

## **Support Material**

The Trans Australian Railway - Background  
Life along the Trans Australian Railway - The early days (pre 1945)  
Life along the Trans Australian Railway - The middle years (1948 - 1990)

Compiled by John Henry SMITH (c1990)  
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16 page digital copy, can be folded into a booklet  
Tea and Sugar T F Chambers.  
Additional Museum images b/w and colour,  
Tea and Sugar exhibit details.

Members of Aboriginal  
and Torres Strait Islander  
communities are advised that  
this booklet contains images  
of deceased people.

## The Trans Australian Railway Background

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John Henry SMITH (c1990)  
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*The line, variously referred to as the Trans-Continental, and the Trans Australian Railway, Construction began in 1914 branching out from Port Augusta (South Australia) and Kalgoorlie (Western Australia), the 1779 km of line to Kalgoorlie (Western Australia), was completed in 1917, thus fulfilling the federation promise.*

### Federation, and the construction of a Trans-Continental Railway

The task of uniting six autonomous British settlements under one central (Federal) government was one that had herculean proportions. State rivalries seemed to impede the federation fathers at every step.

Neither New South Wales nor Victoria wanted to see the other as the seat of Federal government and each was aware that the other colonies may well benefit, by form of a virtual subsidy, from their wealth and prosperity.

Western Australia was a reluctant guest at the Federation table. She argued that:

- distance between her and the eastern sea-board, no doubt the seat of (Federal) government, would mean that the interests of her people would be ignored;
- she was neither a Cinderella state, nor poor cousin. The Kalgoorlie/Coolgardie goldfields gave hint of vast potential mineral wealth. In effect she would be milked for her economic contribution without having any political influence in a central government.

To ameliorate the sensitivities of the Western Australian Government, it was agreed that the proposed new Federal Government would construct a rail line - a direct communication line - to the West.

Both colonies, Western Australia and South Australia, ceded a narrow corridor of their precious territory so that a railway link could be constructed.

The line, variously referred to as the Trans-Continental, and the Trans Australia Railway, was constructed. Begun in 1914 branching out from Port Augusta (South Australia), the 1779 km of line to Kalgoorlie (Western Australia), was completed in 1917, thus fulfilling the federation promise.

However, the federal obligation had not finished.

The line had to be maintained. How? It was decided that small settlements of six houses per siding, could maintain the line.

But the line traversed hot, arid, treeless country. Certainly there was no rich farming hinterland to supply these isolated groups with food. Nor was there a water supply.

The latter was doubly imperative, for water was vital for these twentieth century pioneers and for the large steam engines which pulled the passenger and freight traffic. The line and the settlements were now on Commonwealth land - Western Australia and South Australia had ceded their sovereignty when the construction of the rail link was being negotiated. Hence these problems were the responsibility of the Federal Government.

And so in 1915 it was proposed that a supply train provide food and water for the navvies (railway worker) maintaining the East-West link. With the completion of the line, the supply train became the lifeline of the fettler (track layer or repairer) communities, bringing them food, water, clothing, household item, letters and news of the rest of the world. It became known as the Tea and Sugar train.

(A similar supply train referred to as the Slow Mixed, later provided for the communities along the line to Oodnadatta.)

By the 1980's many of the settlements along the Trans Australian line no longer existed and the families from these communities had been settled elsewhere. But not all the towns were 'dead men's camps' and the Tea and Sugar still supplied isolated communities along the railway line out on the Nullarbor. But the supply train of that era reflected the consumer goods of the day and with air conditioning, refrigeration and a welfare car, was a far cry from the trains which served those areas in the early part of our century.

As we moved into the 1990s railway engineering advanced rapidly and with some urgency adopted a range of low maintenance materials that essentially eliminated the need for local maintenance gangs. Most notably the use of highly durable concrete sleepers was adopted, and together with the ability of modern diesel locomotives to travel very long distances without refuelling, the staff along the line dwindled away.

As a result the Tea and Sugar was no longer required and the last trip was made on 30 August 1996 ending a colourful chapter in railway operations in Australia.

Today, the only place with permanent railway staff is Cook, where one couple remains to manage the facilities for locomotive refuelling and for the 'watering' of the Indian-Pacific (today's Sydney-Adelaide-Perth passenger train operated by Great Southern Railways).

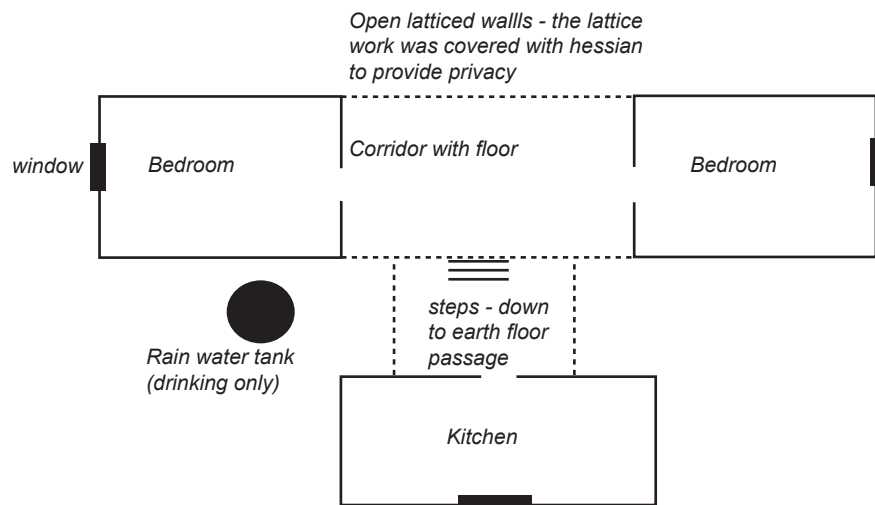
## Life along the Trans Australian Railway The early days (pre 1945)

From Port Augusta to Kalgoorlie, 1,770km of railway was maintained by communities of six houses, thirty km apart. For the residents of these communities the problem of food, water and isolation was ever present.

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Life today has some of the benefits and conveniences found in the cities, but in comparison it is still frontier country. The comparison was even greater in the first half of this century.

Houses were provided for the railway workers - three roomed houses in a 'T' form, each room being linked by open latticed-walled corridors. They were usually constructed of corrugated iron with no fly screen for the doors or windows - one of each per room. Imagine the conditions in summer with the temperature around 50°C for weeks on end with all cooking done on a wood stove. Without refrigeration food could not be kept, and meat especially had to be cooked as soon as it had been purchased from the Tea and Sugar.



Nor was there any privacy when moving from one room to another; neighbours had a clear view through the lattice walls.

A 'pit' or 'dry' toilet (a long drop) at the bottom of the yard, and tin (galvanised) tubs and baths were all that served as conveniences.

What access reptiles and small animals might have had through the open latticed-walls? It is claimed that at night, one never ventured without a light (candle) in order not to step on any snakes that might have decided to visit.

The rain water tank was filled from the catchment area provided by the roof of the house - when it rained. This precious water was for drinking only. Water for their domestic purposes came from tanks filled with water carried from Port Augusta in the water wagons included with the weekly train.

Water was carried to the homes in buckets. On washing day, the water was heated in wood coppers and the clothes scrubbed in galvanised iron washing tubs on benches out in the yard.

The only power provided was from a bank of batteries and one accumulator (like a car battery). The accumulator could only be charged at Port Augusta; each family was allowed one charging per fortnight, the accumulator being sent away to Port Augusta.

The batteries provided power for the wireless, but reception was too often poor and so people filled in evening leisure time by reading library books brought by the supply train, and the newspapers - at least two days old.

Wind generators could provide power and 'free' electricity, but the towers and equipment were expensive. At best they generated a 12 volt supply to charge radio batteries, and 32 volts did give electric light - sometimes. The Commonwealth Railways did not provide generators until about 1960 - and then only in the bigger camps of locomotive depots.

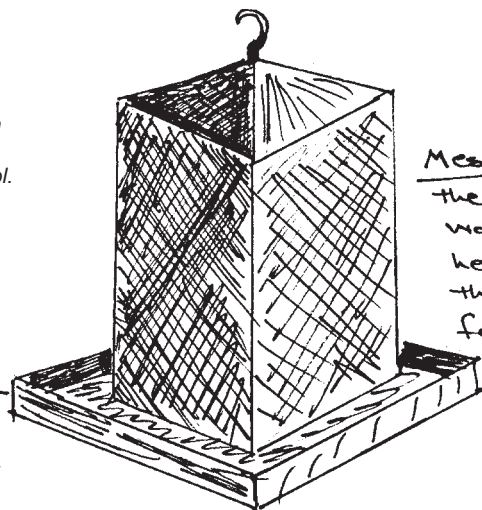
There was no refrigeration and the Coolgardie safe hung in the shade of the latticed-wall corridor, providing the only 'cooler' place for food.

Mesh walls covered with hessian, the ends of which were in water.

Capillary action kept hessian damp. Air passing through damp hessian, kept food cool.

Tray - filled with water

Tray - filled with water



Mesh walls cover with hessian the ends of which were in water. Capillary action kept hessian damp. Air passing through damp hessian, kept food cool

Later coolers had double walls of mesh, the space filled with charcoal, kept wet through percolation.



Flat iron

Ice boxes, kerosene refrigeration and then gas-heated refrigeration marked progress in technology for the women out on the Nullarbor. The first kerosene refrigerator on the Nullarbor appeared in 1938.

Ironing must have taken an immense amount of will-power and determination as the old flat irons had to be heated on the wood stove.

Made of cast iron, these appliances were also very heavy and required considerable strength, stamina and endurance.

An alternative was the petrol iron (using 'Shellite') which worked under pressure. The tank was screwed down, and the iron heated making its own pressure. They were dangerous because of the risk of igniting and there was the fear of explosion, the latter more imagined than real. Then there were the kerosene pressure-tank irons which were pumped to build up pressure.

Domestic lighting was also provided courtesy of kerosene - hurricane/wick lamps, Aladdin lamps and Tilley lamps.

And cleaning the house? Well, there was dust. Fine, red dust which filtered into every part of the house. And once a week or once a fortnight, a good strong dust storm made sure that every thing was well covered. Remember there was no power and no vacuum cleaners. All cleaning was done by hand.

Linoleum covered floors were easy to sweep, but after a dust storm, dirt was shovelled out. Cupboards had to be cleaned out - crockery, clothing, etc - everything had to be washed.

Some dust storms were so heavy that lamps had to be lit inside houses in order to see and it was necessary to lay on the floor with a cloth over the mouth so that it was possible to breathe.

Respite from the dust came with the rain and then there were the floods and mud! Mud was trampled everywhere, including the house.

While the women coped with heat, flies and dust in the home, the men had to deal with the same out along the lines. Tracks were laid, maintained and repaired but there were no air-conditioned lunch rooms - just the open spaces, dust, heat, flies and a water-bag.

It has been claimed that it was a great life for a kid. There was space and the room to roam, explore and learn. Formal education was based on correspondence lessons sent out from Port Augusta once a fortnight. Mother became the teacher. But there was also the school of the bush and its lessons were absorbed by being with young First Australian peoples, as they learnt the traditional ways from the elders and then practised and developed their bush craft in their play. Boys gained most from this and integrated more easily. More freedom was allowed than to girls. Cultural values meant that girls looked to their mothers as models and therefore assisted them and learnt housekeeping skills. Mothers were more protective towards their daughters and did not accept them going off into the scrub for a few days, yet it seemed acceptable for their sons to do so.

Secondary school meant leaving home and so 'going on' was the exception. It was possible to continue correspondence lessons at secondary level, but sometimes this became difficult as the level of work surpassed the level of education of the parents. There were high schools in Port Augusta and Kalgoorlie and a few students came to board in Adelaide.

A great life for a kid, yet what were the prospects and expectations of children out on the Nullarbor 50 or more years ago? A boy's highest ambition was to drive a locomotive - like their fathers. For girls, the railways offered little, apart from marriage to a railway worker. The proportion of such marriages was high.

Most girls became housewives and mothers - like their mothers. But before marriage they did aspire to semi-professional careers such as nursing and teaching. Many became governesses to the children of station owners and managers. Such careers carried status - they were seen as a rung up the social ladder.

As well as being wives, mothers and housekeepers, women also had to fill the role of a para-medic, able to treat and cure snake-bite, sun-burn, heat exhaustion, and gastroenteritis (summer diarrhoea). Starvation and plenty of boiled water was a standard treatment. For severe cases there was the additional medication of water and cornflour to bind the contents of the stomach and intestines. And for those who suffered the opposite of excessive looseness of the bowels, there was the weekly dose of castor oil.

Inevitably there was pregnancy and child-birth - help and advice came from the other women of the settlement, pooling their collective knowledge gained from a text on home nursing and experience. Common sense and folk-lore prevailed.

The highlight of the week was the arrival of the Tea and Sugar train. It may have developed into a social event, but it was a necessary service, a life line. The first supply trains (provisions trains) brought basic food stuffs, wood (fuel) - remember this is the Nullarbor - and water. Women made their own bread but the food brought by the supply train was kept 'fresh' in the cool of the vans constructed of thick timber. Fresh meat was 'on the hoof'.

All families had to pre-order and their requirements were packed into the provision van accordingly. Livestock was carried in the butcher's section that included a slaughter van. As the train approached a siding, the meat order was checked, the butcher selected a beast, had it slaughtered, gutted, skinned it and was sectioning the carcass into the cuts ordered by the time the train had halted.

The local dogs welcomed the arrival of the provisions van as much as the human inhabitants. They raced straight for the slaughter van, anticipating the inevitable spoils of the kill.

What fresh milk there was, was not transported. Goats were kept, penned at each siding and occasionally they also supplemented the meat supply. The cream from the goat's milk was used to make butter. To prevent inbreeding within a herd, billygoats were exchanged between the various camps or towns, courtesy of the provisions train.

Water wagons transported water for up to 800 km and ensured the renewal of that necessary commodity.

Wood for the stoves and coppers was tossed out along the line.

And the social event? Regardless of the hour 10.00am or 1.00pm, the entire settlement met the train. Men had their weekly shave and donned a clean shirt; women put on their best dress and a little bit of 'lippy' and the children were expected to be clean and in their best, but 'catching' them, 'pinning them down' and making sure that they were bathed was another matter.

But the children eagerly anticipated the Tea and Sugar. Although it was part of the weekly routine, there was the excitement of climbing and crawling over the locomotive and talking to the engineer who seemed to treat them as adults. Not being told what to do by their parents was an hour's fantasy and fed the dreams of being an engine driver.

And then there was always the hope that after the weekly provisions had been bought, there might be 'a few coppers' left over to buy sweets (lollies): a penny (less than a cent) bought three or four boiled sweets. That's what was going if one was lucky. Eyes only lingered on the packets of 'Tip-Top Toffees'; at six pence (5 cents) a packet, they were too expensive. Chocolate was available only in the winter; it did not travel well and melted in the warmer temperatures, let alone the extreme heat of summer.

The men were also drawn towards the engine driver and the fireman. These were the elite of the railways, but all the men had the bond of working on the railways and could engage in conversation about their work and become recipients of the ubiquitous stories (of course, no rumours!) about expansion, improvements, changes being planned by politicians in the remote cities etc.

News of what was happening in other camps also was sought with great interest.

As shoppers anywhere seeking the best buys, the women concentrated on procuring their goods, after which there was the real business of exchanging news and gossip. The train crew were eagerly sought out, for if they were worth their salt, they were worthy mediums through which information could be exchanged and once they had proved their worth, they became the trustees of news along the line. It was they who knew who was going to have a baby, leaving, which children were staying on at school, who was going to attend a secondary school at a larger centre; they provided the information about new families in settlements and who was arguing with whom. When the thirst for information had been satisfied, the residents then passed on the latest news from within their own community. The crew were also an unofficial postal service - they were given letters to either post or deliver and they even passed on verbal messages.

As the train pulled out, the families made towards their homes and for the women, began the task of cooking the meat and dealing with feeding the family during the ensuing week.



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## Life along the Trans Australian Railway

### The middle years (1948 - 1990)

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John Henry SMITH (c1990)  
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– Port Adelaide

Technological development in the four decades to 1990, brought about many changes in lifestyles, standards of living and modes of transport. These changes had an impact on all aspects of Australian society, including the small communities scattered along the Trans-Continental line.

The Trans Australia was a self-contained railway operated by the Commonwealth Railways which had to make provisions for the staff along the Nullarbor. All needs, except medical and education, were catered for. The Royal Flying Doctor service and the state education system had the latter responsibilities.

The Tea and Sugar continued as the lifeline for railway employees and it also served the pastoral stations and those who made independent livings along the line. However in 1981, the ubiquitous problem of containing costs was solved by reducing the number of stops which necessitated the cessation of services to pastoral stations. Then the Tea and Sugar limited its stops to railway camps only. As the Commonwealth Railways was unable to charge freight costs of goods (which are sold at store prices) only employees were then able to take advantage of the services of the Tea and Sugar. The pastoral community and others had to pay freight on their requirements which are transported along with normal freight.

Housing changed. The corrugated iron and wood structures were replaced with prefabricated, transportable type dwellings, which with air-conditioning provided more comfortable (family) accommodation. Solar panels fitted to the roofs provided hot water on tap - no more wood fires to heat and boil water. Video cassette recorders and satellite TV replaced the creative pursuits and some of the community activities that previously occupied children and filled leisure time. Yet the remoteness remained and life could still be difficult.

More facilities were available in some towns. Cook, near the SA - WA border, had a basketball court and swimming pool as well as an air-conditioned recreation area with pool table and bar (an ex-SA Education Department transportable classroom).

Septic sewerage systems also did much to make things quite nice.

The women still supported their men folk and families by making the best of the situation - their philosophy based on the maxim life is what you make it.

Of course they were still as eager to know what is happening further along the line in the remaining camps and they sought out the train crews (for this information) just as eagerly as the men. Like people everywhere they had their differences of opinion, perhaps even more so being such small communities where things could 'get on your nerves' easily when it was not possible to escape from an irritation, but what was the point when the children of the protagonists were playing together.

The positive attitude of these women was also reflected in their knowledge: you don't have to worry (about the children) out here - not like in the city.

".... a woman has all the routine jobs to do with very little companionship",

and yet..."

"... I really do love the life and - will be truly sorry to leave when the time comes ....."

-comment made by a woman in Nullarbor Lifelines, Basil Fuller

These attitudes were countered by the hard reality of maintaining staff - the turnover was high, especially among single men who may only stay 3-6 months. In the 5 years, July 1969 to June 1974, there were 1175 persons hired and 1182 left.

Anyone who was strong, healthy, active and prepared to work was taken on, regardless of age.

Much had changed since the early vans of the Tea and Sugar. The wooden construction of the first vans had given way to insulated evaporative cooled vans and motor driven refrigeration cooled, chilled and froze perishables as required.

No longer was there a slaughter van, but a refrigerated Butcher's Van carrying beef, pork, mutton, fresh milk and ice cream. During the 1960s and 1970s the Butcher's Van was also the home of the community notice board which bore messages written on scraps of paper and pieces of cardboard, informing everyone along the line of what was for sale, wanted or available for exchange, as well as personal messages.

A Cold Stores Van carried fruit, vegetables, sweets, chocolate and beer.

The Provisions Van extended its range of goods to include groceries, clothing, general household articles and goods, records, cassettes and some (small) furniture.

In June 1982 the Butcher's Van was taken from the train and the final Tea and Sugar was a type of supermarket on bogies, which provided goods at Port Augusta prices, except for specials that were advertised in the press.

The Tea and Sugar still brought in domestic and drinking water, wood for fuel and bulk kerosene. Maintenance supplies such as rails, sleepers (concrete) also came into the camps per the Tea and Sugar.

A few passenger cars, as in earlier days, still carried those who choose this mode of travel.

And, once a fortnight, the pay-van was included. The pay-clerk was not only responsible for the employee's wages, but also did their banking and postal business where there was no post-office.

In spite of the changes, the arrival of the Tea and Sugar was still an occasion to dress-up and exchange news, even though there were fewer camps and fewer families than in the early days. By mid-1985 there were only twelve camps left and by 1987 these had reduced to nine.

Conditions for the train crews had improved considerably; with the introduction of diesel locomotives - ice-boxes for their food, refrigerated water coolers, fans for each driver, plus radiant heaters at foot level. Diesels locomotives had shortened the time taken to serve the remaining camps, although the distance was still the same!

Education was still based on lessons from the correspondence school, but modern technology provided a direct link between students and teacher(s) by means of the DUCT system (a telecommunications link). Modern, faster diesel travel permitted the occasional visit from a teacher. Larger centres had schools which enabled some students to experience school life in much the same way as their urban cousins.

Cook had a school where students attended normal lessons and their experiences of school life had similarities with that of any city student.

For students at places such as Barton (line kids), there was the opportunity to enrol in the Open Access College at Marden through which they could do their correspondence lessons, or to enrol in the Pt Augusta School of the Air. Marden had two colleges, one R-10 ( the School of Distance Education), the other a Senior College at Port Augusta was R-12.

Students enrolled in these colleges do have direct access to teachers through a telephone bridge. Their written work was passed in to their teachers who would mark and assess it.

Father Christmas, alias Alf Harris, also visited the children of the Nullarbor. Born in 1929, son of a ganger at Zanthus - east of Kalgoorlie (WA) - Alf grew up there and in Kalgoorlie.

Before joining the Commonwealth Railways in 1948 at the age of 19, as a cleaner, he had tried mining at Coober Pedy, Kingoonya and Tarcoola. In 1960 he donned the garb of Father Christmas, a role that with the exception of one year, he has continued to play, even in retirement.

The Welfare Car became part of the Tea and Sugar in 1945 - its purpose was to help immigrants settle in these remote areas and to serve a community referred to as Little Europe. These immigrants had to work wherever the Federal Government sent them in order to pay back their fare to Australia.

By the 1970s the services provided by the Welfare Car had extended to TB and dental clinics, a toy library, Infant Health, clergy for all denominations, a representative from the Aboriginal Commission, representative from the Good Neighbour Council and facilitating the visit of Father Christmas to the outlying communities. Also help was given in expediting furniture removal, investigating leases, assisting and supporting women having their first baby, arranging for new families to be linked with old families for support, and the officers also gave advice concerning family matters and mental health.

The Welfare Car also carried gifts from the people of Port Augusta. These gifts were clothing, magazines and such. In earlier days, when gangers wages were low,

these gifts were welcomed because of need. Later they are welcomed because it gave the women an opportunity to see, touch and try on - not possible when ordering by catalogue. Also it was another opportunity for social interaction.

The Welfare Officer was responsible for Commonwealth Railway/Australian National employees and their families:

- first aid equipment and recreational facilities had to be inspected
- first aid equipment on goods trains and the Tea and Sugar was inspected
- instruction on first aid was given to guards, engineers, shunters and apprentices
- maintained a disaster chest in readiness for emergencies along the line
- arranged movie films (shown in the theatrette van) - each siding/camp had seven films a year.

The Royal Flying Doctor Service and the Air Ambulance linked the remote communities with the Tarcoola and Pt Augusta hospitals. The Flying Doctor Service also held monthly clinics at designated places.

In between, people relied on radio links with the sister in charge of the hospitals, to discuss symptoms and to seek advice.

## TEA AND SUGAR TRAIN NATIONAL RAILWAY MUSEUM



**Provisions Van**  
Standard Gauge  
Class operators: Commonwealth Railways  
Condition: Good  
Entered service: 14.12.1955  
Entered the museum: 2.8.1988  
Number in class: 2  
Ownership: Port Dock Station Railway Trust  
Provenance: Commonwealth Railways and Australian National Railways (ANR)  
Withdrawn: 3.5.1986

This van was used to service railway settlements weekly on the Tea and Sugar train from Port Augusta-Kalgoorlie on the Trans-Australian Railway. Groceries, hardware, etc. were supplied from the Provision store at Port Augusta.

In 1955 two purpose-built brand new all steel framed vehicles were constructed for use as Provision Vans on the Tea and Sugar. Entering service on 14.12.1955, VPA1340 provided a far superior service and facilities to that of the then existing vans.



**Butchers Van**  
Standard Gauge  
Class operators: Commonwealth Railways  
Condition: Good  
Entered service: 20.11.1944  
Entered the museum: 2.8.1988  
Number in class: 2  
Ownership: Port Dock Station Railway Trust  
Provenance: Commonwealth Railways and ANR  
Withdrawn: 11.9.1982

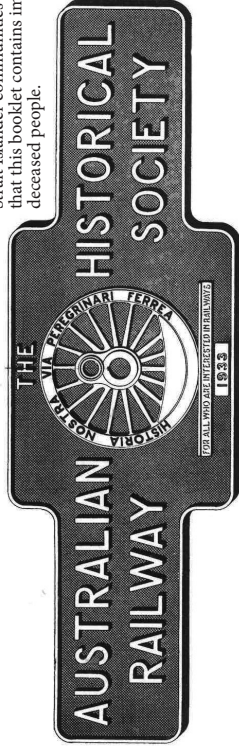
The original butcher cars transported live sheep that were killed en route, as no suitable method of refrigeration was available to keep meat fresh for long periods.

In 1944 two new bodies were built for use as mobile Butcher cars. One of these was van FA640, which entered service on 20th November 1944. It was constructed on a 45 foot (13.71 metre) flat wagon that originally had been built in 1916.

Apart from new refrigeration units fitted in 1963 both vans remained basically unaltered, apart from minor overhauls, until being written off on 11th September 1982. They were stored at Port Augusta and Stirling North for six years until FA640 was delivered to the museum on 2nd August 1988 and the other tendered for disposal.

Images Chris Drymalik, NRM

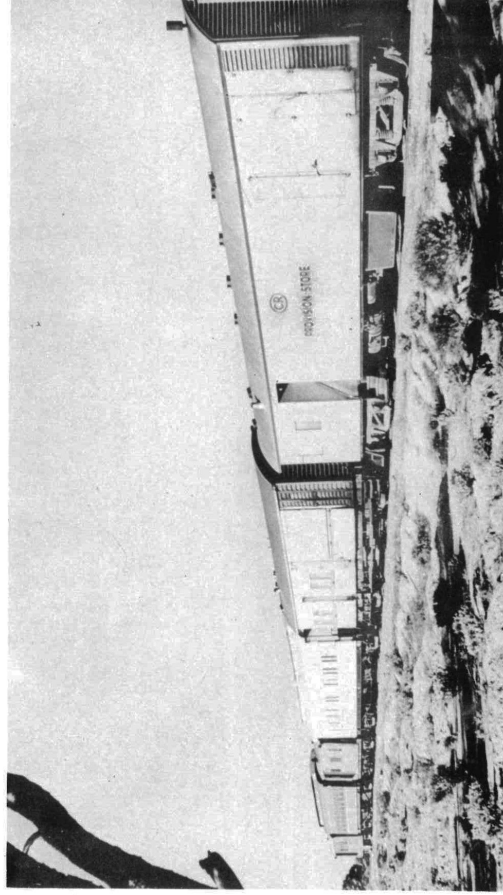
Members of Aboriginal and Torres Strait Islander communities are advised that this booklet contains images of deceased people.



Vol. XIII (New Series)

Bulletin No. 300

October 1982



The business end of the weekly "Tea and Sugar" - the lifeline of the permanent way employees of the Trans-Australian Railway. From the left: guard's brakevan, wayside coach, paymaster's van, welfare car, butcher's van and the provision van. (Photo: T.F. Chambers)

### THE "TEA AND SUGAR" (by T.F. Chambers)

#### Commonwealth Railways

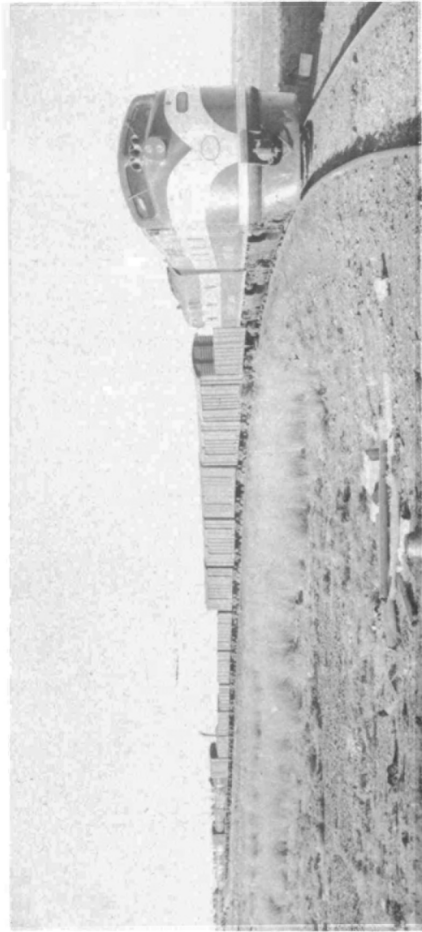
The Trans-Australian Railway stretches across 1,051 miles of some of the loneliest country in this continent, from Port Augusta in South Australia to Kalgoorlie in Western Australia. Owned and operated by the Commonwealth Railways since its opening in October 1917, it is an isolated system in terms of locality and yet, by its very existence, it overcomes the isolation that existed until that date between the Eastern and Western portions of Australia.

A factor which is often overlooked, or seldom given thought, is the vast organisation necessary to keep this railway in good

running order and, in particular, the permanent way and its upkeep.

For this purpose, no fewer than 56 camps and settlements have been established along the line, staffed by approximately 515 gang-ers and fettlers. These permanent way groups are, in turn, controlled by six Roadmasters, each Roadmaster being responsible for approximately nine gangs.

The labour turnover for these gangs on both the Commonwealth Railways' controlled Trans-Australian and Central Australia Railways was 3,115 men for the last financial year - not such an incredible figure when



The leading end of the "Tea and Sugar", with D/E locomotives GM.19 and GM.8, on the Woomera branch line at Pimba, South Australia. (Photo: T. F. Chambers)

considered in the light of living and working conditions, isolation and extremities of climate.

In order that the permanent way employees and their families may receive the necessities of life, the Commonwealth Railways operate a once - weekly "slow mixed" service in each direction, No. 535 Westward and No. 520 Eastward, known throughout the Trans-Australian system as the "Tea and Sugar Trains". It was my good fortune to travel on one of these trains recently and the following account of my journey may be of interest to members.

Every train on the Trans-Australian is allotted a number consisting of three figures, of which the first figure always indicates the day of the week on which the train departs from its originating station.

Following the arrival from Woomera of No. 522 (Budd car to Port Pirie), No. 535 departed Port Augusta (56m. - all mileages read from Port Pirie), its starting point, on time, at 7.30 a.m. on Thursday 7th June last. The maximum load for No. 535 is 1800 tons and this particular trainload was 1782 tons. Drawn by D/E locomotives GM.19 and GM.8, the composition was 11 steel box vans, five gondolas, a flat car, 18 tank cars, a provision van (refrigerated), a butcher's van (refrigerated), a welfare car, a pay van, a wayside coach and a brakevan.

I might mention that, with the kind approval of the Chief Traffic Manager, Mr. N. White, I had been given permission to travel in the welfare car with the two Departmental officers, Mr. J. O'Rourke (the Welfare and Ambulance officer) and Mr. M.

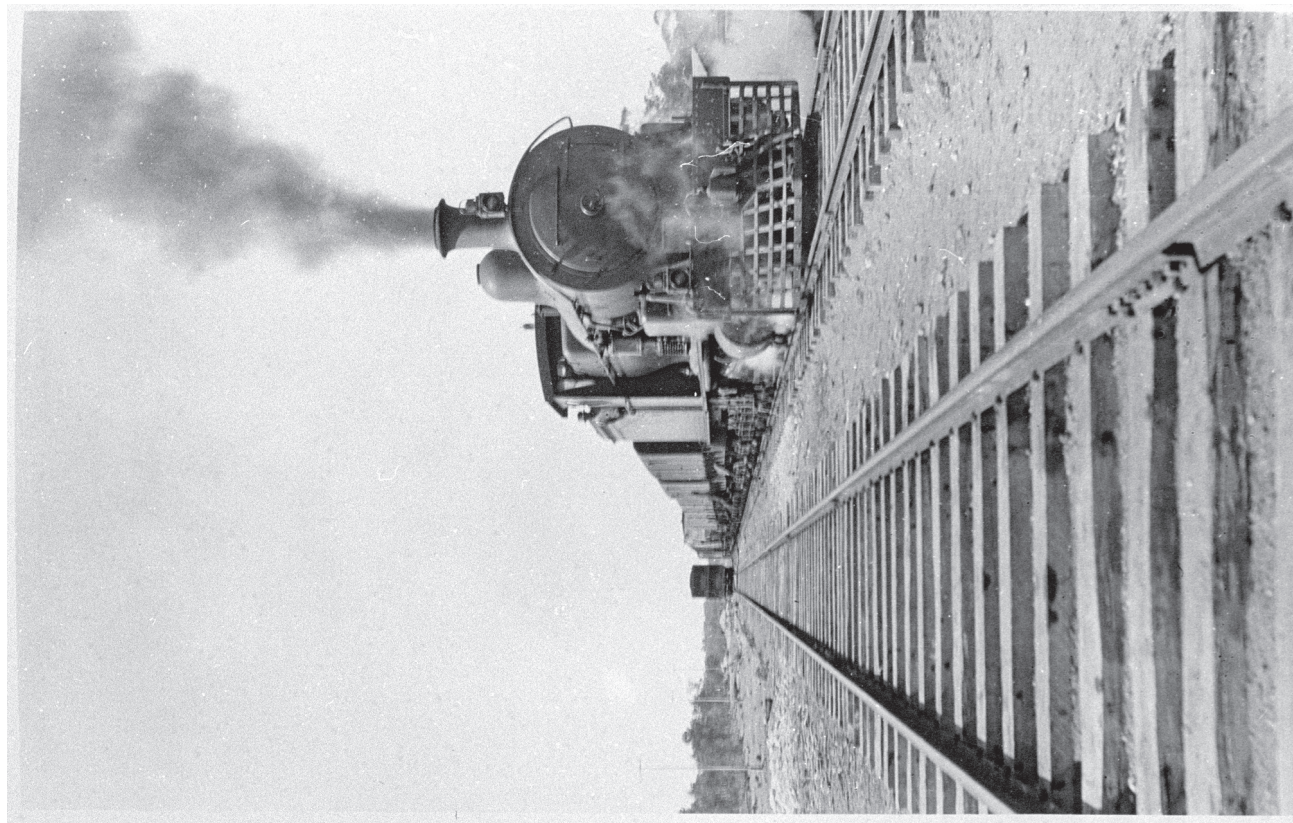
Luke (General Secretary of the Commonwealth Railways' Institute).

The welfare car is an ex-"Trans" wooden sleeping car, fitted out in similar fashion to the Baby Health cars of other systems and in fact, it often performs this particular duty. It is a most comfortable car to travel in and is fitted with Porta-gas for the operation of heating, cooking, refrigeration and shower.

Skirting the head of Spencer Gulf, we turned Westward, running through myall and mulga country, through which were seen unusual flat - topped individual mountainous hills. Our first stop was at the 73 Mile Camp and a description of the scene as the train arrived could be used as a general portrayal of similar stops made along the line.

As we approached the shunt limit board outside the camp, a long blast was sounded on the five-note air horns on GM.19 and the "Tea and Sugar" customers began to appear. Easing down to about 5 m.p.h., we passed through the camp area until we received a message over the locomotive's radio, "Guard to Driver GM.19, that'll do nicely".

This left the business end of the train right in the heart of the camp, which consisted of a row of six wooden-framed asbestos cement homes, with verandahs on three sides, a one-roomed electric staff cabin, a fettlers' shed, containing a section car, and a water tower. Most of the employees' wives were pushing wheelbarrows from their houses to the butcher's and provision vans, whilst the menfolk made straight for the pay van, which also serves as a bank and a post



Tea and Sugar supply train steam hauled c1913-1917

80-894

Electric staff at Chifley (1005m.). The sum total of this "centre" is a passing loop, an electric staff cabin and a nameboard - a very humble monument to a great Australian. At Karonie (1039m.), we crossed West-East Express No. 436 at 9.30 a.m. and one and a half hours were spent two miles beyond Curtin, off-loading sleepers for use by yet another special gang. Finally, at 3 p.m., journey's end at Parkeston (1105m.), three miles from Kalgoorlie and the Western depot of the Trans-Australian Railway.

So ended six and a half days through some of the most desolate, yet fabulous, country in the Southern Hemisphere. In my 1,000-mile journey, I had seen 12 changes of crew take place, yet we had been hauled by

the same locomotive. I had met a cross-section of the "Trans" population, people who not only worked on the railway but, in their isolation, depended on the railway for their very existence.

In particular, their existence centres on the running of the "Tea and Sugar", the weekly Slow-Mixed Nos. 535 and 520, the unusual nature of which may best be described by an extract from the Commonwealth Railways' Trans-Australian line Working Time Table (page 52), which states - "Provided all is ready, the train (535 or 520) must be despatched as soon as the tabled allowance of time has expired, unless the van storeman or the butcher requests otherwise!"



Aboriginal people living along the Trans-Australian line were reduced to living marginal lives, worsened by the South Australian government's chronic underfunding of the Aboriginals department. The communities living along the Nullarbor were obviously a novelty for travellers riding on the Trans-Australian Railway.

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office. The butcher's van contains a large freezing chamber (for the storage of approximately 50 sheep, three bullocks, six pigs and a large variety of smallgoods), a shop and living quarters for the butcher and his assistant.

The provision van consists of a freezer (containing milk, fruit, vegetables, etc), a large storage area for groceries, papers and periodicals, a shop counter and living quarters for the storeman and his assistant.

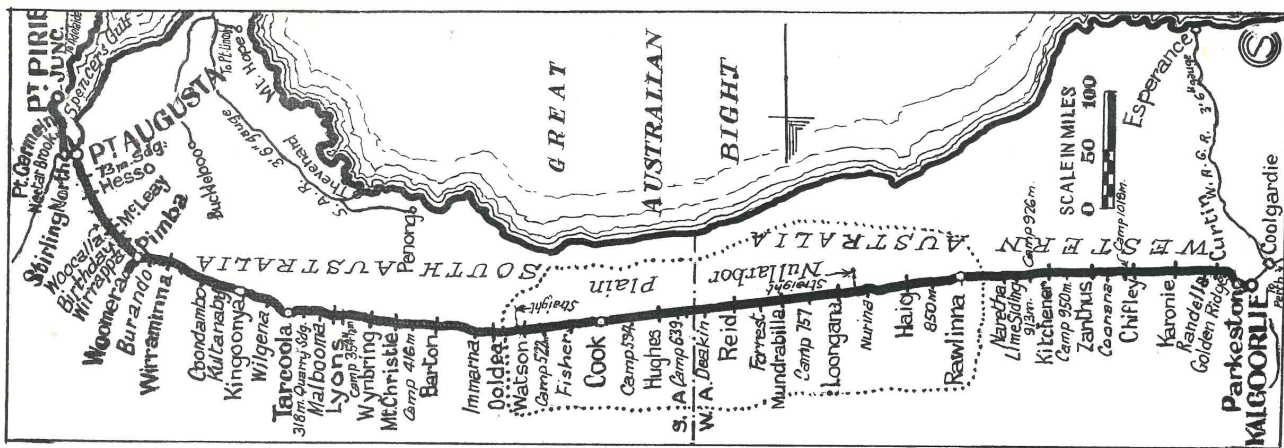
The pay van is made up of a post-office-type counter, paymaster's office, paymaster's living quarters and a storage area. This car is in a bad state of repair, the original timber showing through in many places but a new van is currently being built in the Port Augusta car shops for replacement.

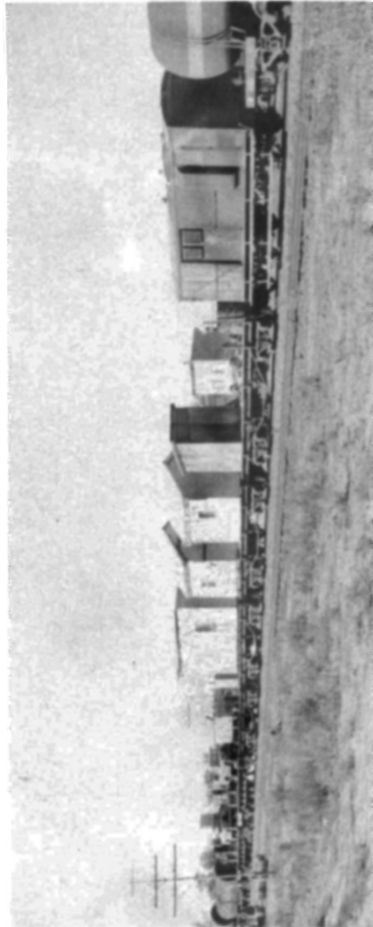
Whilst the paymaster, butchers and storemen were handling their customers, the Institute secretary was approaching his members on Institute matters, acquainting the parents of scholarships available for their children's education and, at the same time, attempting to enlist new members from any recent arrivals. The Welfare and Ambulance officer inspected the gang's ambulance box, issued a replacement, if the existing one had been used since his previous visit, and checked on the welfare of the gang generally.

At this particular camp and in some other camps visited during the trip, domestic troubles had caused an upset to the efficient working of the group. The Welfare officer called all the men together, held "court" in the shade of the wayside coach and attempted to iron out the differences among them. All of this action had a booked time of 25 minutes, after which we were off again.

This, then, was the general pattern of the halts during our day's run through the unusual "lake" country (huge salt lakes with white-crusted shores and some cliffs), across Lake Windabout, past the Island Lagoon and, finally, ending our first day's travel at Pimba (109m.), arriving at 3.10 p.m. 20 minutes ahead of time. As was the pattern each evening of the trip, we shunted on to a siding for the night. Later in the evening, our locomotives set off for Woomera, on the 4½-mile spur line, with six freight vehicles for the "village".

Friday morning, we departed Pimba on time at 4 a.m. However, about six miles out from this point, trouble beset us. A special gang had been relaying track in the section and the bridging rails between the old 82 lbs. rail and the new 94 lbs. rail subsided under the weight of our locomotives. Fortunately, we were not off the road and, after some temporary repairs to





Indicative of the multifarious tasks of the "Tea and Sugar" - the weekly Slow Mixed - is this five-car train for the rail-welding gang, which was attached to the train at Tarcoola and hauled to Reid, in the centre of the Nullarbor Plain.

(Photo: T. F. Chambers)

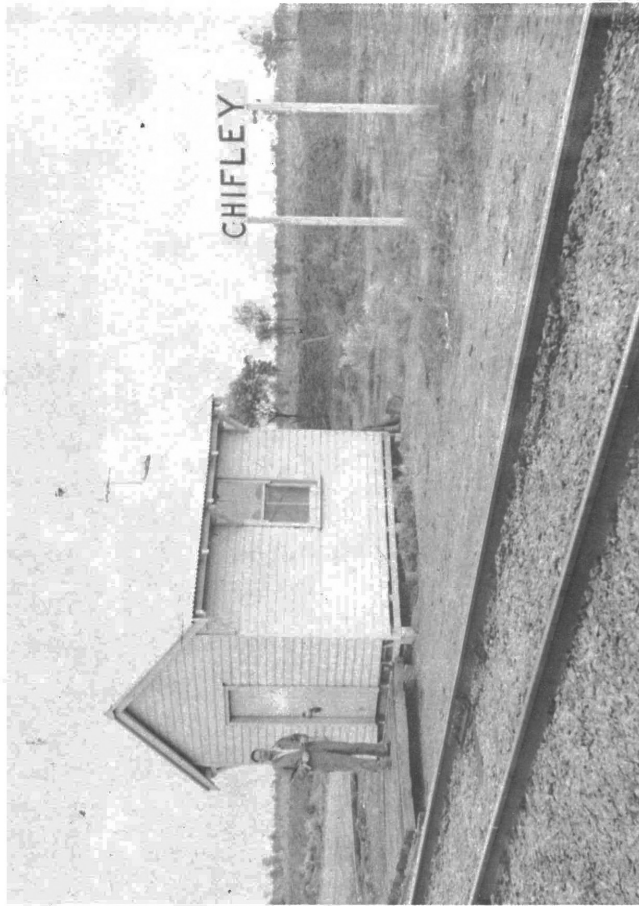
the track, the engines were eased back over the trouble spot and we pushed back to Pimba, arriving at 7 a.m.

To add to the confusion, it was found that the butcher had taken ill and, after an examination by the ambulance officer, it was decided that he should be returned to Port Augusta on the West-East Express, which we now had to cross at Pimba, instead of at Wirraminna (213m.), 43 miles further on. We were advised by Train Control that a relief butcher would be sent out on the Fast Goods to join our train at Tarcoola. The crossing was made at 8.35 a.m. and we finally departed for the second time at 9 a.m., just five hours late.

Still in the myall and mulga saltbush country, we passed further salt lakes to Kingoonya (265m.), where the overland road spurs out to Alice Springs through Coober Pedy, 175 miles to the North. At the turn of the century, goldfields were established at Kingoonya, known as the Glenloth goldfields.

Moving on, we passed through Wilgena (301m.), which, in addition to being a felters' camp, is also the railpoint for "Wilgena Run", a 3,000 - square - mile sheep station. Our stabling point turned out to be Tarcoola (314m.), which was reached at 5.30 p.m., 119 miles short of our day's destination, Barton (432m.)

Tarcoola is the largest settlement between Port Augusta and Kalgoorlie and was named after a Melbourne Cup winner. It was also a gold producing area in the early part of this century and was an important locomotive servicing depot in the days of steam. During the night, No. 576, Eastbound Fast



Driver Hill of GM.19 changes the staff at Chifley - a nameboard, a staff cabin and a crossing loop - 1008 miles West of Port Pirie. (Photo: T. F. Chambers)

tempt to escape the extreme heat and rumour has it that guards were not posted at these camps, as the Italian P.O.W's were convinced that the aborigines were Abyssinians and, therefore, to be feared.

Eight miles prior to Nurrima, we came to our first curve in the track for nearly 300 miles and a very minor one at that. At the 829 milepost, two miles out of Haig, we stopped for three hours, while a special gang loaded old 82 lbs. rails on to three flat cars. These rails are returned to Port Augusta, where they are butt-welded into 270' lengths for use on the North-South narrow-gauge Central Australia line.

A long run of 43 miles followed, without habitation of any sort, until Rawlinna (873m) was reached, where we had to wait for No. 275 West-East Express. Here, we attached a gondola-load of limestone, quarried at Rawlinna, to be railed 40 miles to the 913-Mile Siding.

Trouble again occurred at Naretha (902m.) where a gondola of sleepers had to be cut out on to a dead-end on account of a hot box on the leading axle. When the axle-box lid was removed, flames shot out as the oil sump was alight. The Welfare Officer rushed up

and extinguished the fire and, by this time, I was beginning to wonder where this officer's duties really ceased - from ambulance classes conducted at stabling points en route, peacemaker of domestic upsets and adjudicator of troublesome gangs.

At the 913-Mile Lime Siding, we shunted off the limestone truck and took on two vans full of bagged lime for the goldfields at Kalgoorlie, 200 miles away. We were now off the Nullarbor, travelling through salmon gum and mallee country, many of the tree trunks looking as though they had been varnish-stained.

Within an hour of stabling at Zanthus (977m.), we were crossed by No. 374 Fast Goods East and here natives were on hand to obtain supplies from the train for the Cur-deelee Mission, which was 25 miles North of the line. The mission industry is mainly the supply of sandalwood, which is railed from Zanthus to Freemantle for export.

The final leg of our journey commenced on Wednesday at 6.30 a.m., following the passing of No. 277 Westbound Fast Goods. Entering the Coonana Hills, we climbed over the highest point on the Trans-Australian Line, 1376', and stopped to exchange the





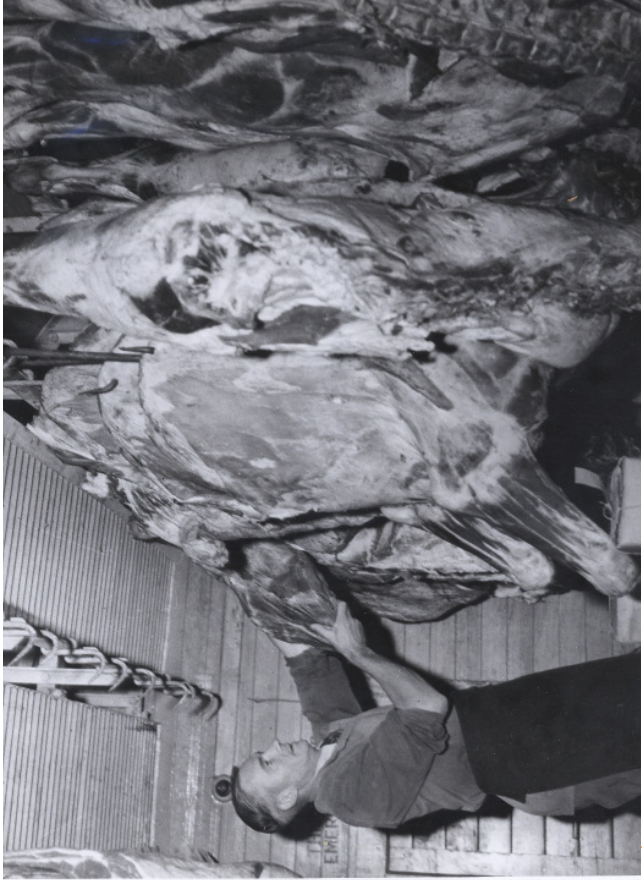
Supplying the families across the Nullarbor with food and groceries was the responsibility of the Commonwealth Railways. Once a week a provision train+ would run in both directions, known as the 'Tea and Sugar'.

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Besides meat, the train sold bread (originally baked at key points along the route), vegetables, fruit and household groceries. From the late 1970's onwards a mobile health clinic was attached, providing the families with access to a doctor or nurse, as well as baby health and mothercraft lessons.

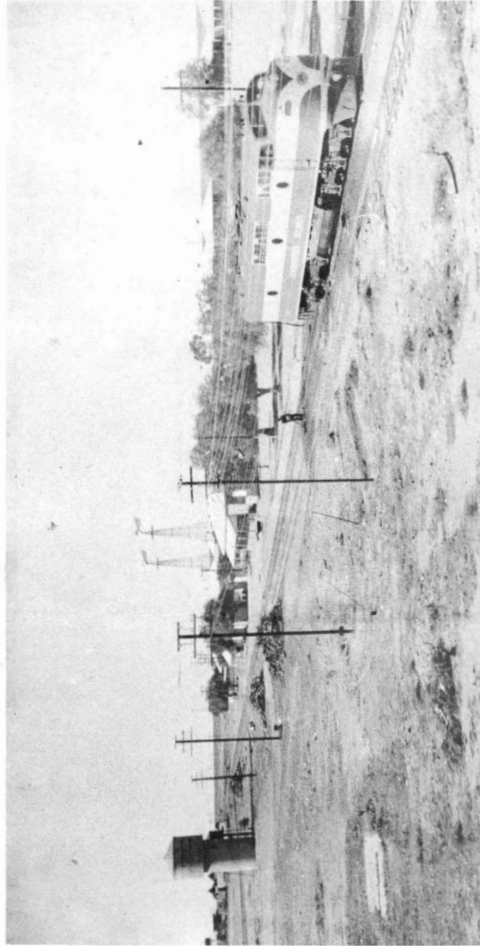
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The original butcher's van had space for a shop front, live sheep and a small sleeping area for the butcher himself. The sheep were slaughtered as needed and sold through a window wherever the train pulled up. By the 1940's new butcher vans also incorporated large refrigerated compartments and the live sheep onboard were discontinued.



These photos of the Tea and Sugar Train Christmas car and Santa c1990 donated by Australian National.



GM.8 departing Cook, South Australia, on the 10th June last, on the long 202-mile Light-engine run to Loongana, Western Australia. (Photo: T. F. Chambers)

Locomotive, GM.8, which ran "light engine" to Loongana, a journey of 202 miles and possibly the longest regular light-engine working on this continent. At Loongana, GM.8 would work ballast trains for a week and then act as helper to the Eastbound "Tea and Sugar" to Port Augusta, departing Cook on the following Sunday.

In the steam-operation days, Cook was an important locomotive depot and, with the changeover to diesel traction, a complete two-sided street of homes was removed. My travelling companion, Mr. Luke, lived in Cook for 14 years, where his father was the locomotive foreman, and the wartime record of the men at this and similar depots along the Commonwealth Railways' network was known to few, many of them performing engineering miracles with limited equipment and working long hours in trying conditions.

A point worth noting at this stage is the 40 m.p.h. restriction, which is automatically applied to all welded-track sections when the shade temperature exceeds 100 degrees. The welded-track sections are indicated by warning boards at the trackside, reading "TW", and shade temperatures are indicated on thermometers hanging in the cabs of all locomotives. It is also of interest to note that Nos. 535 and 520 are restricted to 40 m.p.h. at all times, due to the tank cars in the trains' composition.

Another interesting fact regarding heat applies to the rocks on the plain, which heat up during the day and when the outside suddenly cools at night. they explode with

his own construction, which he towed behind a once-wrecked utility that he had found on the Eyre Highway and rebuilt. At week-ends, he travels the road that he has cut through almost 70 miles to a coastal beach on the Bight.

Most of his yard was irrigated with piping, waste water from the house being used, with the result that the Nullarbor at this point was a misnomer, for the entry to his shrub-surrounded house was marked by two 12-foot flowering gums in flower. A truly versatile and ingenious railwayman!

At the 654 milestone, we passed into Western Australia, a large sign at the Eastern side of the track marking the border, under which was erected an obelisk. Another 34 miles brought us to Reid (688m.), where a highly-mechanised special gang was engaged on a very long section of track relaying and here we shunted off from our train the line welding gang.

At Forrest (707m.), we passed the Flying Doctor airfield and proceeded to Mundrabilla where the deepest bore along the line was sunk in the steam-operation days, to a depth of 1470', at which point solid granite was encountered. Eastbound express No. 236 was awaiting our arrival at Loongana (771m.) and here we ended our Monday's run.

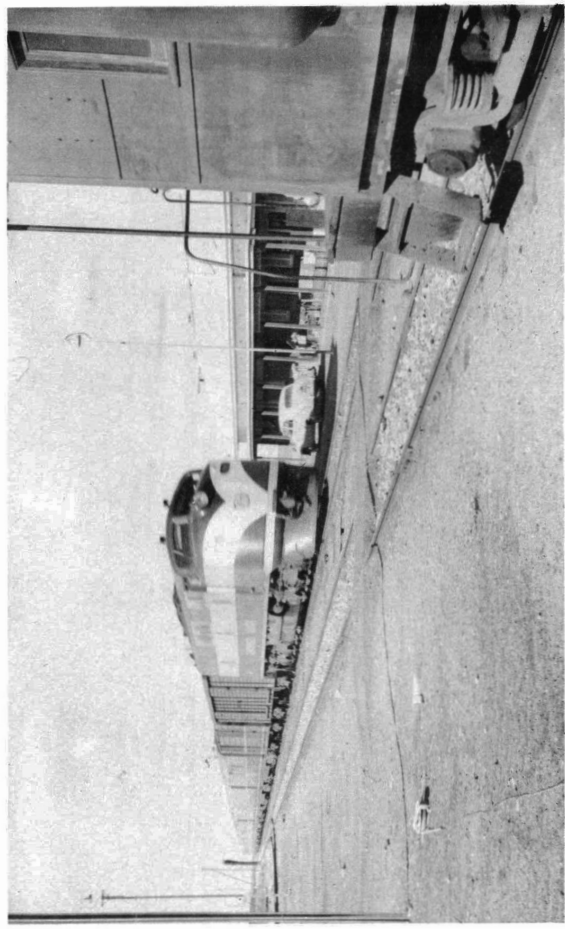
A large ballast quarry has been opened here for the Commonwealth Railways by the

Australian Blue Metal Co. Ltd. Here, we saw our ex-helper, GM.8, on the ballast-train siding. The quarry was established in March of this year and, in its three months of operation, 40,000 cubic yards of ballast have been quarried and crushed, the total contract being for 220,000 cubic yards. On the quarry tracks were 20 55-ton ballast hopper cars, a bogie ballast plough and an ex-wartime troop kitchen car, now seeing duty as a ballast train brakevan.

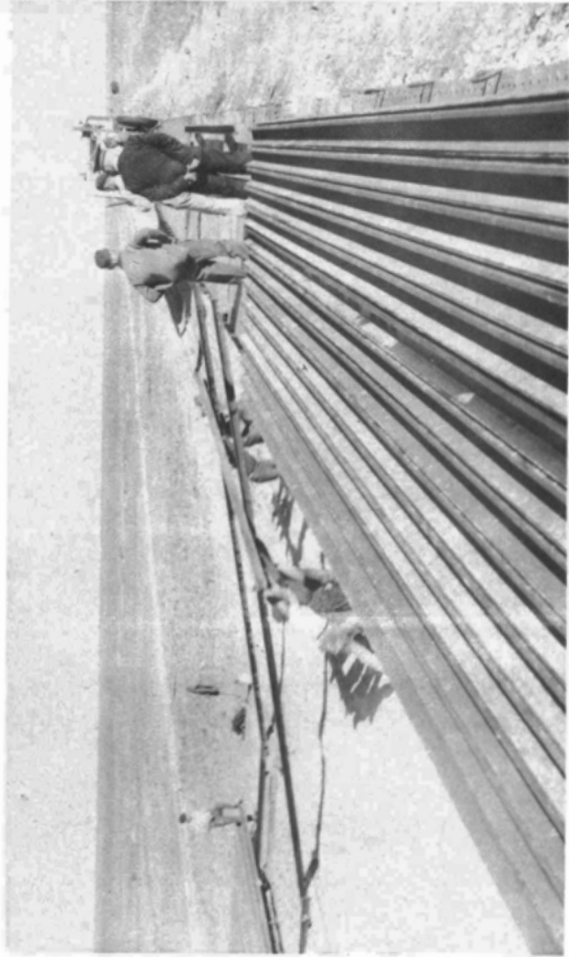
The Ballast Superintendent, Mr. Bill Shearer, who is resident on the site, stated that two ballast trains are worked on Mondays and Fridays, with one train on the other weekdays, each train consisting of 11 hopper cars, one hopper ballasting three chains of track. Kalgoorlie locomotive crews are sent to Loongana for a week at a time, and guards for a fortnight, to work the ballast trains - not a very popular job.

At 9 p.m., No. 177 Westbound Fast Goods passed through and, following the 4.20 a.m. departure of No. 276 Eastbound Fast Mixed, we left Loongana at 4.30 a.m. on Tuesday.

At various points along the track, huts built of railway sleepers could be seen, the roofs piled high with earth, and it was explained to me that, during World War II, internees had been used on track maintenance and were housed in tents only. They had built these huts for themselves in an at-



At Rawlinna, Western Australia, the "Tea and Sugar" is sidetracked to allow No. 275 West-East Express to pass. (Photo: T.F. Chambers)



A contrast in scenery. The "Tea and Sugar" loads old 82 lbs. rails for Port Augusta at the 829 Milepost (above). Note the flat, treeless features of the vast Nullarbor Plain at this place. (Below) No. 436 West-East Express crosses the "Tea and Sugar" at Karonie, where the herbage and trees provide a welcome relief to the monotony of the Nullarbor, as photographed from the cab of GM.19. (Photos: T. F. Chambers)



silky oak, native cork and various shrubs, and continued on into an area near Wynbring (377m.), at which point we crossed No. 674, Eastbound Fast Goods.

Passing through the scrubby sandhills around Mount Christie, we arrived at the 416 Mile Camp, where I had the pleasure of meeting a famous "character" along the line, Paddy Griffin, a ganger of many years' service. Paddy was featured in an article on the "Tea and Sugar", which appeared in the "Sydney Morning Herald" during 1957, mainly because of his huge library of books and his hobby of reading. In his hut, he showed me anything up to 1,000 books on his shelves, containing works of past centuries up to present-day fiction.

The "Herald" article had been noted by an American, Frank Baker, technical adviser to a Hollywood film studio and friend of the Australian travel author, Frank Clume. I was proudly shown a long letter from Frank Baker and attached to a book, "Tales of the Rails", by Veronica Hutchinson, which has been sent as a gift to Paddy.

On arrival at Ooldea (463m.), I inspected a cairn, erected at the trackside to the memory of a great lady, bearing the simple-inscribed plaque, "In memory of Mrs. Daisy Bates, C.B.E., 1859-1952, who devoted her life to the welfare of the Australian aborigine".

Ooldea has an underground water supply, the only natural flow on the Nullarbor and thought to originate in the Musgrave Ranges.

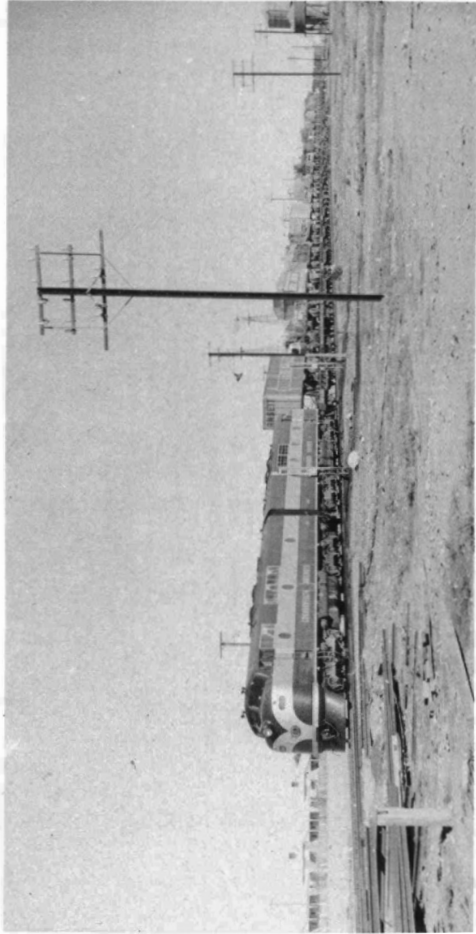
This is the entry point to the vast unfenced Nullarbor Plain, one of the largest in the world, extending for 420 miles, covering an area larger than the State of Victoria, and consisting mainly of limestone, saltbush, bluebush and more limestone. Here, we began our run over the famous "world's longest straight rail track", 297 miles, from Ooldea to Nurina in Western Australia.

At Watson (503m.), control centre for the Maralinga Long Range Weapon Establishment, we spent an hour shunting tank cars into their various discharge points.

We finally arrived at Cook (569m.) at 10 minutes to midnight, after 19 hours of travelling for the day. Here, we came alongside No. 520 Eastbound "Tea and Sugar", which was shunting in the yard. We were unceremoniously shunted out past the old locomotive depot on to a siding about half a mile from the station, where we were to lay up until Monday morning.

Cook is a fueling point for locomotives, a watering point for passenger coaches and a train examination point. Sunday saw quite a few train movements - No. 775 Westbound Express, No. 774 Eastbound Fast Goods (including a "piggyback" load of 23 semi-trailers), No. 777 Westbound Fast Goods and No. 136 West-East Express. Port Augusta crews work as far as Cook and no further and the same applies to the Parkerton (Kalgoorlie) crews.

On Sunday, also, we lost our trailing



No loading-gauge problems on the "Trans! No. 774 Eastbound Fast Goods passing through Cook, on Sunday, 10th June last, with a "piggyback" load of 23 semi-trailers. (Photo: T. F. Chambers)