



Heritage unit - Maintaining the story of Queensland Rail
Heritage Rollingstock Maintenance

Refurbishing Aunt Emma RM28

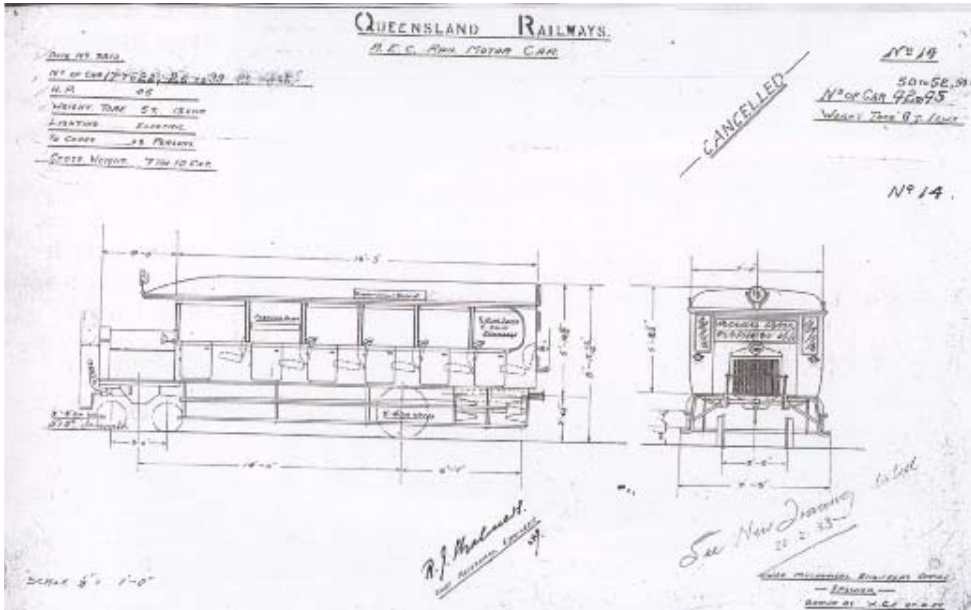
A labour of love...



Greg Hallam - QR Heritage and Graham Hodgson - Workshop Production Manager with the Heritage Rollingstock Maintenance Team

Aramac, Queensland

RM28 (D)



The purpose of the railmotor (railcar) was to provide a passenger service on branch and main lines, where passenger numbers did not justify the expense of running a steam train service.

The RM28 was one of a number of railmotors built on bus and truck chassis of the Associated Equipment Company (AEC) and Associated Daimler Company (ADC).

Buses in London had been built on the same type 506 chassis since 1914. Power was supplied from a four cylinder 45 HP engine. Thirty-eight were imported into Queensland between 1927-3, and a total of 38 rail motors were to then enter service between 1927-31. They were fitted out with seats and bodies, and converted for rail use. The introduction of the 45 HP AEC cars revolutionised rail services in local and regional Queensland.

Rail Motor 28 entered service on 11 May 1928. It was built at the North Ipswich Railway Workshops, at a cost of £2076.10.2. As originally built it was able to carry twenty-eight passengers in four compartments. RM28 was built to operate the service on the Mary Valley branch from Gympie.

The original body was open to the elements above the level of the rear of the seats. Doors opened out on either side, and the seats ran bench style full length across each compartment. Protection from rain and sun was by pull down canvas blinds. Running boards were also provided so that passengers could

step up into the rail motor from ground level. The motor itself was hand cranked to start.

Maximum speed for the rail motors was 30 miles an hour (50 kilometres an hour). The railmotors were also designed to be able to haul a six wheel passenger trailer, seating thirty passengers, and a goods trailer. Later a bogie passenger trailer was built that was able to seat fifty passengers. All up a complete "motor train" could handle 108 passengers, and weigh in total 24 tonnes.

After 1932, a number of the rail motors were converted to have full sides and glass windows. Travelling on some branch lines, during a whipping westerly wind in winter, with open sides was too much for passengers, or driver to bear. Wind down windows, were also incorporated into the new bodywork, the seating capacity was also reduced to 24.

In 1940 it was converted to run with a Buzzacott Gas Producer unit. Five passenger seats were lost in the conversion, and RM28 could now carry 19 passengers. Total cost for fitting with wages and charges was £194.00. The unit was stated to be unsuitable and was removed in 1941, and RM28 was noted to run "temporarily" as a petrol unit. The area at the rear of the rail motor that formerly housed the gas producer unit, was then converted into luggage space. RM28 was converted to run with a Gardner 50hp diesel engine in October 1942. The other eleven enclosed railmotors were also converted to operate with a Gardner diesel, from 1937-42. The D painted on the side identifies it as a diesel powered railmotor.

After 1955, RM28 left its southern haunts and went to Rockhampton. The 45 hp motors lasted in service until the early 1960s. They were reliable and rugged machines, with the ability to be able to be repaired quite easily should anything go wrong with them. Their working lives were spent on branch lines, generally on a daily timetable run, where passengers could join the railmotor at special stops near road crossings, farm gates, or school yards. Not only passengers but mail, cream cans, and parcels travelled on the rail motor. Many of the rail motors were worked from a home station (or terminus) and spent years working specifically on one branch, often times with one dedicated driver.

RM28 was written off the books in August 1963, and sold to the Aramac Shire Council for £100.00. It then spent the next twelve years providing venerable service on this privately owned Shire Tramway that ran seventy kilometres between Barcardine and Aramac, bouncing over the lightly laid track. The railmotor was christened "Aunt Emma" by the local community. In 1975 the line closed and Aunt Emma was placed in a museum in part of the former tramway goods shed at Aramac.

References:

Rail motor history card- RM28- Queensland State Archives: RSI 14124, John Knowles, "The Rail Motors of the Queensland Railways". Australian Railway Historical Society (ARHS) Bulletin, 357-358, July/August 1967, QR Heritage Unit

Establishing the Aramac Tramway Museum

The Aramac Tramway Museum was constructed as the Aramac Tramway Station in 1912-1913, funded by the Aramac Shire Council. It closed on 31 December 1975.

The tramway ran its last service at some time in the days just before New Year 1976. In February 1976, four tenders were received for the purchase of 82 miles of steel rails and the eight year old locomotive¹. Council accepted the tender of £262 400 from the Australian Sugar Producers Association, and the tracks were torn up and trucked away over the next few months. The bitumen-sealed road arrived in Aramac a few months after the tramway closed.

After the tramway closed, its few remaining assets were dispersed. The railway station building was in poor condition because of termite infestation, and was demolished in 1976. The goods shed remained standing, as did the cold store near the station, which remained in service as a Council facility. The railmotor and its carriages, two maintenance trolleys, and some other passenger carriages that the tramway had acquired over the years were placed in a steel mesh cage on a short length of the main line near the goods shed. In 1986 a group of railway history enthusiasts requested a railmotor carriage and with Council's approval removed it to a museum at Kunkala².

The next wave of interest in the conservation of the remaining relics of the tramway came from two schoolteachers who galvanised community members into organising a local historical museum based at the goods shed. This involved housing the railmotor inside the goods shed by means of the major operation of demolishing and later rebuilding the end wall. The Aramac Tramway Museum opened on 29 September 1994, and the Aramac Tramway Museum Association was incorporated in 1997³.

The Tramway Museum has also become a focus for local historical activity generally, and in recent years people have donated a number of items which have been stored in and around the goods shed.

References:

¹ Aramac Shire Council Minutes, 13 February 1976.

² B. Pezet, "The Aramac Tramway Trailer Car - Aramac to Kunkala", Sunshine Express No 241, April 1986, 367-372

³ Extract from Entry in the Qld Heritage Register- Aramac Tramway Museum (File No. 601172).

The Refurbishment Team



Production Manager - Graham Hodgson, Leading Hand - Keith James,
Carriage Builders - Eric Scott, David Wernowski, Eric Joy & Philip Horsey, Wood
Machinist - Wayne Pennell, Painters - Cecil Martischewsky & Michelle Mancy



Fitters - Glen Watson, Allan Verrall, David Williamson & Peter Ehrnholm,
Blacksmiths - Kel Creedy & Warren Nicholls, Trade Assistants - Barry Dallinger,
David Hannah, Bevin Neuendorff & Andy Turner

Transporting Aunt Emma

In December 2002 the Aramac Shire Council approached QR regarding the possibility of undertaking refurbishment work on RM28 (Aunt Emma). This was to be a major element of the celebrations of the Aramac Shire Council in recognition of the centenary of local government.

In January 2003, a quote was forwarded from QR Heritage Rollingstock Maintenance, Ipswich Workshops, for proposed work to be carried out on Aunt Emma.

The quote was negotiated with QR, and a decision was made to transport the historical item from Aramac to Ipswich to allow refurbishment work be carried out.

Transport was carried out by low loader from Aramac. After its journey from central Queensland, "Aunt Emma" arrived at QR Heritage Rollingstock Maintenance Workshops, Ipswich, on 7 February 2003.





Following its arrival the railmotor was placed on number 13 Road, in the Ipswich workshops. After a preliminary examination "Aunt Emma" was then moved to number 8 road to provide a working area for refurbishment work to be carried out.

The initial report on the condition of "Aunt Emma", by the QR Heritage Rolling-stock Maintenance team, showed that the railmotor overall was in a structurally sound condition, but in need of renewal of major components. It was intended to maintain as much of the original fabric as possible, whilst renewing the exterior and interior of the vehicle. One aim of this project was the decision to utilise original material already extant in the railmotor, and where new material was added to ensure that this could be identified in any later work undertaken on the railmotor.

The work begins...



After the preliminary work was undertaken several major areas of refurbishment were identified these being:

- Doors and fittings
- Covering on roof
- Repairs to radiator
- Replacement of flooring material
- Repainting of interior
- New pillars for doors
- Refurbishment of radiator, fitting of new tanks
- Fitting of new gutter mould
- Renewal of mud guards
- External pain and finish
- Renewal of timber for external luggage compartment (boot)

Refurbishment of doors

The condition of the doors on the railmotor were of concern to the Heritage Rollingstock Maintenance team.

Rusting out was noted on the skin of the doors, as well as several window winders were also missing. Several glass windows which had been placed loose had been damaged during the road journey to Ipswich from Aramac. All doors were removed from the railmotor for reconstruction where necessary, or for the inclusion of new material. New door pillars were also required.



Roof renewal

The canvas roof had deteriorated to an extent that required complete renewal.

The underlying timber of the roof was judged to be in generally good condition, although the leading edge would require a new shielding. Strengthening straps on the roof also required complete replacement.





Trimming canvas roof covering, and painting.

A new gutter mould was also fitted to the roof of the railmotor.



Replacement of interior floorboards

The interior fittings, such as seats etc. were all removed to allow for investigation of the interior space.

The interior floorboards on the railmotor were judged to beyond repair, and required complete replacement. All the floorboard material was shaped, and sized in the K Mill at Heritage Rollingstock Maintenance Workshops.



Under the cowl...

No major work was to be carried out on the engine of the railmotor. The cowl of the engine area was removed so that access could be gained.

The radiator required major refurbishment work, and was sent to an external repair company. New tanks were fitted, although the original core was retained.

The cowl was later repainted.



Aunt Emma up on blocks

The front bogie on the railmotor was removed for attention to the mudguards, and attention to the brakes.



Fitting of bogie, replacement of radiator

Painting and finishing were the major final elements of the refurbishment. Prior to this the front bogie was replaced after receiving attention, and the radiator replaced in the engine compartment.



Painting and finishing

Presenting Aunt Emma to the world, in time for her 75th birthday was a major focus of the refurbishment. The interior ceiling had received successive repaints, and required complete cleaning back to a bare surface. Old paint was burnt off the ceiling, and interior. Paint scrapings had revealed that at one point a green colour had been used on the external stripe (speed whisker). After consultation it was decided to proceed with a representative colour scheme for the interior.





External bodywork

The external skin on the doors was renewed, or replaced as required.

The luggage compartment had seen deterioration in the matchboard timber on its external surface, as well as the rotting of other timber. Reconstruction was required of the luggage compartment, and new timber inserted where needed.



Back on the rails...

By late April 2003, RM28D, "Aunt Emma" was ready to face the world again.

The work had taken approximately ten weeks. The work involved the application of a variety of trade skills, and knowledge, and was given the corporate support of QR. QR Heritage Unit provided historical advice on the history of the railmotor and its significance in the story of QR.

The refurbishment identified that it was important where possible, to conserve existing material on the railmotor, but where necessary to utilise new materials that could be identified as being added to Aunt Emma in 2003.



Aunt Emma left QR Heritage Rollingstock Maintenance at Ipswich Workshops for home in Aramac on 12 May 2003, one day and seventy five years after entering service for Queensland Railways.

RM28 in 1963



RM28 at Barcaldine prior to handover to Aramac Shire Council, in 1963.
Image courtesy of the Courier Mail