



Uranium mining tramways. South Australia

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

I understand that following discovery of uranium-bearing minerals in 1910, several attempts were made to exploit the deposits. The initial deposit, on what became known as Radium Ridge, was worked by the Radium Extraction Company of South Australia Ltd for several years until c.1917. From 1923 until 1932 the Australian Radium Corporation NL operated the venture and in 1944 operations again resumed as part of the war effort and samples were provided to the USA in conjunction with the Manhattan Project. After the war, the South Australian Government continued underground development until abandoning Mt Painter in 1950.

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

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

Phil Rickard

Australian lighthouse tramways

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

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

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

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

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

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

(Tas) was surely the most difficult to access, using a flying fox to pluck supplies and people off the heaving deck of a vessel, depositing them on a high, but sometimes wave-washed wharf, followed by a vertigo-inducing incline tramway up the cliffs to the relative relaxation of a near level wooden-railed tram to the lighthouse (into the teeth of a southerly gale!). Thus one endured a very dangerous disembarkation, the steepest (av. 1:1/2) and highest (220m) lighthouse tramway before even starting one's posting.

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

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

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



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

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

My list comprises:

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

* *boatshed/slipway tram only*

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

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

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

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

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

Phil Rickard

PTC photos online, Victoria

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

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

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

Phil Rickard

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

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

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

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

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

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

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

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

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

Ross Mainwaring