three Walkers B-B DH locomotives and two brake wagons. David Phillips 11/03 & 12/03; Editor 11/03; Frank Pini 11/03; Shane Yore 11/03; Tony Wells 11/03; Rob Stanier 11/03; Tom Badger 11/03; Peter Ford 12/03; Wayne Barnicoat 12/03; Kenneth Petts 12/03

#### MT ISA MINES LTD

(see LR 168 p.22) 1067mm gauge) Walkers B-B DH 5803 (682 of 1972) remains on site out of use, apparently still unsold. Rod Milne via Scott Jesser 11/03

#### **SMORGON STEEL, Acacia Ridge**

(see LR 145 p. 22) 1435mm gauge Goninan 4wDE 030 of 1972 arrived at the former Palmer Tube Mills site on 28 November from Commonwealth Steel, Waratah, NSW. It is not known if it has been commissioned yet. Bob Gough 11/03

# ZEBRA TRUCK WRECKING,

Capricorn Highway, Gracemere 610mm gauge

A number of items were purchased from the Mackay Sugar auction for resale or scrap. Motor Rail 4wDM *PHAR LAP* (21623 of 1957) was observed outside the premises in early December sitting adjacent to the railway line. Stored inside were Motor Rail 4wDM 02 *BARNEY BULL* (9861 of 1953), Plasser ballast tamper 112 of 1976 and two Plasser track jacks, 226 of 1980 and 229 of 1981. The track jacks are to be scrapped with one engine already removed, and the tamping machine is likely to suffer the same fate. The locomotives will be offered for sale as

complete units or for their engines. Enquiries to Wayne Barnicoat on (07) 4933 2444 or zebrawrecking@austarmetro.com.au Carl Millington 12/03; Editor 12/03

# VICTORIA

# INITIATING EXPLOSIVES SYSTEMS PTY LTD (IES AUSTRALIA), Deer Park

(see LRN 102 p.16) 762mm gauge

This Orica site was visited on 23 December 2003. The manufacture of the high explosive pentaerythritoltetranitrate (PETN) and booster charges ceased the week before. The tramway will close during January 2004 and is to be removed by March 2004. Most of the magazines are to be demolished and the site cleared. The two locomotives are Greenwood & Batley 4wBE 420363/1 and 420363/2.

Colin Harvey 12/03; Editor

# WESTERN AUSTRALIA

#### **BHP BILLITON**

(see LR 174 p.22) 1435mm gauge

The first shipment of GM EMD Co-Co DE locomotives arrived from General Electric Transportation Systems on 8 November and were unloaded over the next few days. The three locomotives were numbered GECX 6401 & 6415 and Southern Pacific 8335. The latter is believed to be for crew training and spare parts only. It is understood that a further three units were loaded at a US port on 31 October.

Michael Bray 11/03; Richard Montgomery 11/03; *MotivePOWER* 31.

### LOCOMOTIVE, ROLLING STOCK & EQUIPMENT MANUFACTURERS

#### **BUNDABERG FOUNDRY ENGINEERS PTY LTD**

#### (see LR 172 p.19)

The various parts from the dismantled Proserpine Mill EM Baldwin B-B DH locomotives 9 (6626.1 7.76 of 1976) and 10 (9816.1 10.81 of 1981) had been removed from the Foundry's yard by 4 November and are believed to have been shipped to Sydney (see next item).

Ex QR and Cooks Construction Walkers B-B DH DH24 (606 of 1969), which has been stored by Walkers in Maryborough for Tully Mill since 1998 was noted on road transport heading for the Bundaberg Foundry on 27 November. On 6 December, it was noted in the yard at the Foundry mostly dismantled, with the cab being cut off. It appears that this locomotive may be due to be rebuilt for Tully. Other Walkers B-B DH locomotives in storage for sugar mills at the Moonaboola Industrial Estate, Maryborough, and Bundaberg Foundry sites are:

IC	iiybolouyi	i, anu bi	unuavery	a oning sires c	16.
	No.	B/n	Built	Stored at	Owned by
	DH29	611	1969	Bundaberg	Kalamia
	DH36	618	1969	Maryborough	Tully
	DH41	623	1969	Bundaberg	Bundaberg Sugar
	DH47	629	1969	Bundaberg	Mulgrave
	CC03	643	1970	Maryborough	Tully
	7336	698	1972	Bundaberg	Plane Creek
		- 11/04	. F.J.	11/00 0 10/00	

Carl Millington 11/03; Editor 11/03 & 12/03

#### **ON TRAK ENGINEERING, Maraylya**

Following assessment at Bundaberg Foundry, the collision-damaged Proserpine Mill EM Baldwin B-B DH locomotives 9 (6626.1 7.76 of 1976) and 10 (9816.1 10.81 of 1981) were shipped to this company in Sydney for rebuilding. Some of the staff involved in the rebuild are former EM Baldwin employees. It is understood that five new axles are required and that the rebuilt units will be fitted with upgraded engines. John Garaty 12/03

# A selection of books from the LRRSA Sales Department ...

#### **Built by Baldwin**

#### The Story of E. M. Baldwin & Sons, Castle Hill, NSW - by Craig Wilson

The history of Australia's most successful and innovative builder of industrial diesel locomotives. E. M. Baldwin developed the B-B DH locomotive now widely used on Queensland's sugar railways, 160 pages, A4 size, 148 photos, 16 diagrams, construction listing.

\$44.00 Hard cover (LRRSA members \$33.00) Weight 1000 gm.

#### The Aramac Tramway

By Peter Bell & John Kerr

The history of the 41 mile long 3 ft 6 in gauge Aramac Tramway, almost in the centre of Queensland. Built in 1913, it operated for 62 years, providing the Shire Council a major challenge to keep it going.

48 pages, A4 size, 49 photos, 5 maps and plans, references, bibliography and index. \$15.00 Soft cover (LRRSA members \$11.25)

Weight 350 gm.

### Focus on Victoria's Narrow

Gauge Whitfield Line Photographs by Edward A.Downs and others, published by Puffing Billy Preservation Society. Very high-quality landscape format book of duotone photographs dating from 1899 to 1963, but mostly from 1940 to 1945. 48 pages, soft cover, A4 size. \$35.95 (LRRSA members \$32.35) Weight 280 gm

Echoes through the Tall Timber

# The Life and Times of a Steam Man 1895-1984

by Dorothy Owen, published by Brunel Gooch Publications. Life story of Harry Matheson, who drove logging winches, and mill engines in the Warburton-Powelltown area. 176 pages, soft cover, A5 size, 48 illustrations

\$22.95 (LRRSA members \$20.66) Weight 375 gm

Postage and packing: Within Australia, up to 500 gm: \$4.80; 501 gm to 3 kg \$9.00 Send to: LRRSA Sales, P.O. Box 21, Surrey Hills Vic 3127, Fax (03) 5968 2484. Payments may be made by cheque, money order, Mastercard, Visa or Bankcard.

### Focus on Victoria's Narrow

Gauge Gembrook Line Part 1 Photographs by Edward A.Downs, published by Puffing Billy Preservation Society. Very highquality landscape format book of duotone photographs from the mid-1930s to the mid 1940s, 48 pages, soft cover, A4 size. \$35.95 (LRRSA members \$32.35) Weight 280 gm

#### Powelltown

A History of its Timber Mills and Tramways by Frank Stamford, Ted Stuckey, and Geoff Maynard. 150 pages, soft cover, A4 size, 150 photographs, 22 maps and diagrams, references and index.

\$22.00 (LRRSA members \$16.50) Weight 550 am.

#### The Innisfail Tramway

#### The History and Development of the Geraldton Shire Tramway and the Mourilyan Harbour Tramway

by John Armstrong & G.H. Verhoeven. 128 pages. A4 size, 99 photos, 22 maps/diagrams. \$37.90 Hard cover (LRRSA members \$28.43) Weight 650 gm. \$29.95 Soft cover (LRE:SA members \$22.46)

Weight 470 gm.

#### Modernising Underground Coal Haulage **BHP Newcastle Collieries' Electric Railways** by Ross Mainwaring. 60 pages, soft cover, A4 size, 18 photographs, 13 maps and diagrams, references and index.

\$16.50 (LRRSA members \$12.38) Weight 230 gm.

#### Lahevs' Canungra Tramway

by Robert K. Morgan, revised by Frank Stamford Describes Queensland's largest timber tramway. 32 pages plus soft cover, A4 size, 28 photographs, plus maps/diagrams and index. \$9.95 (LRRSA members \$7.46) Weight 220 am.

### Mountains of Ash

#### A History of the Sawmills and Tramways of Warburton - by Mike McCarthy

Describes a complex network of over 320 km of tramways which linked 66 major mills to the Warburton railway. 320 pages, A4 size, 280 photos (incl. 52 duotones), 50 maps/diagrams, (incl. 14 fourcolour maps).

\$59.95 Hard cover (LRRSA members \$44.96) Weight 1500 gm.

#### Settlers and Sawmillers

A History of West Gippsland Tramways and the Industries they Served 1875-1934 by Mike McCarthy

168 pages, soft cover, A4 size, 96 photographs, 17 maps and diagrams, 6 graphs, one loco diagram, references and index.

\$31.90 (LRRSA members \$23.93) Weight 700 gm.

### Bellbrakes, Bullocks & Bushmen

A Sawmilling and Tramway History of Gembrook 1885-1985 - by Mike McCarthy 104 pages, soft cover, A4 size, 71 photographs, 17 maps and diagrams, references and index, \$26.00 (LRRSA members \$19.50). Weight 500 am.

#### Arsenic and Molasses

A Pictorial History of the Powelltown Tramway and Timber Milling Operations by Frank Stamford. All photographs are different to those in Powelltown. 88 pages, A4 size, over 100 photographs, 8 maps and diagrams, glossary and index. \$36.00 Hard cover (LRRSA members \$27.00) Weight 650 gm.

\$24.00 Soft cover (LRRSA members \$18.00) Weight 470 gm.

#### End of the Line:

A History of the Railways in Papua New Guinea by Bob McKillop & Michael Pearson. Published by University of Papua New Guinea. 170 pages, 81 photos, 28 maps. \$27.00 (LRRSA members \$24.75) Weight 550 gm.

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#### Dear Sir,

#### J&A Brown van B1 (LR 173)

In Light Railways No.173, it was stated that ex-J&A Brown van B1: "Apparently serves as a reminder that private railways once passed this spot." In fact, the van was recovered from the Minmi end of Hexham yard by Coal & Allied about 8 to 10 years ago and rebuilt at Hexham. It was moved to Minmi to be used as a site office for the sale of Coal & Allied land at the location. Looking at the photo, the power and phone lines can be seen entering the van at the top left-hand side. The van has now been donated to the Minmi Progress Association and has been moved to the local community hall.

Graham Black Minmi, NSW

#### Dear Sir

#### The Saga of Sandfly and the Lost Tribe (LR 65, 78, 80, 83)

The following notes relate to the period supposedly spent in South Australia by 3ft 6ins gauge Baldwin 0-4-0ST 8130 of 1886. In some respects it queries the information in John Buckland's excellent article, in which, as he admitted, due to a paucity of information, he relied upon "what is believed".

The first statement that I would query relates to the words *After fitting of a new boiler* . . . *probably in 1912* . . . When her then owner sought a current boiler certificate for her in about 1954, I had rejoined the Factories & Steam Boilers Department and was told by a member of the Boiler Branch that because of the age of the original boiler, made of, I think, "Lowmoor Iron", they requested X-rays and the owner decided not to proceed with his request.

I cannot prove or disprove her ownership by Smith & Timms, probably from 1912, and her possible use on the construction of the Willunga Line in 1915 and later the deviation on the Main South Line. However, I would point out that she was never registered with the Department, although during this period (1910-20), considerable railway construction work was carried out by Joe Smith, Smith & Timms, and Timms and Kidman, using locomotives that were registered. It is also pointed out that the deviation and new two-track tunnel at Sleeps Hill was contracted to George Baxter and not Smith & Timms. The statement that the first positive record of her in South Australia is with the Engineering & Water Supply (E&WS) Department is, to the best of my knowledge, correct, but her being used on the Tod River reservoir construction is open to doubt, if only for the fact that if she was with the E&WS Department, it is unlikely that she would have been loaned to the private contractor working there.

My first record of her in South Australia is with the E&WS Department on the River Murray loco construction. She was at Lock 3 in June 1923 and August 1924, and at Lock 2 in March 1926 and October 1928. I also have a photo of her at Lock 1, taken by one of the workers there. As the four steam locomotives used by the Department during the lock construction were moved from lock to lock as required, she probably worked on all of them. She was given the number 1 by the Department, the other locomotives being numbers 2, 3 and 4.

At the completion of the lock construction, the four locomotives remained with the Department out of use until the construction of the Mount Bold reservoir in 1933. The contract was given to Essery & Cartledge, who "purchased" her from the Department with other surplus equipment to be used on the job. I believe that it was taken over as part of the contract conditions. Before being taken over, she was overhauled by the Department, then transported to Mount Bold. This belief is supported by the fact that, although she went there she was never used, the work being carried out by a converted Fordson tractor.

On the completion of the reservoir, in November 1934 she was sold to Forward Down & Co Ltd, an engineering company, and was stored at their Kilkenny works. She remained there, stored in a "knocked down" state with the cab and saddle tank removed. until 1953, when I went to see her and found out that she had gone. A letter to the company resulted in a reply by Mr K Forward, Managing Director, dated 19 October 1953, advising me that she had been sold to an old friend, not as stated by John Buckland, an employee or ex-employee of the company. The new owner was Mr R G Howard, a plaster manufacturer, who traded as R G Howard & Co. Mr Forward added that Mr Howard was very mechanically minded, had had her steamed up, and hoped to run her on a track laid on his property at Mitcham.

At the time I was living at Barmera, and transferred back to Adelaide and the Factories & Steam Boilers Department in mid-1954. I cannot be sure of the sequence of the following incidents, which occurred after my return. I contacted Mr Howard and with Lionel Kingsborough on a Saturday inspected her on his property. He had her set up as a stationary boiler with a steam line connected to a small steam engine which had been salvaged from a river steamer. This was about the time he approached the Factories Department for a current Boiler Certificate, as I mentioned earlier. Because she was 3ft 6ins gauge, he was hoping to sell her to someone in

Queensland. I have no evidence of her being scrapped about 1960 at Hines Metal,, but seeing the source, Eric Bowes, would not doubt it.

In conclusion, I would draw your attention to the article in *Light Railways* 130, October 1995, *Mount Bold Tramway, S.A.,* by Vic Harbour. It contains a copy of the photo I took of her stored at Forward Down, Kilkenny.

#### Arnold Lockyer

Dover Gardens, SA

#### Dear Sir,

#### Wellman, Smith, Owen Engineering Corporation

The latest Industrial Railway Record (Number 175, December 2003) has a couple of articles on Wellman, Smith, Owen Engineering Corporation Ltd. of Darlaston, Staffordshire in the United Kingdom, well-known for building coke ovens locos for steelworks etc. It now transpires that it also built electric and battery electric mining locomotives to the designs and on behalf of two Chicago, USA firms: the Goodman Manufacturing Company and Mancha Storage Battery Company Ltd.

The 'Mancha' locomotives were (obviously) battery ones and most went to Canada, but a few went to Australian gold mines as follows:

• 2360A (two locomotives) of 1939, 1ft 8in gauge, 'Mancha B' for Lake George Gold Mines Ltd., NSW

• 2526 (two locomotives) of 1939, narrow gauge, 'Special' for New Occidental Gold Mines NL, Cobar, NSW

• 2559 (two locomotives) of 1939, 1ft 6in gauge, 'Mancha A' for Gold Mines of Kalgoorlie, WA

• 2810 of 1944, 1ft 6in gauge, 'Mancha B' for Norseman Gold Mines NL, WA.

Richard Horne

Surrey, UK

Editor:

• It should be noted by readers that the numbers provided above are not strictly speaking "builder's numbers" as these were not allocated by WSO. They are in fact contract numbers.

• Ross Mainwaring has provided a list of the six Mancha 'Special Type A trammer' 51/Ap, 18-inch gauge locomotives supplied to New Occidental Gold Mines at Cobar between 1937 and 1949. The list does not include any supplied in 1939, so it would appear that the two WSO locomotives for this mine were in addition to those supplied direct by Mancha. Further advice on these would be appreciated.

• The article mentioned also lists some standard gauge electric coke oven locomotives supplied to Australia. These are: 1392 of 1929 (two units), 15 ton machines supplied to Coppee (a coke oven supplier) for Broken Hill, quite possibly for the Newcastle Steelworks, and 2611 of 1937 for BHP Ltd. It is possible that the 1929 units were in fact built by Goodman.

#### OBITUARY

#### John Douglas Kerr 8 August 1942 - 26 November 2003

John Kerr, described so accurately at his funeral as "modest, reliable and trustworthy", was an outstanding and prolific historian of railways, the sugar industry and public institutions in Queensland. His father was the founding Director of the Sugar Research Institute in Mackay, and as a boy John was an avid explorer of the district - on his bicycle - even compiling an accurate street map of Mackay for his mother before such a thing was available commercially. He became captivated by railways and street tramways at an early age, and had a particular fascination for timetables, while remaining a dedicated cyclist for the rest of his life.

John was very intelligent, and graduated from Mackay State High School in the top 20 in Queensland. He studied Mathematics to become a statistician with the Bureau of Statistics, the Queensland Department of Forestry, and with CSIRO, retiring in 1997.

John became an avid researcher in government and all manner of other archives, as time went on encouraged by his wife Ruth, an archivist and fellow historian. His notes were computerised at a very early stage, and over time developed into a large and fully-referenced historical database. He began to contribute articles to a number of railway journals from the 1960s, with his first contribution to "Sunshine Express" in 1963 and the ARHS Bulletin in 1967. His interests did not exclude private railways, with those of Queensland sawmillers and the Ipswich coalfield an early interest. His contributions to "Light Railways" date from 1975.

John did not merely contribute to magazines. He also assisted as an editor, and made significant contributions in this role to the journals of the ARHS Queensland Division, the Brisbane Tramway Museum Society and the Australian Narrow Gauge Railway Museum Society. He was also a stalwart of the Royal Historical Society of Queensland and the Professional Historians Association in Queensland.

Magazine articles and editing led naturally to the authorship of books. In 1979, his first commissioned public history was published, "Northern Outpost", dealing with the story of Mossman Central Mill. A succession of sugar industry histories followed, on Bundaberg (1983), Maryborough (1987), Racecourse (1988), Cattle Creek (1991), Isis (1996) and Proserpine (1997). Other histories included Mackay's Pioneer Shire (1980) and the Burdekin Shire (1984), as well as a mining history of Mount Morgan (1982), and the railway history "Brunswick Street, Bowen Hills and beyond" (1988). He also published books on the ports of Gladstone and Bundaberg. Railway books that were co-authored were "Sunshine Route Jubilee" (1975) and "Destination Sth Brisbane" (1978) with John Armstrong, and "The Aramac Tramway" (published by LRRSA in 2002) with Peter Bell. John also produced a major definitive report for government on sawmills and timber tramways in south-east Queensland in 1998. At the time of his death, work in preparation for possible publication by LRRSA included an article on the Wee McGregor Tramway, and a book on the Irvinebank Tramway as well as "Tall Timber and Tramlines in Queensland". Recognised as probably John's greatest work is "Triumph of Narrow Gauge", his 1990 history of Queensland Railways (reappearing in a second edition in 1998), a superb, concise and very readable account of this vast and unique railway system.

John was a keen field researcher, visiting many sites of interest throughout Queensland on his bicycle. A number of Victorian members remember with great fondness the time in 1989 when John and Ruth attended a weekend trip to the sites of mining and timber tramways around Walhalla and Erica. A memorable extended discussion on timber tramways took place during a lunch break in the depths of the forest on the site of the Tyers Valley Tramway.

John was not particularly interested in the details of individual locomotives or specific working practices. Rather, he used his encylopaedic knowledge and understanding to put the stories of industries, transportation and local government into the context of political, economic and social development in rural, regional and metropolitan Queensland. He took a great interest in the work of others and could always be relied upon for help and advice. He was above all generous with the material he had amassed, and was always quietly unassuming about his abilities and achievements. He leaves an immense legacy to others who will benefit from his painstaking research and broad analysis. The Society offers its condolences and support to Ruth on her unexpected loss, and joins with the many other groups to which he contributed so much in expressing its gratitude as well as sadness.

John Browning with thanks to John Knowles, Danny Sheehan, Frank Stamford & Peter Evans



#### LRRSA NEWS

#### MEETINGS

ADELAIDE: "Railway Photography in Wartime"

There will be a discussion on the problems of engaging in railway photography during wartime.

Location: 150 First Avenue, Royston Park. Date: Thursday 5 February at 8.00pm. Contact Arnold Lockyer (08) 8296 9488

#### BRISBANE: "Overseas Narrow Gauge"

Frank Savery will present a program of short videos on Welsh narrow gauge, the Liverpool Overhead Railway and the Maine 'two-footers'.

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 13 February at 7.30 pm. Entry from 7 pm. Contact Bob Dow (07) 3375 1475

#### HOBART: "The Last of Their Breed"

A class Climax locomotives on the Salmon River line presented by Mark Fry, who is well known for his research into Tasmanian timber tramway locomotives. We hear rumours that this presentation will include movies from the 1940s of the locomotives working. Not to be missed! **Location:** Transport Museum, Anfield St. Glenorchy

Date: Friday 27 February 2004 at 7.00 pm

MELBOURNE: "Group Googling Session" Phil Rickard will demonstrate the wonders of the internet, and the extensive resources it provides for those interested in narrow gauge railways. (This item was originally scheduled for December 2003 but unexpectedly could not be held then). Location: Ashburton Uniting Church Hall, Ashburn Grove, Ashburton. Date: Thursday 12 February at 8.00 pm

#### SYDNEY: "Industrial Railways"

Industrial surface and tunneling railways across five Australian states. Slides to be presented by Jeff Moonie from those taken by Craig Wilson and from his collection predominently in 1970-1990 period. **Location:** Woodstock Community Centre, Church Street, Burwood, (five minutes walk from Burwood railway station). **Date:** Wednesday 25 February at 7.30pm.

#### **MEMBERS' ADS**

#### FOR SALE

12 wheelsets, heavy construction, roller bearings, 16in gauge, 9in diameter, 1½in tread. Would convert to 12in or 15in gauge. \$20 each or \$200 the lot, plus freight. Keith Vanstan 4 Robyn Place Delacombe Vic 3356

Ph (03) 53 359 847



# RESEARCH

#### **Melbourne Herald Sun Archives**

Cold North Wind and News Limited, the Australian division of News Limited Corporation Limited, has released an additional 20 years of the *Melbourne Herald Sun* (originally the *Port Phillip Herald*) on Internet access. The digitised archive now covers over 60 years (1840-1901). The *Herald* archive can be found on the Internet at:

http//:portphillipherald.archivepub lisher.com and clicking the link to search.

RHSV History News, October 2003.

# Labour History and Museum Studies

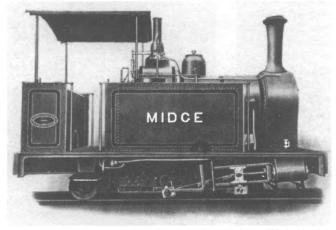
Is the LRRSA a leader in interpreting Australia's industrial history? Reflection on this important issue has been stimulated by the launch of a special thematic issue of Labour History, the journal of the Australian Society for the Study of Labour History. Launched by Susan Rvan at Powerhouse Museum on 20 November 2003, Labour History No.85 focuses on 'Interpreting Working Life and Culture in Australian Museums and Galleries'. The key issue at stake is the degree to which historians and museum professionals are moving

away from interpreting the 'things' of industrial sites to focus on the workers of the enterprise and their culture. Railway workshops – Eveleigh Railway Workshops in Sydney and the Midland Railway Workshops in Perth – feature prominently in the case studies provided in the *Labour History* volume, but the central issue is to what degree the interpretation of their heritage should focus on the technology of the workshops or the culture of their workers?

The founding fathers of the LRRSA sought to establish a researchorientated society that went beyond the technology, particularly the locomotives, of narrow gauge and industrial railways to examine the railway operations within the context of the economic and social parameters of the industries they served. In doing so, many of our researchers have collected excellent oral history material on the workers and their culture. The museums conserving the heritage of our narrow gauge and industrial railways have not yet, however, fully grasped the challenge of interpreting this working culture as a dominant theme in their presentation of history.

Labour History No.85 presents a challenge to LRRSA researchers and associated preservation groups to come up with innovative ways of interpreting the lives of the workers in the industries our 'little railways' served. The skills and working culture of these workers offers insights and stories that have wide public appeal. The case studies in *Labour History* No.85 offer ideas on how that interpretation might be tackled. For further information, check the Web site at: www.asslh.com

Bob McKillop



MIDGE (Falcon 132 of 1887), forerunner of the Kerr Stuart 'Skylark' class, as it appeared in Brush Bulletin No.5, January 1904. Kerr Stuart literature of the period carried the same photo, but with the builder's plate altered.

#### **FEBRUARY 2004**

1 Wee Georgie Wood Railway, Tullah, TAS. 610mm gauge steam train operations, 1200-1800, also on 14-15 and 29 February. Phone (03) 6473 2228. 14 Puffing Billy Railway, Gembrook, VIC. Valentine's Day Night Train. For information, phone (03) 9754 6800.

#### MARCH 2004

**6-8 Redwater Creek Steam & Heritage Society, Sheffield, TAS.** SteamFest 2004 with narrow gauge steam trains, steam traction engines and rollers, Sentinel steam wagon, steam powered Carousel and chaff cutter. Information (03) 6424 7348.

7 Wee Georgie Wood Railway, Tullah, TAS. 610mm gauge steam train operations, 1200-1800 – also on 14 and 27 March. Phone (03) 6473 2228.

13-14 Puffing Billy Railway, Gembrook, VIC. Day Out with Thomas – a family attraction at Emerald town. Also on 20-21 March. For information, phone (03) 9754 6800.

#### APRIL 2004

3-4 Puffing Billy Railway, Gembrook, VIC. Day Out with Thomas – a family attraction at Emerald town. For information, phone (03) 9754 6800.

4 Wee Georgie Wood Railway, Tullah, TAS. 610mm gauge steam train operations, 1200-1800 – also on 11 April – last operating day of season. Phone (03) 6473 2228.

#### MAY 2004

2 Puffing Billy Railway, Gembrook, VIC. Annual Great Train Race – from Belgrave to Emerald Lake (13.2km). For information, phone (03) 9757 6775. 15-17 Goolwa-Port Elliot Railway 150th Anniversary, SA. Programme of heritage train trips, paddle steamer parades, vintage sailing regatta, historical displays and walks, musical entertainment, etc at Goolwa, Port Elliot and Middleton. Inquiries (08) 8555 3488. www.australiasfirstrailway.com 15-16 Campbelltown Steam & Machinery Museum, NSW. Oil, Steam & Kerosene field days with steam railway, tractor ploughing, engine displays, vintage cars, etc.

**NOTE:** Please send information on coming events to Bob McKillop – rfmckillop@bigpond.com - or the Editor, *Light Railways*, PO Box 674, St lves NSW 2075.

#### Kerr Stuart Skylark Locomotives

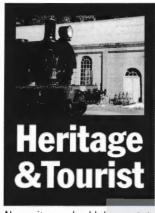
The December 2003 issue of the UK magazine *Heritage Railway* (No. 56, pp.74-5) carries an article by Mark Smithers on the origins of the Skylark class of locomotives built by Kerr Stuart & Co. Ltd. of Stoke-on-Trent. Titled "In search of the last Skylark", it tells of Mark's pilgrimage to the Red Cliffs Historical Steam Railway in Victoria to research the only known survivor of the design, KS 742 of 1901 (see LR166, pp.11-17).

The origins of the Skylark design date from the period when Kerr Stuart sub-contracted the construction of its locomotives to other builders. In 1887, the Falcon Engine & Car Works Company supplied the first of its Midge 0-4-2T metre gauge locomotives (KS B/N 531), which had 7in x 12in cylinders and was probably for delivery to Japan. Subsequently, Falcon's successor, Brush Electrical, and Hartley, Arnoux & Fanning's California Works built a number of Midge class 0-4-2T locomotives to various narrow gauges and with cylinders ranging from 6inx 10in to 9in x 15in.

The Skylark class developed from these locomotives from 1900. They had a 0-4-2T wheel arrangement and 7in x 12in cylinders. Production continued until 1915 and Skylark locomotives were supplied to many countries, including Australia, India, Mauritius and Spain. An early example, *PRINCESS* (No. 717 of 1900) became the sole Englishbuilt locomotive to see service on Scotland's only pre-preservation era public narrow gauge steam railway, the 2ft 3in gauge Campbelltown & Machrihanish Light Railway.

As described in LR166, BN 742 of 1901 was constructed for a 2ft gauge Indian light railway at Calcutta operated by TA Martin & Co. and named *LUKEE*. By 1902, Martin was shifting to larger locomotives for its line and 742 went back to Kerr Stuart the following year for refurbishment before its export to Australia.

The *Heritage Railway* article summarises the locomotive's history in Australian and its restoration and operation at the Red Cliffs Historical Steam Railway. Two colour photographs of the locomotive at Red Cliffs are included.



News items should be sent to the Editor, Bob McKillop, Facsimile (02) 9958 8687 or by mail to PO Box 674, St Ives NSW 2075. Email address for H&T reports is: rfmckillop@bigpond.com Digital photographs for possible inclusion in *Light Railways* should be sent direct to Bruce Belbin at: boxcargraphics@optusnet.com.au

#### NEWS

### Queensland

#### BAUPLE HISTORICAL MUSEUM, Mt Bauple

#### 610mm gauge

A visit on 30 November showed that John Fowler 0-6-0T 11165 of 1907 had received its expected new cab. Unfortunately, this has no similarity to the design originally fitted and seems not to reflect a serious commitment to historical values. John Browning 11/03

#### BEAUDESERT TOURIST RAILWAY 1067mm gauge

At Tabooba Junction on the 10 October 1903, the Beaudesert Shire Tramway was officially opened by His Excellency, The Governor of Queensland, Sir Hubert Chermside. To mark the centenary of this event, a ceremony was held at the Tabooba Junction site on Saturday 11 October 2003. This event was organised by Norm Messinbird, son of well known former tramway employee, Joe Messinbird. Over 100 people attended the event, including many family members of former residents and tramway employees, Federal and State members and local Councillors. Eight members of LRRSA (SE Qld. group), including Keith McDonald, co-author of the Society's book The Beaudesert Shire Tramway, travelled to Tabooba Junction to represent the society at this event.

Reminiscent of the opening ceremony, an arch of branches was

erected over the former right of way. under which an official ribbon cutting ceremony was held. Numerous speeches followed, as well as the unveiling of a plague to mark the event. Kay Elson, Federal Member for Forde said: "What does give us memories is those people in our community who record history for us." Considerable interest was shown in a wooden model of a typical Beaudesert Shire Tramway train, which was placed on the old formation just behind the replica arch. LRRSA members walked around the site and found the concrete pits for the loco shed. albeit filled in and partially covered, as well as numerous dog spikes, but nothing else from the original tramway was found.

Some visitors then took the opportunity to take a ride on the Beaudesert Rail train to Logan Village and return. This four coach train was hauled by restored 4-8-0 steam locomotive C17 No.967. LRRSA member Percy Forrester was guard on this train, and helped make the trip even more enjoyable by pointing out features along the way, as well as providing members with some interesting discussion.

The Beaudesert Railway suffered a further setback during October, when a "mysterious" fire burnt the centre pile on one pier only of a timber bridge near a shopping centre. The railway was closed were while the fire was investigated and the bridge repaired. Operations between Beaudesert and Logan Village resumed on 15 November.

Terry Olsson, 11/03; *Beaudesert Times*, 15 October 2003, via David Bradshaw

### **BOTANICAL GARDENS RAILWAY,**

**North Bundaberg** 610mm gauge Work is progressing on the restoration of John Fowler 0-6-2T *INVICTA* (11277 of 1907), with the locomotive having been completely disassembled and the frames checked for cracks and built up by welding. Reassembly is expected to take about a year. It is hoped to have all four steam locomotives in service by 2008. Ross Driver 11/03

# PROPOSED COOLUM TOURIST

**RAILWAY** 610mm gauge The Australian Narrow Gauge Railway Museum Society has been approached by the Maroochy Shire Council with an invitation to be involved in a new railway venture at Coolum using the old Coolum Station area and running to a proposed eco park a few kilometres towards River Depot.

"Durundur Railway Bulletin" 11/03 via Brad Peadon

#### DREAMWORLD, Coomera 610mm gauce

Ex Proserpine Mill Clyde 0-6-0DH 1 (DHI.7 of 1955) has been purchased by a private buyer for future use at the mining museum complex at Gympie. It left Dreamworld in October and on 30 November was noted parked outside the Mary Valley Railway station at Gympie covered in plastic sheeting. Bob Gough 10/03; John Browning 11/03

#### PETER McFARLANE, SUGAR BOWL MUSEUM, Septimus

610mm gauge Derelict Motor Rail 4wDM 21622 of 1958 was acquired from Racecourse Mill by Peter McFarlane for his Sugar Bowl Museum, Septimus, during the early part of 2003 after lying derelict since at least 1990. It is planned to restore it cosmetically for display. Peter McFarlane 12/03

#### KENNETH PETTS, "Bedrock", Walkerston 610mm gauge

EM Baldwin 4wDH BALD1 LEO (6/2612.1.10.68 of 1968) was purchased at the Mackay Sugar auction and will be trialled for use on the steep line. The 1998-built 4wDE locomotive has been completely overhauled and a passenger station has been constructed.

Kenneth Petts 12/03

#### WORKSHOPS RAIL MUSEUM,

loswich 610/1067mm gauge The coverage of sugar mill railways at this museum has previously been reported in LR (Nos 167 and 169). While the majority of its exhibits relate to the history of main Queensland Government Railways, the outstanding quality of their curatorship offers some wonderful examples to which other rail and industrial museums should aspire. The individual exhibits of the museum proper are set out by area and theme, with a colour coded 'tower' identifying each area. There is a video screen for each of these 'towers' with a 3-6 minute film activated by a button. The films are of high standard and provide some excellent insights into the working lives of railwaymen.

Static railway rolling stock is notoriously difficult to make interesting for the general public, but the



Graham Black photographed restoration work on ex-SMR 2-8-2 No.10 (Beyer Peacock 5520 of 1911) at the Rothbury Riot Railway, Branxton, in November 2003. The work is being carried out here, not at Braemar as per LR 173 (p.29).

LIGHT RAILWAYS 175 JANUARY 2004

# Heritage &Tourist

Moving Goods exhibit, featuring PB15-class steam locomotive No.444 with a number of goods vehicles with typical loads of the era, is one of the best examples in the world of how to bring life to such a static display. The video film and the excellent range of soundscapes from overhead speakers tell the interesting social history behind a typical goods train operation. In the guards van, there is a recording by the guard who worked in that particular van explaining what the various items were used for, while the driver and firemen discuss various elements of their work on the locomotive. The more traditional museum exhibits located in several climate-controlled modules are also outstanding, especially those dealing with the industrial history of the Ipswich Railway Workshops and its workers.

The majority of the workshops area continues to be used by the QR as its Heritage Maintenance facility. Regular tours led by QR employees provide the visitor with a behind the scenes experience of heritage conservation activities, notably the maintenance work on the OR fleet of steam locomotives in the Erecting Shop. The working Blacksmiths Shop is a real highlight. The guide explains the various processes and tools, then there is a demonstration of the main machines in use, such as an arc welder, the traditional blacksmith's forge and anvil, a steam hammer and a drop hammer. Real-life industrial technology of the 19th and early 20th century has a wide public appeal and the ability to stage demonstrations such as these is a major drawcard for museums. Thanks are extended to David Mewes, the Assistant Curator, for his time providing a guided tour of the museum and its behind-thescenes facilities.

Bob McKillop, 11/03

#### **New South Wales**

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

On Sunday 9 November, two steam locomotives operated passenger trains in conjunction with the

ILRMS auction sale conducted by Tony Madden and the Hon Matt Brown, the local Member of Parliament for Kiama. 0-4-0ST *BURRA* operated the bay road run hauling the match truck and car 430, while 0-4-0ST *KIAMA* 

hauled the main service train.

Brad Johns, 11/03

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

The Friends of Thomas event on 20-21 September was most successful. 0-4-0ST MARJORIE (Clyde 462/1938) was returned to service on Friday 19 September after major boiler work. A total of 59 tubes were replaced, new rivets were inserted in the front tube plate and new stays were required for the backhead. For the Thomas event, ex-SMR 2-8-2T No.30 (BP 6294 of 1925) and ex-BHP Bo-Bo DE No.34 (Goninan 2/S1002 of 1954) ran turnabout on the 10 passenger trains operated each day to Pelaw Main, MARJORIE ran 10 Mulbring Road Shuttle trains per day and the 4wDM Planet (F Hibberd 3715/1955) operated 24 trains each day on the Glass House Shuttle on the south of the site.

Graham Black, 10/03

#### STATE MINE HERITAGE PARK & RAILWAY, Lithgow

1435mm gauge

Following a lengthy process, the Department of Transport approved the accreditation of the State Mine railway in November 2003. The application was greatly assisted by Dick Holesworth, a wellrespected figure in rail auditing, who assisted the museum to prepare the detailed documents required for the accreditation process. An application for accreditation has also been lodged with the Rail Infrastructure Corporation to secure an operating agreement that will allow the museum to gain access to the main line.

The State Mine Board approved the purchase of five passenger carriages and a guards van that had been in storage for a number of years at Casino in northern New South Wales. This rolling stock arrived in Lithgow on 12 September as part of a large train conveying additional carriages for the Ozback Explorer train. Restoration work is proceeding on former South Australian Railways carriage BF 343 in preparation to its entering service on the tourist railway. Restoration work on 2-6-2T 2605 (Dubs 2794/1892) for static display (see LR 173, p.28) is proceeding well.

The museum has posted a learning page on its web site that promotes the State Mine as a place of learning. The page includes linked educational resources and will soon include student focused activity books which were developed with the co-operation of Port Arthur Historic Site and NSW Dept of Education and Training. An interesting 1945 article on the life of mine worker Mick Rudge and his family is currently on the site at: www.statemine.org.au.

Ray Christison, 12/03

#### WARATAH PARK, Terrey Hills 610mm gauge

This tourist park, the home of "Skippy the Bush Kangaroo" had an operational 2ft gauge tourist railway from the mid 1970s possibly until the early 1980s. It has recently been revealed that the rail equipment is still on site, "lost in the bush" and unused for many years. The two locomotives are Motor Rail "Simplex" 4wDM 11035 of 1965, ex Condong Mill, and the unique B-B PM built by John Dunlop in around 1977. Some rolling stock is also present, including passenger vehicles, and the equipment appears to be in reasonable condition. Since being observed in 1978, the Simplex, which is in the shed, has received a new radiator, while the bogie locomotive, parked on the track at the head of a passenger train, has been repainted.

It appears that there is a scheme to restore and revegetate the park, and some consideration has been given to restoring the railway. Alternatively, the equipment may be sold to generate much-needed funds. Enquiries concerning the equipment to Merinda on (02) 9986 1788.

John Tulloch via Carl Millington 6/03; Brad Peadon 11/03; John Browning

# Victoria

#### PUFFING BILLY RAILWAY Various gauges Puffing Billy Railway Preservation Society

The ex-Mt Lyell Railway 0-4-2T Abt locomotive No.5, which has been on static display at the Menzies Creek Museum for 40 years, was removed from the museum and shipped to Tasmania in November. Following a protracted negotiation with the Puffing Billy Preservation Society and the ARHS Victorian Division (the legal owner), the Tasmania Government purchased the locomotive and brake van for \$40,000. The entire proceeds of the sale will be donated to the PBPS Museum for site improvements.

Peter Ralph, 11/03

#### WALHALLA GOLDFIELD RAILWAY 762mm gauge Walhalla Tourist Railway Committee of Management

The popular "Jazz on Track" event was held on Saturday 15 November. The special train, which accommodates 80 passengers, was booked out well in advance. Before boarding the 7pm train at Thompson station, passengers were treated to a complementary glass of champagne. Ex-SECV 0-6-0DM No.14 hauled the train through the scenic Stringers Gorge as the Rampart Street Jazz Band played traditional Dixieland numbers. On arrival at Walhalla, the passengers sat down to a 3-course meal with table service while the jazz band continued the entertainment. The special train returned from Walhalla at 10.30pm, rounding off a great fun evening.

Peter Ralph, 11/03

# Tasmania

#### WEST COAST WILDERNESS RAILWAY, Queenstown 1067mm gauge

The railway is reported to have settled down into a steady routine for the tourist season. Loads vary depending on the tourist flows some trains of three carriages full, whilst others with only two coaches have seen to be very lightly loaded. This coming summer season is expected put quite a bit of pressure on the railway with what is still relatively limited rolling stock resources.

On Saturday 15 November, a wedding special ran from Queenstown to Rinadeena and return. The normal service train ran with No.1 and 2 open window coaches departing Queenstown on time at 10am. The special departed with No. 3 and 3 windowed coaches including the 1st class end platform car at 10:30 from Platform 2, arriving at Lynchford just prior to the normal service departing there about 10 minutes late. Once the normal train had cleared the section to Rinadeena. the Wedding special followed. It remained at Rinadeena where the wedding ceremony took



It is nice to see a cane locomotive saved from destruction, but Fowler 11165 at Bauple Historical Museum has received a very inauthentic cab. 30 November 2003. Photo: John Browning



A demonstration of arc welding at the blacksmiths shop at the QR Heritage Workshops, Ipswich. Photo: Bob McKillop



Former Corrimal Colliery 0-4-0ST BURRA (Hawthorn Leslie 3574 of 1923) hauling the match truck and ex-Melbourne cable tram trailer 430, on the 'bay road run' at Albion Park on Sunday 9 November 2003. Photo: Brad Johns

Heritage &Tourist

place, It departed there ahead of the service train at 1:15 and returning to Queenstown at approx 2:35pm. The service train followed arriving just before 3pm and was quickly turned around to form the 3pm service.

The ex-Mt Lyell 0-4-2T Abt locomotive No. 5 and the brake van formerly at the Menzies Creek Museum on the Puffing Billy Railway arrived back in Tasmania on the *Spririt of Tasmania* on 21 November 2003. No. 5 will be taken to Hobart for overhaul prior to returning to service, while the 4-wheel brake van will be restored at Queenstown by the ABT Railway Society members.

Rob Bushby, 11/03

# Western Australia

#### BENNETT BROOK RAILWAY, Whiteman Park 610mm gauge WA Light Railway Preservation Assoc. Inc.

A Halloween special event on Friday 31 October 2003 attracted an excellent turnout of some 300 people. The evening provided spooky train rides between Mussel Pool and the Junction, treasure hunts at Mussell Pool and treats from the witches and wizards. Summer holiday midweek train services commenced in December. In 2004, the BBR is to commence the operation of regular trains on each Wednesday and Thursday, with the Whiteman park management paying a fixed fee for the service regardless of patronage, thereby helping to provide the society with a regular and reliable income.

Steam locomotive NG123 has been moved to the pit shed so that work can commence on restoring it to working order. New pistons and rings have been received from Willis Engineering and boring of the cylinders and valve liners has been completed. Two steam experts from the Fremantle Maritime Museum are assisting with this work, while Murry Willmont, the former mechanical supervisor of the Hotham Valley Railway, is assisting with installation of the new internal steam pipe, the regulator and the superheater header.

BBR Newsletter, December 2003

LIGHT RAILWAYS 175 JANUARY 2004

# MALCOLM MOORE '1000' SERIES 60TH ANNIVERSARY Alexandra Timber Tramway

On 8 November the ATT held its first special event aimed squarely at the railfan market. It commemorated the 60th anniversary of the construction of ninety-two 2-ft gauge locomotives for the Department of Supply for intended use hauling stores from beachheads to dumps in the Pacific campaign against the Japanese during the Second World War. Numbered 1001 to 1092, the "1000" series locomotives were built by the Victorian engineering firm Malcolm Moore, a significant Australian constructor of small industrial locomotives. After the war, many were sold to industrial railway users and were scattered across Australia from far north Queensland to the southernmost tip of Tasmania. By their sheer numbers, many have survived into preservation. Saturday 8 November saw three operational "1000" series locomotives at Alexandra and two that could be included in a train as a rolling chassis, as follows:

**No.1015** was dispatched from Malcolm Moore on 3 March 1944. Following the war, it was on-sold to the Victorian State Rivers & Water Supply Commission for use at the Redcliffs pumping station, where it was used for the transport of firewood. After lying out of use for some years, it arrived at the Puffing Billy Preservation Society museum at Menzies Creek on 20 March 1977. It was restored to working order in August 1992 using some parts from sister locomotive 1013. It was kindly loaned for the 60th anniversary celebrations by the Puffing Billy Preservation Society.

**No.1023** was possibly originally intended for use by the Department of Supply at the St. Marys munitions factory in NSW before being sold to a private owner who removed the engine for other use and stored the remaining components at Wedderburn. By late 1992, it was stored at the Menangle narrow-gauge railway near Campbelltown in NSW. The locomotive was purchased by the Alexandra Timber Tramway in mid 2001 and in February 2003 the chassis was assembled and placed under the body and power plant of 1049. The body of 1023 was displayed for the 60th anniversary commemoration on the frame of 1049. When the wheels of 1049 have been built up and re-profiled, both locomotives will resume their former identities.

**No. 10??** Is a mystery locomotive. It was purchased by ATT member Chris Holmes from the Menangle Narrow Gauge railway in an engineless condition in 2003. Its prior history is thought to be similar to that of 1023. This locomotive will be restored as time and funds permit. **No. 1049** was sold by the Department of Supply to the State Electricity Commission of Victoria where it was probably used on one of the construction railways of the Kiewa hydro-electric scheme. The SEC later moved it to Yallourn where it was used on the flue-ash disposal line. The loco was withdrawn from service in December 1974 and eventually moved to the Gippsland Folk Museum at Moe. The ATT swapped the locomotive and its associated side-tipping skips for an old motor vehicle, and 1049 was restored to operating condition by lan Bowering and Alan White at the Alexandra Hospital. In February 2003, the chassis of 1023 was inserted under 1049's cab and power-plant due to excessive wear on the wheels of 1049. When the wheels of 1049 have been built up and re-profiled, both locomotives will resume their former identities.

**No.1092** is the highest-numbered "1000" series locomotive known to have survived. It was possibly stored at Bandiana after shipping from Malcolm Moore. By 1975, it had been purchased by Caribbean Gardens at Scoresby, where it has been used as standby locomotive on tourist trains since at least 1993 (LR 174, p.). The locomotive was repainted especially for the 60th anniversary celebrations and it was proudly displayed by the management of Caribbean Gardens.

Also on display was Malcolm Moore C.396 of 1946 No.2. This was built for the State Rivers and Water Supply Commission for use during construction of the Hume Weir. Three of this "Model 47 Type L" were built, and this is believed to be the sole survivor of the class. The locomotive is 3ft 6in gauge and has been leased from the Bellarine Peninsula Railway for restoration at Alexandra (LR 173, p.31). The oldest Malcolm Moore locomotive artefact on display was the draw-gear/ballast weight of Malcolm Moore No.23, a Fordson tractor-engined locomotive purchased by the State Electricity Commission of Victoria for the construction and maintenance of the Rubicon Hydro-electric scheme. This weight is all that survives of the locomotive, which was scrapped following the arrival of Malcolm Moore 1091 at Rubicon in the 1950s.

Despite excellent weather, attendance was below expectations and undoubtedly Kodak was the financial winner on the day. Nevertheless, the Alexandra Timber Tramway has learnt some valuable lessons on the importance of advertising, and the ATT volunteers had an excellent day "playing trains". Peter Evans, 11/03



At the end of the day, the opportunity was taken to assemble five locomotives for a group portrait. From left to right: Malcolm Moores 1049/1023, 1092, 1015, 10?? and 1023/1049 at Alexandra on 8 November 2003. Photo: Peter Evans



Motor Rail 4wDM "Simplex" 11035 of 1965 slumbers at Waratah Park, June 2003. Photo: courtesy John Tulloch



At the Walhalla Goldfields Railway's popular 'Jazz on Track' event, Saturday 15 November 2003, the Rampart Street Jazz Band is in full flight as the train passes through Stringers Gorge en route to Walhalla station, where dinner was served to the 80 passengers. Photo: Peter Ralph



The restoration of former Tasmanian 0-4-0+0-4-0 Beyer Garratt K1 at the Festiniog Railway's Boston Lodge works is now reaching an advanced stage, as evidenced by this October 2003 view. Photo: Michael Chapman

LIGHT RAILWAYS 175 JANUARY 2004

# Heritage &Tourist

#### CARNARVON JETTY AND LIGHT RAILWAY

1067 mm gauge A visitor on 4 June 2003 found the 4wPM steam outline loco *Coffee Pot* outside the depot with the open carriage used for the jetty

tramway operation. Both this and the Carnarvon Light Railway Association's 1.6km line from a station on Babbage Island toward Carnarvon, had suspended operations due to public liability insurance difficulties. Andrew Barclay 0-4-0T *KIMBERLEY* (1754/1922) was photographed inside the shed, while a rusted and largely derelict 0-4-0WT locomotive (Orenstein & Koppel 4058 of 1910)) was 'displayed' on a plinth outside the depot.

Ray Graf, 10/03

#### **OLIVER HILL RAILWAY,**

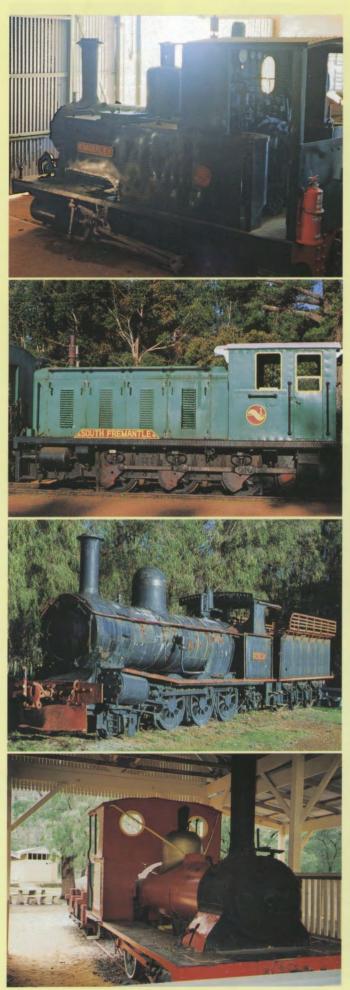
Rottnest Island 1067mm gauge Further to the report in LR 167 (p.30), the new Gemco diesel railcar was officially commissioned on Sunday 9 November. With an outline similar to a Fremantle tram, the railcar replaces the former WAGR rail tractor and its two lightweight carriages. The car seats 64 and has room for two wheelchairs. The 1067mm former army railway was rebuilt for tourist purposes in 1994. David Whiteford, 11/03

#### **Overseas**

WELSH HIGHLAND RAILWAY, United Kingdom 597mm gauge Updating the report in LR 170 (p.31), ex-Tasmanian Railways pioneer Beyer Garratt 0-4-0+0-4-0 K1 (Beyer Peacock 5292 of 1909) was outside the Boston Lodge works with its new boiler and firebox sitting in K2's frames and the original K1 engine units, in October 2003.

New mechanical lubricators and vacuum brakes had been fitted and the cab had been restored, while new boiler cladding was being manufactured. The original tank and bunker have been renovated, with new tanks fitted inside. No definitive date has yet been set for a return to steam, although April 2004 has been mentioned.

Michael Chapman, 11/03



# WEST AUSTRALIAN PRESERVATION

Clockwise from below: Whiteman Village Junction station of the Bennett Brook Railway on 1 June 2003 with the Perry 0-4-2T BT1 BETTY THOMPSON (8967 of 1939) operating the passenger train to Kangaroo Flats. The remainder of the loop line was undergoing restoration work at this time. D Planet 0-4-0DM (FC Hibberd 2150/1939) in WALRPA's locomotive shed at Whiteman Park on 1 June 2003. Photos: Ray Graf D The former logging locomotive KATE and truck on static display at Margaret River. This small 0-4-0WT was built by Thomas Green (B/N 132) in 1889 and worked in Tasmania and Victoria before going to the west as a timber mill locomotive in 1895. Around 1915 it was sent north to the Wyndham meatworks, where it operated until 1953. Ten years later, KATE was repatriated and placed on display at Margaret River. It was cosmetically restored at Boyanup Museum in 2001 (LR 161, p.31) and returned to Margaret River, where it has been given a more substantial shelter. Photo: John Shoebridge D Former State Saw Mills 2-6-0 No.7 (James Martin 117/1895) at Pioneer Museum, Pemberton, 17 June 2003. D Ex-SEC of Western Australia 0-6-0DM (Vulcan Foundry D1041/1949) photographed at Dwellingup on the Hotham Valley Railway, 14 June 2003 D Inside the depot of the Carnarvon Light Railway Association on 4 June 2003 was Andrew Barclay 0-4-0T KIMBERLEY (1754/1922), currently out of action due to public liability insurance problems. Photos: Ray Graf

