# YOUR VIRTUAL DISCOVERY VISIT - 29 TO THE DEFENCE HERITAGE STORIES OF ROTTNEST ISLAND



The Virtual Visit series was initiated during the COVID-19 pandemic when Rottnest Island was closed to the public due to social distancing restrictions and periods of use for quarantine from March to June 2020. The intent was to maintain a connection to the Island by exploring stories of interest and offering links for self discovery.

Now that the Island is once again open to visitors and guiding services are being gradually reestablished, these Virtual Visits have been retained as part of an archival record for future

## **OPERATION QUOKKA – 44 RAILWAY SQUADRON**



Operation Quokka was the codename for a task carried out by 44 Railway Squadron, Royal Australian Engineers on Rottnest Island over the Labour Day long weekend, 5-7 March 1960.

The task involved restoring the Military Railroad to operational use and then moving over 100 tons of 9.2 inch projectiles from the Oliver Hill Magazines to the Army Jetty. The projectiles were then transferred from the rail wagons to a barge for dumping in the Rottnest Channel.

Over the three days, the permanent way was made good, the rolling stock and engine repaired and tested and the ammunition cleared from the magazines.

Failure of the engine on Day 3 meant that 44 Railway Squadron was not able to complete the entire task. After repairs of the engine, the last 40 tons of ammunition were shifted on Tuesday and Wednesday by soldiers from 4 Water Transport Troop and the Special Air Service.

#### HISTORICAL INFORMATION

When Defence decided to sea dump the projectiles, it was quickly realised that the only practical means of moving them from the magazines to the jetty was to utilise the 3 foot 6 inch gauge railway which had been installed in 1936-37 to construct and service the Oliver Hill Battery in the first place. Unfortunately, since 1945, major portions of the rail network had become derelict. Although most of the track was in fair to good condition, exposed sections of the line had been buried in metres deep sand drifts. As Railway Squadron personnel were only available for the three days of the long weekend, the task of clearing the line of drifts was assigned to 22 Construction Squadron, the regular army engineer unit in Western Australia. This was successfully undertaken by a dozer and the cleared line was ready for the arrival of the 55 members of the Railway Squadron on 5 March.

The Squadron, a Supplementary Reserve unit of railway employees, was organised as four Troops: Construction, Locomotive, Traffic and Workshops. The magnitude of the task of remediating the line meant that all Troops were initially allocated to construction tasks. Here civilian railway expertise came in useful. The non-commissioned officer in charge of each fettling gang was either a ganger or permanent way worker in his civilian occupation. By Saturday evening, the remediation work was completed enough to enable two wagons to be moved to Oliver Hill in preparation for loading.

By 1960 the only motive power was a 4-wheel motor unit powered by a Fordson tractor engine known to wartime engineers as the *Crab* because with its transverse mounted engine and transmission, it appeared to be moving sideways. Available rolling stock consisted of three GS pattern open wagons with a further three in repairable condition. By mid-afternoon on Sunday repair works had progressed so that six wagons could be maintained in traffic. In the meantime, loading of the projectiles on the first two wagons had commenced Sunday morning.



A challenge to the emptying of the H1 Magazine was the 1 in 25 gradient from the tunnel entrance up the slope to the main line. The Crab could not manage this and so a rubber-tired tractor whose wheels straddled the rails was used to haul loaded wagons up the slope before forming a train unit to run down to the jetty. Three train units were utilised with two wagons unloading at the jetty, two wagons and the Crab in transit and two wagons loading at Oliver Hill. Novel use of radio orders was established through a Corp of Signals network with a Control Station at Kingstown Barracks and control points at the Jetty, Airfield and Oliver Hill.

Safety measures through the operation consisted of a No Smoking policy and strict ammunition handling procedures. A 10 mile per hour speed limit was imposed reflecting the condition of both the right of way and the rolling stock. As an indication of the good work of the fettling crews, there were no derailments throughout the operation. Transfer operations for 44 Railway Squadron ceased at 11 am Monday morning and the 55 unit members arrived back in Fremantle on the Army transport vessel *Lerinda* at 4:30 pm on Monday evening.

### **DEFINITIONS AND SOURCES**

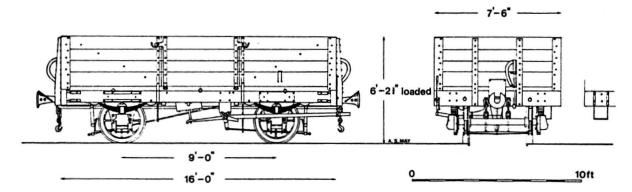
This Virtual Visit is based on information contained in an article published in the Railway Institute Magazine, May 11, 1960. Having restored the Railway to working order, the Squadron later conducted other camps on Rottnest.

**Fettler**: A person who does repair or maintenance work on a railway

**Ganger:** One who oversees a gang of workmen.

**Permanent Way:** The finished track bed of a railway together with the track and other permanent equipment.

**GC Wagon:** The single most important and numerous class of wagon on the W.A.G.R. was the class GC open wagon. After the construction of a single prototype wagon in 1907 more than 3700 others followed.



## http://westralia.uk/gc\_wagon.htm

**Lerida:** AS3050 "Lerida" was a 66 feet wooden Army cargo vessel of trawler design similar to the trawler AS1743 pictured below

