A note from Random002:

For years these older Australian railway books have been out of print. Rather than hoard limited quantities in dusty baby-boomer book shelves these books need to be made available to the railway community as a whole. Education and information should be made freely available to those who seek it and if it is not made available from the publisher then alternative measures will always be taken. I have spent considerable time scanning and editing these copies for your enjoyment, so please do us all a favour and share freely with others.

Enjoy.
It is August 1960, and the days of regular steam-hauled trains on the Broken Hill line are drawing to a close. The delivery of Clyde-GM branchline diesel 4901, four weeks hence, will herald the end of scenes like this. Sixty-eight-year-old 3223 stands at the head of No.48 goods at Euabalong West, having worked the train east from Ivanhoe. The 4-6-0 has shunted off its bogie water gin, and, after a crew change, it will then continue east to Parkes, a further 108 miles away. The goods is standing in the loop whilst No.45 down Silver City Comet occupies the platform road. The two elevated water tanks (one on a well-weathered timber stand and the other on a steel stand) were vital to the operation of this line during steam days, supplying water for points west. Other evidence (ash pit, goods siding with S truck awaiting unloading, water column) attests to the importance of this location in the operation of the state's longest branch line.

G.J. Hughes

By the mid 1960s, the only steam locomotive serviced in Broken Hill loco was the yard shunter. On 25 August 1966, 3230 rests in the depot, surrounded by an ash truck, 20,000 gallon elevated water tank on a timber stand and treeless desolation. A match wagon cum shunter's truck, in the form of a KF flat truck, is coupled to 3230's tender. It is surmised that the large pieces of stone piled high on the left are readily available for the infrequent, but sudden, washaways along the poorly ballasted main line to the east. In the right background can be seen the characteristic mountains of tailings from the Broken Hill mines which form a backdrop to the south side of the Silver City.

Tony Eyre

It is about 1.45pm on Saturday, 23 May 1959 as the down midday Newcastle Flyer, No.71, descends Cowan bank, having just emerged from Boronia No.4 tunnel, beneath the photographer. Green-painted 3813 is at the head of seven car HUB set 119 as the train passes the abandoned Boronia No.5 tunnel at right. Travelling in air-conditioned comfort, the passengers are experiencing their first views of the picturesque Hawkesbury River valley, characterised by steep, tree-clad slopes in the Hawkesbury Sandstone. A track, recently constructed to provide access for electrification works, can be seen above the engine and train.

J. Elliott
With the Walschaerts gear right down in the link, 3808 barks away from Hornsby with the down morning Newcastle Express in April 1948. This was the month in which the new, air-conditioned HUB sets were introduced to this service, but here it is still a very clean, shiny, tuscan-and-russet NIB set trailing the green-painted Pacific.

John Sullivan

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The liberal coating of sand on the up line attests to the continual struggle between machine and nature on Cowan bank. The driver of 3830, however, has no such worries as he slips down the 1 in 40 past the Boronia No.5 tunnel and the upper quadrant signal with No.21 morning Newcastle Flyer in 1958. The passengers are beginning to enjoy one of the finest vistas available to the rail traveller, as the Flyer descends to the shores of the river, then skirts Mullet Creek and Brisbane Water, over the next sixteen miles.
Introduction

A visit to Aunty in Newcastle began some time before the actual date of travel. It entailed a walk to the local station, where a request for “One-and-a-half return first-class to Newcastle, please!” elicited a gruff response, “What train are you catching?” “The midday Flyer next Monday.” “You’ll need reserved seats. Six shillings extra.” So a lengthy phone call to Sydney Booking Office was needed before the issue of the perforated cream Edmonson tickets. These were inscribed ‘West Ryde to Newcastle’ on the right-hand portion and ‘R Newcastle to West Ryde’ on the left and were accompanied by two similarly sized, blue ‘Reserved Seat Tickets’, hand-inscribed with car and seat numbers by the ticket seller.

On the appointed day, we waited on the down platform at West Ryde for the electric train, all stations to Hornsby. The morning goods from Enfield would be shunting in the yard opposite, usually with a 50 class or a 53, but sometimes the more exotic Southern valve-gearred 55 class was in charge. Between the half-hourly passage of electrics, the steam engine ambled across to water at the ‘electrified area type’ water column by the water tank. The up end of the stand for the column carried a mysterious black plate, about three feet by two feet, on which a white rabbit was painted. This emblem was of some significance to steam engine crews, but I never discovered exactly what.

The electric train journey to Hornsby was merely a tedious prelude to the real show. After a ten minute or so wait on Platform 4 at Hornsby (“Don’t go too close to the edge; you might fall off.”), the exciting sound of an urgent steam loco heralded what was the big moment of the day. Perhaps half a mile down the track, a vertical column of smoke could be espied before a majestic 38 class stamped around the bend and marched its 310 tons of air-conditioned HUB set up the 1 in 40 and into the station. The minute or so during which this event took place demonstrated to all on the platform just what presence a modern steam train had: the loco’s stride was nothing if not purposeful, measured but impatient, powerful, and masterful. The driver did not shut off steam and wind the valve gear forward until the loco was underneath the overbridge. He and the fireman had just overcome the most difficult exit from Sydney, several miles at 1 in 40-50, with sharp curves in the middle reaches, and the fireman, at least, was looking forward to easier times for a while, once the summit at Mt Kuring-gai had been breached.

To a small boy’s eyes, the magnificent cocoon of a tuscan and russet HUB set was incomparable. The exterior was smooth, shiny and symmetrical, and the roar from the GM diesels in the PFH power van as it passed, right behind the tender, promised ‘eternal spring’ within, a haven from the elements outside. Inside, smooth, light-coloured polished wood, white ceilings and ultra-modern fluorescent lighting troughs marked a long saloon which contained green, leather-covered seats, separated by a grey carpet. These were arranged in sumptuous two and one settings, and a single seat on the right was highly prized. These seats had a wonderful gadget, a small knob on the side frame which allowed the seat-back to recline to a decadent angle! Compared to those on any other long-distance train, these cars, with their lack of soot, smoke and grit, radiated an aura of insulation from the world’s hubbub, and promised a two-and-a-half hour magic carpet ride.

The actual journey was something of an anti-climax after the magnificent entry. A corollary of the air-conditioned cocoon was an almost total absence of those manifestations of steam travel which a young rail enthusiast savoured, although a nose pressed hard to the window allowed brief glimpses of the green-painted steed around the picturesque waterside along Mullet Creek, and the sharp sound of the barking exhaust could be heard clearly climbing Hawkmount and leaving Fassifern. These high points were punctuated by the serving of tea and scones, and the frequent passage of an ‘RRR girl’ selling buckets of ice cream, of a size and price peculiar to the NSWGR, and accompanied by a small wooden paddle in a cellophane bag!

At journey’s end, an obligatory visit to the engine to indulge in hero-worship of the driver rounded out an event totally unexperienced by, and unavailable to, today’s youth. To journey on the Newcastle Flyer in the 1950s was to savour the best transport on offer, to experience the acme of the New South Wales Government Railways.

There is nothing comparable today.

Ian Dunn
Wednesday afternoon in the summer months of 1960 and low-framed 3353 is prepared in Parkes loco by the shed fireman to work No.51, the Broken Hill mixed. The engine is standing on No.2 ‘arrival’ road, the ‘departure’ roads being occupied by two Standard Goods engines and 3616 (partly visible), being prepared for its ‘bread-and-butter’ run, the up Forbes Mail. At 5.30 am the following day and 231 miles further west at Ivanhoe, 3353 will be relayed by 3368 for the remaining 191 mile trip to Broken Hill.

Above Right: A train which had a long association with Broken Hill and the desert, the Silver City Comet air-conditioned diesel rail cars commenced running to Broken Hill in 1937 and served the isolated communities between Parkes and Broken Hill for 52 years. Crews from Parkes, Ivanhoe and Broken Hill depots worked the Comet during its long career. On a summer’s day in January 1963, power unit DP103 and six trailers stand in Ivanhoe station on No.45 down Silver City Comet. Following a crew change, and after the ‘out-of’s’ and other parcels are transferred, the train will head for Menindee and Broken Hill.

R. K.Booth
THE STEAM LOCOMOTIVE DEPOTS IN NSW

Ray Love

Locomotive Out-Depots: Ivanhoe, Menindee and Broken Hill.

Preamble

The series of essays dealing with the history and operation of the steam locomotive depots in the state, as covered in Byways Of Steam, has so far concentrated on those located in the eastern half of NSW.

Other, more distant, depots were just as important in the running of the railway system. This essay deals with the three most isolated depots in the western half of the state. One of the depots dealt with in this story, Broken Hill, was located further from Sydney in rail miles than any other depot in N.S.W., being 699 miles away from the centre of railway administration. It is of interest to note that the distance from Sydney to Broken Hill by rail is much shorter than the road distance. Remote locations often meant some form of hardship for the people who had to work and live there, but, in contrast, to be away from 'constant supervision' also had a few advantages.

Broken Hill has been served by rail for many years, in fact, more than 40 years before the connection was completed through to Sydney. Railway connection from Broken Hill to South Australia was completed in 1887 and local railway construction in the city, which was associated with mining and other ventures, continued over the next 30 years. This side of railway operations in Broken Hill is considered to be outside the scope of this series, which deals with the history and details of the NSWGR locomotive arrangements. To gain an insight into the railways within the city of Broken Hill, readers are enjoined to study the fine series of articles by the famous railway historian, the late C.C. Singleton, titled Railed Transport in the Broken Hill District, which was presented in the ARHS Bulletin commencing in April 1962.

Connection of the then-existing Sydney-Parkes railway to Broken Hill with standard gauge tracks was a long and drawn-out affair and much debate ensued as to the best and most obvious route. It had been a possibility that the line would extend from Cobar, via Wilcannia, but in the end a rail connection was constructed between Broken Hill and Menindee on the Darling River. Later, the through route to the east was formed by joining up Menindee to the then-existing rail town of Condobolin, via Ivanhoe and Roto. This provided the long-awaited
The main line or northern end of Ivanhoe locomotive depot in March 1957. On the right, 3363 and 3342, both coupled to 7000 gallon water tanks (or 'gins') stand on one of the shed roads with another 32 class at the far end of the shed. The two-road shed was built in 1927. The jib of an electric coaling grab crane can be seen to the left, above the roof of the oil store, the small structure attached to the side of the shed. Trucks of loco coal are standing on the left. M. Farrell

through route to the NSW east coast.

On Tuesday 25 October 1927, the rich mining town of Broken Hill was finally linked by rail to the NSW capital city, when the Inspection Train from Sydney steamed into town.

Through passenger and goods services commenced immediately, providing local communities living in the tiny towns west of Parkes with a regular means of long distance travel and reliable transportation for their produce and their everyday needs.

Five locomotive depots serviced the steam engines and provided the men to work the 422 mile long section of single line in the far west of the state. This essay deals with the history and details of three of those five depots - Ivanhoe, Menindee and Broken Hill. The other depots, Euabalong West and Parkes will be covered in the future. Parkes was actually the 'parent' depot for Euabalong West as well as the three sub- or out-depots described on this occasion.

The documentation of the history and operating details of these far western depots has been somewhat neglected compared to many other locations closer to the eastern coast of the state. This could be due to a number of reasons, including the vast distance from Sydney, the transportation and travel difficulties encountered by interested historians, the general sameness of the area and the extreme weather conditions. There was perhaps another reason for the general shortage of interest by enthusiasts in the area - the lack of variety in motive power and working. For more than 30 years, there was, generally, only one class of steam engine in the area, the ever-faithful 32 class. These 4-6-0s did everything: shunting, pick-up work, slow goods, fast goods, mixed trains and passenger trains. On quite a few occasions, an old 32 class and a couple of carriages even substituted for the Silver City Comet diesel train, at least on part of its run.

This essay brings together the available documented history and details of the area, as well as making some use of information recorded during visits by keen enthusiasts and historians. By far the most thorough and interesting information has been obtained from the men who worked in the district. Due acknowledgement is made at the end of this volume.

**Brief Area History**

Explorer Charles Sturt discovered and named the Barrier Ranges in 1844, but it was to be 1878 before further exploration revealed the existence of silver-lead ore in the area. By 1880, miners came from many parts of Victoria and South Australia to work the new fields and by 1883, the town of Silverton had been surveyed.

In 1884, ore was discovered in a ridge of hills known locally as 'The Broken Hill' and during the next year, further discoveries of ore in the district assured the future of Broken Hill.

In the same year, authority was given for extension of the South Australian 3'6" gauge railway system to the New South Wales border at Cockburn. Neither the NSW nor SA Parliament agreed to extension of the railway from Cockburn to Silverton (in NSW), so a private company, The Silverton Tramway Company Limited, was formed and completed the line in 1887. This private line was of 3'6" gauge and 35 miles in length.

Meanwhile, various proposals, both government
All trains relayed engines at Ivanhoe. Both 3363 and 3342 have been fully coaled and the water gins refilled in anticipation of their next long run, to either Parkes (231 miles) or Broken Hill (191 miles). M. Farrell

and local, were made in the 1885 period for a railway connection between the eastern regions of NSW and Broken Hill. By 1888, the government standard gauge line was opened as far as Molong, but even as late as 1910, no progress had been made on any connection from the eastern part of NSW to the town of Broken Hill.

In 1891, a 3'6" gauge tramway (known as the Tarrawingee Tramway) was opened to transport flux from Tarrawingee, 40 miles north of Broken Hill, to the smelters in that town. This line was later operated by the Silverton Tramway Company for the NSW Government. The line closed in 1929.

By March 1898, NSW railway construction had reached Condobolin, 339 miles west of Sydney, and agitation continued by the local people in Broken Hill for connection of the rails to their town. In 1902, a standard gauge steam tramway was opened in Broken Hill and, by 1920, this system had 11½ miles of track.

In December 1912, after much agitation, promises, proposals and counter-proposals, the Condobolin Railway Bill passed through Parliament. In 1914, as a means of relief work for the local unemployment situation, earthworks were commenced on a standard gauge railway from Broken Hill towards Menindee. At this time, the Government system still terminated at Condobolin.

By January 1915, men were transferred from Broken Hill to Condobolin to commence work westward toward 'the Hill'. It was reported that by June 1915, 320 men were working at the Broken Hill end of the project, while 185 men were based in Condobolin.

Almost four years later, on 15 September 1918, the 73 mile section between Broken Hill and Menindee was opened for traffic. Appropriately, it was called the Broken Hill-Menindee Railway and a bi-weekly train service was inaugurated over the line. By this time, the main system had reached Trida, 129½ miles west of Condobolin. For the next six years, progress on the route was slow, supposedly due to lack of finance, and, on 19 August 1925, Ivanhoe became the temporary terminus of the line. This town was 507 miles from Sydney and 231 miles west of Parkes.

In 1926, the gap between the then-existing rail head and Menindee had narrowed to 40 miles and, by the end of the year, the bridge across the Darling River at Menindee was under construction.

On Friday, 21 October 1927, the first locomotive steamed across the Darling River bridge from the east and, at 12.30 pm on Tuesday, 25 October 1927, the Inspection Train arrived in Menindee from Sydney. This train continued on and arrived in Broken Hill at 6.15 pm on the same day. The Inspection Train left Broken Hill for the return to Sydney on Wednesday, 26 October 1927. The first train carrying passengers was No.47 down Broken Hill Express, which left Sydney at 8.00 am on Monday, 7 November 1927 and arrived in Broken Hill on the following day at 9.00 am, for a journey time of 25 hours. The through route from Sydney, a distance of 699 miles, was opened. As a matter of interest, although Broken Hill is within the Central Time Zone, the NSWGR has always, for reasons of operational convenience, used Eastern Standard time in Broken Hill.
Sixty-five year old 3201 (plus bogie gin) and its younger classmate 3356, stand at the main line end of Ivanhoe locomotive depot. Fuel for the two diesel alternator sets used for supplying power to loco, the railway village and the town was supplied in 44 gallon drums. The empties are shown lying in front of the small power house on the left.

M. Farrell

Above Right: Early afternoon at Ivanhoe in February 1957 and a fresh engine in the form of 3342 has been attached to No.41 down goods. The engine has been fully coaled and, with a 7000 gallon gin trailing, it will be 12 hours before it can have a long rest in Broken Hill.

M. Farrell

Below Right: Forty miles west of Ivanhoe and 3296 stands on the main line at Darnick at the head of No. 37 down goods. Included in the load behind the bogie gin is a new 3'6" gauge fuel tank car being delivered to the Silverton Tramway Co. in a bogie well wagon.

M. Farrell

Railway construction for the 422 mile section between Parkes and Broken Hill was carried out by a number of contractors including W. Finlayson, H. Smith and J. Timms, John Falkingham, Norton Griffiths and Public Works Department labour.

For 43 years (between 1927 and 1970, when the through standard gauge route, from the east coast to the west coast of Australia, was opened), the Parkes-Broken Hill line could be described as a 422 mile branchline. Junction stations en-route included Bogan Gate (to Tottenham), Roto (to Hillston and Griffith) and Matakana (to Mt. Hope, which closed 1926).

Maximum gradients were 1 in 100 as far as Condobolin, with 1 in 150 grades thereafter. Long, straight, level sections exist on the line; some grades are quoted at 1 in 4400 and many curves at 100 and 200 chain (2½ mile) radius.

Improvements were carried out for the through standard gauge project in the late 1960s and the area began to lose its branchline atmosphere.

A Record of the Early Days

The major part of this essay conveys descriptions and accounts of the local conditions as related by those who worked and travelled in the area. Most of that information applied to the 1950s and 1960s period, but the history and details of life in the early days of the railway have been documented elsewhere. Australian Railway Historical Society Bulletin No.612 October 1988, contains a fine description of the region during the 1920s and includes details of the long-closed Mt. Hope branch. The author, F.B. Bradwell, was a fireman (later driver) in the Condobolin/Ivanhoe section at the time. Study of that particular story is almost mandatory.
Locomotive Out-Depot: Ivanhoe

History

The through service between Sydney and Ivanhoe began in 1925, when the line was opened into the latter town. At the time, the locomotive servicing facilities included a coal stage and an ash pit on the main line at the Broken Hill or western end of the platform, as well as a triangle for turning locomotives. This triangle was formed by 10 chain radius curves and branched off the main line in a southerly direction, also at the western end of the platform. A small barracks for locomotive crews was also located within the triangle in the 1925 period.

Locomotive servicing facilities were improved in late 1926, recorded as follows: "...Locomotive water supply, 40,000 gallon tank plus stand, troughing and pumping plant installed, 15 November, 1926". The pumping plant was re-located from Coombing Park. (Coombing Park was a small iron ore mine, located on a branch line out from Carcoar on the Blayney-Harden cross country line). The whole arrangement was in service in Ivanhoe by February, 1927.

The original troughing for the collection of water brought in by train, to Ivanhoe, was installed adjacent to a new siding noted as the 'water siding', inside the triangle, parallel to the main line.

On 28 April 1927, a drawing was issued showing the arrangement and details of a new locomotive
Two lengthy goods trains cross at Darnick. The up train (No.44) has entered the loop, its PHG van just inside the clearance lamp on the ground between the tracks. Engine 3296, on No.37 down goods (previous photo) stands on the main line. Both trains will proceed once the Ordinary Train Staff safeworking has taken place.

M. Farrell

shed in Ivanhoe. The drawing was titled “NSWR. Ivanhoe Engine Shed” and included details of building construction, location of pits, coal stage, water service, hydrants and a drop pit.

In September 1927, a servicing pit was installed outside the shed, and in November of that year a new coal stage was provided. About the same time, new crew barracks were constructed a short distance from Ivanhoe railway station, replacing those originally built within the triangle.

At the Locomotive Officers Conference (LOC) in November 1927, approval was granted for the installation of a 4" dia. water main and hydrant in the new locomotive shed at Ivanhoe and the shed was ‘opened’ on Christmas Eve, 1927, the records stating “... engine sheds and pits were provided at the time”.

In Weekly Notice No.50 (December) of 1927, the depot came under the supervision of a ‘fitter-in-charge’, under the overall control of the ‘parent’ depot at Parkes (see later references).

In March, 1928, Composite Redfern Lavatory type carriage LCC52 was converted for use as an accident van, re-numbered L358x and was stationed in the new locomotive depot at Ivanhoe. For the historically minded, this car had been originally built by Hudson Bros. as first class Improved Redfern Car No.99 in 1886 and re-numbered BH52 in 1892. The old car was condemned in February 1955.

At the LOC of September 1928, approval was given for the provision of a new crew rest house (an additional barracks) in Ivanhoe and, again at the LOC of November 1928, attention was drawn to the ‘poor and damaged state of the floor’ in the locomotive shed in Ivanhoe. The floor material was asphalt and had not been provided with ‘jacking strips’, reinforced concrete pads recessed into the floor. The jacking and repairs to locomotives had severely damaged the floor of the shed and urgent attention was sought. As a result, the money was made available to permit repairs to be made and, at the same time, further improvements were to be carried out to the engine sidings near the depot.

The Local Appendix (West) for May 1929, lists the locomotive water arrangements in Ivanhoe as “… a 4” stand pipe in loco and a 9” water column at the Broken Hill end of the passenger platform ...”. For the next 13 years, no additional historical information was recorded for Ivanhoe depot, but with the advent of the Second World War and associated personnel and material movements, major improvements were carried out to a number of depots, including Ivanhoe. At the LOC of March 1941, Ivanhoe depot was mentioned. The notation reads “... improvements and additions to loco facilities at Ivanhoe - for Defence purposes ...”. Again, in July 1941, Ivanhoe came in for some changes. A drawing was issued showing alterations and additions to the water service in Ivanhoe generally, but also covered particular improvements to the loco watering in the depot.

A major improvement in living and working conditions for the local railwaymen, especially the enginemen, was carried out when, at the LOC of February, 1948, approval was granted for expenditure on the provision of two diesel/alternator sets, each of 50 kW, together with a building to house the units and the associated electrical cabling. This installation provided electric power for the lighting, etc. in the rest house (barracks), the local cottages, the station and the engine shed. A further improvement to the living conditions for the local railwaymen was authorised at the LOC in July, 1951 when “… piped water was provided to the Departmental cottages”. It might be noted that Ivanhoe’s rail facilities were nearly two miles from the town.

At the LOC in October 1953, authority was granted for the installation of a new 1 ton chain block plus trolley in the power station and the water pump house. These appeared to be the last documented improvements to this far-western depot. Certainly no major alterations were carried out during the last few years as a steam locomotive servicing point.

The diesels arrived in 1960, and by late 1961 Ivanhoe depot had lost its importance and former
use, that of an essential relaying and servicing depot for steam locomotives during the long haul across the desert.

The old shed remains (as at 1993), but it looks a little the worse-for-wear. Most of the former facilities have also fallen on hard times, with some being demolished. The shed serves occasionally as shelter for disabled goods vehicles and even houses the odd failed 80 class diesel-electric locomotive whilst arrangements are made to effect repairs, a circumstance photographed in October 1989.

**Description**

Ivanhoe locomotive depot was located at the apex of a triangle formed with the main line, immediately west of Ivanhoe railway station. The depot was located on the south side of the line, the junction points leading around the triangle to the depot being just 200 feet west of the platform.

The main line runs generally east-west through Ivanhoe. The axis of the locomotive shed therefore runs basically north-south and other servicing facilities described in this essay are related to that axis.

The depot area consisted of three roads, with the shed being located on two of those roads. The third skirted the shed on the eastern or Parkes side of the structure.

Ivanhoe locomotive shed was a two road building, the internal measurements being 80 feet long by 40 feet wide. It is of interest to note that provision was made on the original drawing to increase the length of the shed by an additional 80 feet towards the main line.

The shed was fitted with a gabled roof, a full length ventilating ridge running along the roof peak. Two smoke chutes were fitted in the roof above each shed road, giving four in total. At the time of construction, the shed cladding material was 26 gauge galvanised, corrugated iron sheeting, the roofing material being corrugated fibre. The smoke chutes (or flues) were each fitted with a curved, mild steel hood. Each side wall of the shed was fitted with windows, each window measuring 8'0" in height, 4'0" in width. All windows had eight, fixed glass panes and a hinged fanlight (two glass panes) at the top of the fixed window, with the fanlights opening inward. The western side of the shed had five such windows fitted, whilst the eastern or Parkes side of the shed had only four. A store measuring 120" x 120" and an adjoining office of similar proportions were externally attached to the eastern wall of the shed towards the rear. The skillion roof material was of corrugated fibre, the flooring was 5" concrete, wall cladding being galvanised corrugated iron. These ‘rooms’ were lined in tongue-and-grooved timber. Windows were fitted to both the store and the office, and access from within the loco shed, as well as external access, was provided.

At the time of construction, inspection pits, each 60'0" long, were constructed on each road within the shed and full length double doors were fitted to the ends of each road. The floor of the shed was 5" thick concrete. A standard dwarf drop pit was located towards the south end of one of the shed roads, while a 45 foot long ash pit (four feet deep) was provided at the north or main line end of the shed.

In later years, additional ash pits were provided, two on each of the roads at the northern end of the
A 9" water column was also located between these roads. (There was also a single 9" column provided at the Broken Hill end of the platform on the main line at the same time). A single 4" standpipe was located between the roads at the southern or opposite end of the shed and a 3" water hydrant, usually used for boiler washouts, was also located between the roads within the shed itself.

A low coal stage, 150 feet long by 22 feet wide, was originally provided at the southern end of the shed, but, again, in later years, an additional 60 foot long inspection pit and a 75 foot long ash pit were also arranged on the three roads.

Track improvements were carried out at the southern end of the shed in the early 1950s and these permitted easier coaling of engines. About 1955, an electric coaling grab was sent to Ivanhoe in an attempt to ease the back-breaking task for those involved, that of hand coaling of engines in appalling working conditions. The grab was located at the southern end of the shed, making use of the improved track layout.

No turntable was provided in Ivanhoe, the triangle formed with the main line being used for the turning of locomotives. Each leg of the triangle, connecting loco with the main line, was of 18 chain radius. Boiler blow-down plates, each 18 feet long, were located on each leg of the triangle. These permitted blowing-down of the locomotive boilers well away from the depot area, obviously reducing the incidence of dust and sand within the shed and nearby buildings during this essential operation.

In steam days, Ivanhoe crews worked in an easterly direction to Euabalong West, where they were relayed by another crew for the run on to Parkes. The exception was the Silver City Comet, which was usually worked in this section right through to Parkes by Parkes crews. In August 1988, No.46 up Comet stands in the loop at Trida, 41 miles east of Ivanhoe, with a Parkes driver returning home. R. Love

An old Kelly and Lewis pump and was used to raise water from a recessed tank and flume arrangement to the 80,000 gallon water tanks both at the depot and near the station. The old pump needed to be pre-heated with a blow lamp to obtain any results.

By the 1950s, the original office served as a sign-on room and as an office for the District Locomotive Engineer, who also made out the crew rosters. The original store continued to serve its intended purpose, containing lubricating oils, cotton waste and loco preparation material. By this period, another room had been attached to the western side of the loco shed. This contained a Tangye diesel engine, driving a lathe and other equipment used for loco repairs as well as re-metalling bearings of engines and trucks, a continual task in the hot, sandy conditions. A small power house, fitted with two diesel/alternator sets was located near the water pump house, on the eastern side.

The barracks were located near Ivanhoe railway station and consisted of two buildings. The larger of the two contained 16 bedrooms, a meal room, shower room and a store. The other, smaller building nearby contained only six bedrooms and was known by crews as ‘Gloucester House’. By the mid 1950s, about 20 railwaymen resided permanently in the barracks. In some other depots in the state, these were termed ‘single men’s quarters’ and were used to provide a roof over the head of cleaners and firemen who were placed on loan to these remote locations. The remaining ‘spare’ rooms in Ivanhoe barracks were used for their intended purpose, the eating and sleeping accommodation of the train crews from Parkes, Euabalong West and Menindee after their long shifts.
Locomotives

Ivanhoe locomotive depot was well set out to suit the stabling, repairs and refuelling of the locomotives working in the area. With all these attributes, it is perhaps a little surprising to note that the depot had no engines on allotment. All locomotives which visited there belonged in fact to other sheds, a situation which existed for the period in which steam worked in the region.

The depot was opened in 1927 and, for the next 34 years, Parkes depot supplied the 32 class engines which worked the single line section to Broken Hill through Condobolin, Roto, Ivanhoe and Menindee.

It is also of interest to note that another class of steam locomotive appeared in the Ivanhoe area, albeit on quite an irregular basis. The 30T class 4-6-0 tender engines were common motive power in the Griffith-Hillston area (usually Narrandera- or Temora-based engines) and they sometimes continued on to Roto, on the Parkes-Ivanhoe section. Stock trains were worked from Parkes to Hillston via Roto, with 30Ts, of course being serviced at Condobolin and Euabalong West. In addition, these small 4-6-0s worked stock trains into Ivanhoe from Parkes, also being serviced as previously mentioned. To quote an Ivanhoe driver "...mostly superheated 30T class engines were used, but on rare occasions, a saturated engine would turn up". It should be pointed out that load tables and running times for 30T class tender engines were issued for the various sections in the far west, but the 32 class predominated in the working.

Typical locomotive allocations to Parkes, the parent depot, are shown. Only 32 class engines are noted, the only type to work over the full length of the line.

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<tr>
<th>31/12/1935</th>
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In 1943, at the height of wartime traffic, the number of 32 class engines allocated to Parkes increased from the usual figures quoted above (8-14 engines) to 20-25 engines.

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By 1951, the maximum recorded number of 32 class allocated to Parkes was noted, 26 engines.

For the next twelve years, the number of allocated engines dropped to an average of about 17-18 engines.

In September 1960, 950 hp diesel-electric branchliner 4901 was allocated to Parkes depot. It was the advance guard for another 11 units (later increased to a total of 18) which would, within two or three years, dieselise the Parkes-Broken Hill section.

As at 31/12/1960, the following locomotives were allocated to Parkes depot.

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By 1961, the operation of 32 class engines on the line from Parkes, through Ivanhoe to Broken Hill, was almost at an end.

At the end of December 1961, only seven 32 class engines were allocated to Parkes.

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For the next eight years, a 32 class engine, (sometimes two) was sent to Broken Hill for yard shunting duties, most movements between Parkes and the Hill being light engine. During this long trip, in either direction, the engine was serviced in Ivanhoe.

Crews And Working

By the 1950 period, about 22 men were employed in 'loco Ivanhoe. This included 6 appointed drivers, 10 acting drivers and 5 cleaners. Most of the cleaners were on loan to the depot from Parkes. In addition, a day-work fuelman was employed there.

A railway fitter operated the local railway power house, which supplied electricity to the railway station, the locomotive depot and the row of railway houses situated near Ivanhoe station. Call boys were not employed in the depot, all calling of crews from barracks or their homes being carried out by one of the shed cleaners.

The out-depot was under the overall control of a District Locomotive Engineer (DLE).

The 32 class engines could handle quite large loads over that part of the railway system: 880 tons was the maximum permitted between Condobolin and The Gorge, 720 tons being the through goods load. All down trains attached a 7,000 gallon bogie water tank behind the tender (termed a water gin, or simply a gin) at Euabalong West, due to the long distances between water columns, and up trains detached these gins on the return trip.

Ivanhoe enginemen worked all types of trains on the main line in both directions from Ivanhoe. The normal limit of working was to Euabalong West (123 miles toward Parkes) and Menindee (118 miles toward Broken Hill). Ivanhoe crews worked all types of trains operating in the area, including goods,
passenger, mixed, water trains, reclamation and work trains. One thing was common with them all, these trains were worked by the 32 class 4-6-0s. An Ivanhoe driver recalls: "The long working was reasonably good if coal such as Muswellbrook No.1 or similar was used. The line from Parkes to Broken Hill was not on metal ballast, it was mostly sitting in sand with a few ashes here and there on the bad spots. After severe sand storms, fettling gangers were called out day or night to check all the bad sand spots before train controllers would let a train enter the section. There were permanent horse camps just scooping the sand back, all day, every day.

"Most sand problems were in the Darnick and Kaleentha Loop sections (mileage 585 being the worst spot). The horse camp for scooping the sand back was not far from there. There were also several places between Gum Lake and Kaleentha Loop. The Gum Lake and Kaleentha area was referred to as 'Hell's Gates', as we didn't know where to expect sand hazards. Another spot was the Kaleentha - Menindee section, near mileage 602."

As previously stated, the main line work usually involved trips to Euabalong West and return or to Menindee and return, the crews going into barracks at those locations before returning home. At odd times, however, a barracks job resulted in a much longer trip. In this case, the Ivanhoe crew would work to Euabalong West, book-off and rest in the barracks there, book-on after the rest period, work to Parkes, book-off and enter barracks. After a rest period, the crew would then work back to Euabalong West (barracks again), book-on and finally return to Ivanhoe. This meant being away from home about three days. The same arrangement applied when working in a westerly direction: work to Menindee, into barracks, on to Broken Hill, barracks there, back to Menindee (barracks again) and finally home to Ivanhoe.

There was a single set of men at Euabalong West in steam days: a driver, fireman and guard. They worked regular goods trains to Ivanhoe, camped in the barracks there and returned home to Euabalong West the following day. On occasions (mostly a Saturday) they worked a train to Parkes, camped in Parkes barracks and worked back to Euabalong West on Sunday. A loco pumper was also employed at Euabalong West, his job being to fill all elevated water tanks from the river pumphouse, shovel forward on the train locomotives on the main line, light up any stabled engines and tend to the barracks.

Ivanhoe crews also worked goods and stock trains to Roto and on down the line to Hillston toward Griffith. If the goods or stock train was to continue on to Griffith, a crew from Griffith sub-depot would arrive in Hillston on the regular cross-country rail motor service, change over to the goods and work it back to Griffith. If, on the other hand, the train was to terminate in Hillston, it was loaded (or unloaded) and prepared for its return trip to Roto, some hours later. In both cases above, the Ivanhoe crew would go into the small barracks in Hillston and return to Ivanhoe after a rest. The train engine (32 class) was stabled in the loco siding in Hillston, which also possessed an ash pit and a 60 foot diameter steel turntable.

Similarly, the Roto-Hillston section of the line could also be worked by Parkes crews. If the goods train came from the east, it was usually worked by a Parkes crew and they, like the Ivanhoe men, were relieved by a Griffith crew with the Parkes men going into barracks in Hillston.

The year is 1957 and the location is 'Tully's Gully' between Ivanhoe and Menindee, so named because driver Tom Tully 'got off the road there one day'. The train, hauled by 3202, includes seven empty 7000 gallon water gins in addition to the full water tank coupled to the engine. These gins were used to carry water from the Darling River at Menindee to Ivanhoe 'loco as well as to augment the local town supply. Note the steel sleepers beside the train.

M. Farrell
At Kaleentha Loop, between Ivanhoe and Menindee in May 1957, 3379 stands at the head of No.35 goods whilst
the Ordinary Train Staff for the previous section is returned to the Staff Box and the staff for the next section
to Menindee is taken. During the short stay, the Guard of the train would ring Orange Control and report his
train's arrival and obtain information about other trains in the area.

M. Farrell

Although not directly associated with Ivanhoe
crews, the working on the Roto-Hillston-Griffith
section of the line is interesting. The Griffith-based
crews also worked from Griffith through Hillston
and on to Roto. The regular goods from Griffith
(Thursday, No.39) ran through to Roto and was
worked by a Griffith crew, who would normally go
into barracks in Roto. They would then work the
return train (No.18) to Griffith next day. This train
conveyed loading to and from No.21 Parkes-Broken
Hill pick-up goods and from No.16 Broken Hill-
Parkes pick-up goods.

Local passenger services on the Roto-Hillston
section of the line were also carried out by a Griffith
man, sometimes with a CPH rail motor, at other
times with a Narrandera-based 400 class rail motor.
The Griffith driver would camp in the Hillston barr-
acks, the usual run being Griffith-Hillston-Roto,
(meet Silver City Comet), return to Hillston and go
into barracks. The next day the Griffith man would
then work Hillston-Roto (meet the Comet), return to
Hillston, then on to Griffith and home.

Shed work around the depot in Ivanhoe was
carried out by a rostered shed crew on a daily basis,
usually a fireman (acting driver) and his 'mate', one
of the cleaners. Their normal duties included un-
loading the water trains, marshalling the loco coal
trucks and also placing those vehicles which had
sustained hot boxes in position for the local exam-
iner to effect repairs. In the desert conditions, hot
boxes were commonplace, up to ten trucks per week
being repaired, the examiner replacing axle brasses
which had become severely scored by the sandy
conditions along the line.

All water for Ivanhoe depot and the Ivanhoe
railway township was carted by train from
Menindee in bogie tank wagons and pumped into
elevated tanks. In the 1950s, there were three or
four regular water trains per week and in addition,
all goods trains were built up to a full load at
Menindee with loaded water tanks bound for
Ivanhoe. It was the job of the shed fireman in
Ivanhoe to pump all water from the railway water
tanks into the elevated tanks, using the old Kelly
and Lewis diesel pump.

Every night, a cleaner was rostered on at 10.00
pm to attend to the boilers of the engines in the shed,
call any crews for the jobs, keep the barracks fires
alight and well stoked. He also coaled one engine
every night; most engines required seven to nine
tons of coal after working trains from Parkes (231
miles) or Broken Hill (191 miles).

An Ivanhoe driver remembered the early 1950s
"... the shed working was very primitive, with night
coaling of engines, no lighting at the coal stages,
mostly a kerosene flare lamp sitting on the cab roof,
that is if you could keep it alight in the wind. Coal
reserves used to be kept on wooden coal stages in case
of coal strikes, which were fairly frequent at that
time. These coal stages were about 2'6" above ground
level and coal had to be shovelled from that level up
over the top of a 32 class tender - fairly hard work, I
can assure you. In the depot, we all had a bit of a go
at it to try and make life a bit easier for everybody.
All coal was shovelled by hand and all ashes were
shovelled from the pits into ash trucks by hand as
well, pretty primitive conditions, really ...".

In the east, the nearest locomotive servicing fa-
cilities to Ivanhoe were at Roto, 68 miles away (a
triangle, although it had boasted a coal stage in
1929), but the nearest water column was at Euaba-
long West, (9" dia., Orange end of loop) a further 55
The same train as shown on page 17, No.35 goods stands at Kaleentha Loop. On this day, in addition to the tank connected to the engine, the train is conveying six extra bogie water tanks, which are being taken to Menindee for filling.

M. Farrell

Above Right: 3356 on a work train near Darnick. New steel sleepers have been unloaded from the train and await installation. Quite a few sections of track were relaid with steel sleepers in this area of the system in the 1950s, some lasting well into the late 1960s.

M. Farrell

Centre Right: By 1989, the locomotive servicing facilities in Ivanhoe were quite dilapidated. Steam had been displaced from the area for more than 25 years. The old shed occasionally provided shelter whilst wagon repairs were carried out or to keep a failed diesel away from the elements. Disgraced 8031 is keeping out of the weather, awaiting rescue from Parkes. The small building on the left was the old pump house, the larger building was the power station, with the 80,000 gallon elevated water tank beyond.

R. Love

Below Right: Although in a poor state of repair, the basic structure of the old shed was still intact in this 1989 photo. It was expected that the shed would be demolished during 1993.

R. Love

miles to the east. This made for a long, 123 mile run between columns, hence the need for the attachment of a bogie water gin. To quote again “... when working trains with inferior coal such as Lithgow, ash was a problem as there was only one de-ashing pit along the way, at Roto, nearly 70 miles away”.

To the west, Menindee (115 miles away) possessed a triangle and a water column and, in this case, ash again was a problem, with only one de-ashing pit en route at Gum Lake (70 miles). “Firing steam locomotives at 118 degrees over these long distances, with the sun shining into the cab, was something you never forgot ...”.

In 1993, seven appointed drivers, one acting driver and a driver-in-training were working out of Ivanhoe depot. In addition, two guards were also based in Ivanhoe. Local supervision is carried out by the Ivanhoe Station Master, the Chief Running Inspector in Parkes being in overall charge of crews in the area. This is in contrast to the 22 men working out of the depot some forty years earlier.

Currently, Ivanhoe men work trains to Parkes in the east (231 miles) and to Broken Hill in the west, (191 miles), almost double the old steam mileages.

General Notes

By May 1929, the Local Appendix (West), listed Ivanhoe depot as being under the control of a Fitter-In-Charge, Mr V. Heraghty. Ivanhoe was located in the Parkes locomotive district, the responsible Locomotive Branch officer, the Parkes Steam Shed Inspector, Mr J.A. Johnston having charge of the locomotive district bounded by Meranburn in the east and Ivanhoe in the west (inclusive). Overall control of the Locomotive Branch (as it was then known) in the western part of the state was by Mr W.A. Harper, Divisional Locomotive Superintendent at Bathurst, whose responsibility extended from Mount Victoria to Broken Hill (inclusive).

As stated previously, the 32 class engines were in use almost exclusively along this section of line, and were described by a long-time Ivanhoe engine-man as “... a very good engine, which adapted to the working very well”.

Steam locomotives were serviced in Ivanhoe for 35 years, but by the mid 1960s, only the Broken Hill yard shunters called in for reconditioning during their long trek between Parkes and the 'Hill. This situation continued for about eight years. When the shunting engines were replaced by diesel-electrics, the only purpose to which the loco shed and sidings were put was the odd wagon repair or 'board and lodgings' for a wayward diesel.
Constant track maintenance was essential in these remote areas and work trains were a regular occurrence. Engine 3356 heads a work train with two water gins, PHG van, a string of S trucks and another PHG van, as sleepers are unloaded in the area near Darnick in February, 1957.

M. Farrell

On Sunday, 23 August 1970, two unusual locomotives (for Ivanhoe) were serviced in the depot. Green-painted express engines 3801 and 3813 were both serviced in turn, during their epic cross-Australia trip whilst hauling the Western Endeavour tour train. Three weeks later, on Friday 11 September, Ivanhoe depot serviced these engines again, on their return journey. In October 1972, Ivanhoe depot again serviced tour train engines, when both 3801 and 3642 called in during a trip to South Australia.

With the general modernisation of servicing facilities and amenities for crews, etc., tenders closed on 11 January 1978 for the construction of a new 20 bedroom rest house (barracks) at Ivanhoe, replacing the old, existing arrangements installed many years earlier.

Some ten years later, 29 April 1988 (Australia's Bicentennial year), 3801 and 3642 called into Ivanhoe depot during their trip westward with the Bicentennial Steam Train. Subsequently, 3801 and British express engine 4472 (Flying Scotsman) were both serviced in the locomotive depot.

At the time of writing, the old depot was living on borrowed time. Both the local Station Master and the Chief Loco Running Inspector in Parkes, passed comment on the imminent demolition of the remaining depot facilities.
Early morning in Menindee in March 1957, and low framed 3231 stands on the main line on a very late running No.16 up goods heading for Ivanhoe, some 118 miles to the east. The engine has been serviced over the pit on the main line, coal shovelled forward, crews changed and, after the bogie water gin has been filled, will start on its seven-hour journey.

M. Farrell

Locomotive Out-Depot: Menindee

Menindee is located on the Darling River, 118 miles to the west of Ivanhoe and 73 miles east of Broken Hill.

Menindee was a small locomotive depot (with engine crews) and assisted with the engine servicing and train running over the 191 mile section between Ivanhoe and Broken Hill.

The derivation of the name Menindee is interesting. When the Post Office was opened in 1861, the town was known as Perry. In 1866, the Post Office was re-named Menindie and the local school (opened in 1868) also carried that spelling. During 1918, the school and the Post Office became MENINDEE and the railway followed this spelling. The most interesting aspect of all this is the fact that railway construction drawings for the area, dated 1917, carried the original spelling, Menindie.

The Ivanhoe to Menindee section of the railway was opened in October 1927, thus linking the small river side town to Parkes (349 miles) and Sydney, 625 miles away to the east. The town had previously been linked by rail to Broken Hill in July 1919.

History and Description

With the commencement of railway construction between Menindee and Broken Hill in 1915, a small locomotive shed was planned for Menindee, obviously to assist with the servicing of the construction locomotive. In November 1917, a drawing was issued showing the arrangement of a small depot in the town and this consisted of a single road locomotive shed, 120 feet long by 25 feet wide located on one road, and a 60 foot diameter turntable on a separate adjacent road. The engine shed (labelled ‘temporary engine shed’) contained an inspection pit, approximately 80 feet long. Both the turntable road and the shed road were located on the Condobolin or eastern end of the station, these sidings curving away toward the south. The junction points for the sidings were 14 chains east of the Menindee platform and a short branch line to the Menindee wharf sidings on the Darling River, also ‘trailed’ off the loco roads, on the down side of the line.

A construction drawing was issued in October 1918 showing installation details of a turning triangle on the northern side of the line, also east of the platform.

In steam days, Menindee was a locomotive depot, fitting into the guidelines - a home base for locomotive enginemen. Menindee was a small but important link in the train operations on the line between Parkes and Broken Hill, being a crew change point between Ivanhoe and Broken Hill. Locomotive servicing facilities were minimal. Engines were not normally changed or relayed there, Ivanhoe being the main point for engine changes along the 422 mile route between Parkes and Broken Hill.

On 13 March 1926, a water pumping plant with a capacity of 10,000 gallons per hour was installed in Menindee and in September 1927, the locomotive ash pit was extended. In November 1927, a new water pumping house and suction jetty (the ‘raft’ in
This view, of a westbound train standing on the Darling River bridge at Menindee, is believed to show an early Inspection Special in October 1927. The assembled dignitaries are standing on the western approach span and the 32 class is on the lifting span over the navigable channel.

The 'Shoppers' Special'. Engine 3289 stands in Menindee at the head of No.33 mixed just prior to departure for Broken Hill in October 1956. Although 'tabled as a mixed, it seldom conveyed goods vehicles. This train carried Menindee townfolk to the Silver City for weekly shopping expeditions. Behind the bogie gin and MHO van is an FS and two heavy corridor type cars.

M. Farrell
In 1970, the Western Endeavour tour train, with 3801 and 3813, left Sydney to cross the continent to Perth on the recently-completed standard gauge tracks. In certain sections, only one engine hauled the train, whilst the other was serviced or ran 'light' ahead. (Engine 3813 did not travel the entire trip and remained in South Australia, whilst 3801 continued on alone). Sunday, 23 August 1970, and 3801 crosses the Darling into Menindee whilst hauling the tour. 3813 was following along light engine after being serviced in Ivanhoe. The mechanism to operate the lift span was out of service by this time.

SRA Archives

the river where the water suction pipe is located) was installed. The Locomotive Officers Conference (LOC) for that month, noted "... water supply improvements at Menindee completed ..." and "... approval for expenditure on increased facilities for through-working at Menindee."

In 1927, when the through-route had been opened, a new Track and Signal Diagram for Menindee was prepared. No turntable or engine shed, etc., were shown, but it did include details of the turning triangle on the up side of the line. At the LOC in July 1928, approval was granted for the provision of additional accommodation in the rest house (barracks) in Menindee.

The Local Appendix (West) for May 1929, lists the watering arrangements in Menindee as "a 9" water column, 420 feet from the Sydney-end of the platform and six 4" stand-pipes in the ‘water siding’. The Local Appendix (West) for December 1944 shows that these watering arrangements had not been altered during the previous 15 years.

The 1945 Annual Report made mention “Improved locomotive accommodation has been provided at Menindee ...”. For the next 15 years, Menindee remained as a link in the chain, where steam locomotives were serviced and crews were changed, during the long train journeys across the desert.

No further changes or improvements were noted for Menindee until Weekly Notice No.47 of 1989 where, during ‘rationalisation’ of the yard, the locomotive triangle was removed.

Locomotives, Crews and Working

As with the other out-depots dealt with in this essay, Menindee had no locomotives on allotment during the last 30 years of steam operation. All steam locomotives were based in Parkes, a situation which existed during the period where steam reigned supreme over the line. When the 49 class diesel-electric locomotives appeared, they too were based at Parkes.

In terms of depot size, Menindee could be called a small out-depot. Only four men (two sets), two drivers and two firemen made up the loco crews in this remote location. A guard was also based in Menindee. In addition, a loco water pumper was employed there, his duties including shovelling for-
It must have been raining somewhere! The height of the river has noticeably increased as compared to the previous photo. Engine 3356 departs Menindee with a goods, heading for Ivanhoe. The bridge lift span is shown at left of photo.

M. Farrell

Below: Twenty-six years after the above photo was taken, DP103 with four trailers and an EHO van stands in Menindee station comprising No.46 up Silver City Comet. With the completion of the through standard gauge route to Western Australia, tracks and yards were upgraded in many locations to permit fast operation of heavy freight trains and this can be shown by comparison with the photo of the 'shopper' opposite. The old DP will soon have its train cruising at 80 mph on the way to Ivanhoe and a crew change.

R. Love

ward on the tenders of engines on the main line as they stopped for crew changes and servicing, maintaining the barracks, filling all water gins for return loading to Ivanhoe, as well as shovelling ashes from the pits, etc. One could say he was usually gainfully employed.

Train working for the Menindee men involved main line work to both Ivanhoe and Broken Hill. The majority of the work was towards Ivanhoe rather than Broken Hill, the men only venturing to the 'Silver City' on odd occasions, especially during the running of the annual Christmas Miners' Spe-
The ‘shopper’ stands in Menindee station with a bogie gin, MHO van and an MCE corridor car. M. Farrell

Below: The Darling River at Menindee is in flood and water spreads over the flat area adjacent to the banks as 3231 struggles out of town across the lift-bridge, bound for Ivanhoe, some seven hours and 118 miles to the east. The train is No.24 up goods and includes eight, 7000 gallon water tanks (plus one for 3231) in order to take Darling River water back to Ivanhoe. February 1957. M. Farrell

Special trains.

In later years, Menindee was reduced to one set of men who worked from Menindee to Ivanhoe only, returning home after a stay in the barracks out there.

General Notes

Barracks working for enginemen and guards was one of the ‘hazards of the job’. All crews had to endure it at some time or other and whilst some men put up with it in order to gain some slight financial benefit from the expenses, etc., most treated ‘going away to barracks’ as a bit of a burden. The Menindee barracks could be termed a burden.

The men from both Ivanhoe and Broken Hill depots were unfortunate enough to have to rest in the barracks in Menindee. This building was of concrete slab construction with two bedrooms, (each with three beds), a shower room and a meal room. A wire gauzed-in verandah completed the scene. The crew’s food was cooled by a meat safe.

An Ivanhoe driver recalls “… very primitive conditions, mosquitoes almost unbearable, the building being located on the banks of the Darling River. In the extreme hot weather, it was almost impossible to sleep, the walls were still so hot, even at midnight. We had two remedies, one was to pull the sheets off the bed, wet them under the shower, put them back on the bed and climb in between the wet sheets. The other was to go down to one of the local hotels (Maidens or Underdowns), no wonder railwaymen drink …”
No steam engine ventured into the desert areas without a water gin, even when hauling work trains. Class leader 3201, two gins, two S trucks and a PHG van amble through the flat and level landscape near Kinalung in March 1957.

M. Farrell

The problems of running a railway through the desert. Scooping sand off the main line after severe sand and dust storms kept fettling gangs occupied for years in that remote area of the state. According to an Ivanhoe driver, the worst 'sand spots' in the area were near Gum Lake and Kaleantha Loop. A 30T class engine has brought a gang of men out to clear the line, c.1940.

SRA.
History
The first locomotive depot in Broken Hill was established in the 1915 period adjacent to the newly completed Crystal Street station. This depot was, in effect, a number of dead-end sidings and serviced the three K294 class 2-6-0 tender engines then in use on the isolated Broken Hill-Menindee railway.

It is of interest to note that servicing of the motive power used on the early railway construction was, in fact, carried out at the steam tram motor depot. This was located in Wills Street, Broken Hill, south of the Silverton Tramway Company's Railway Town yards. The steam tram depot had been established in 1902 and steam trams were used in the early railway construction during the 1914 period. Obviously, major repairs to the motors were carried out in the depot.

In October 1917, a drawing was produced by the Railway and Tramway Construction Branch titled "NSWGR, Condobolin to Broken Hill Railway, Broken Hill to Menindie, Block Plan of Station Arrangements" and was signed by Chief Engineer Hutchinson on 9 November, 1917. This drawing illustrated (amongst other things) the proposed Block Plan for Broken Hill Railway Station located in Crystal Street and clearly showed a locomotive siding trailing off the main line on the down side as the track entered the platform. The terminal buffer stops for the Condobolin to Broken Hill railway were then to be a mere 13 chains beyond the western end of the Crystal Street platform. The main standard gauge station established in Broken Hill has always been known as 'Crystal Street' to distinguish it from the Silverton Co.'s Sulphide Street station. The unusual thing is that the station was actually built off the extension of Oxide Street, and in fact, only faced Crystal Street across the main line and some other rail sidings. A single-road carriage shed was also part of the locomotive sidings. The proposed locomotive shed illustrated on the drawing was a single-road type, but a three stall partial roundhouse was indicated as 'future construction' on the same site. Most of the facilities proposed on this particular drawing were never built in the positions indicated.

A standard gauge connection had been made between the Broken Hill tramway system and the government railway system near the Crystal Street passenger station, thus enabling transfer of
tram motors used in construction work. In March 1919, another drawing was issued showing details of a new locomotive depot in Broken Hill. The drawing was titled "NSWGR, Condobolin to Broken Hill, Loco Arrangements at Broken Hill, General Layout and Plan of Engine Shed" and included the arrangement and details of a three stall partial roundhouse as well as associated offices, store and pits. A Site Plan of the depot was also shown, the drawing being signed by Chief Engineer Hutchinson on 10 March 1919. The arrangement and details on this drawing, as well as the Site Plan, seem to indicate a change in ideas on the type of depot to be provided in the future for Broken Hill. The Site Plan illustrated the original location (as on the 1917 Plan) but the arrangement of facilities was substantially different and, in fact, represents what was later to be the final arrangement of roundhouse and equipment, but in another location.

Even though the main arrangement drawing was issued in 1919, records appear to indicate that the depot was not constructed at the time and the original facilities near the station sufficed for another seven or eight years. It had been proposed to install a turntable in the temporary location adjacent to Crystal Street station. On 11 January 1919, a drop pit, trolley and jack were authorised for installation in Broken Hill depot. It is likely the drop pit and the equipment were installed in the original location, (i.e. the loco sidings near the Crystal Street station). The 1917 Arrangement drawing, previously referred to, illustrates a drop pit in the shed (or future roundhouse), so it can be assumed they were installed, in what was the temporary location, at that time.

Although available records say nothing about locomotive turning facilities at Broken Hill between 1919 and 1927, it is most unlikely that engines were required to work a 73 mile journey in often adverse

Low-framed 3365 on the Broken Hill turntable in November 1956. The engine is fitted with slide bar dust covers (as were quite a few engines working in that area) to exclude the abrasive sand from the slide bars and crossheads.

M. Farrell
Baldwin-built, re-framed 3289 stands on an outside road in Broken Hill loco depot in October 1956. Slide-bar dust covers are fitted to the engine. The desolation is evident, with sand, rocks and low scrub surrounding this remote location.

M. Farrell

conditions, tender-first. Extant photos of trains in this period uniformly depict the K class travelling funnel-first, on both up and down trains. Furthermore, all trains worked with a bogie water gin attached to the tender (due to the distance between reliable water supplies), and it is inconceivable that regular working required the pushing of a gin on a 73 mile journey. It may be conjectured that the turntable originally installed at Menindee was quickly replaced by the triangle, which was certainly there by 1918, and the turntable was moved to its ultimate location at Broken Hill, some time well before the establishment of the rest of the loco depot facilities at that site.

Another drawing was issued on 15 February, 1927 and showed the arrangement of the locomotive repair shed, turntable, drop pit, stand pipe, coal stage and site for a water tank. This arrangement was shown at the original location in the vicinity of Crystal Street passenger station, on the down side of the line, approaching the terminus. A fenced space at the rear of the station was labelled as a small ‘locomotive repair area’.

The through service to Broken Hill was opened in October, 1927 and in the preceding months, a new locomotive depot was constructed, incorporating the arrangement shown on the previously-mentioned drawing of 1919. This depot was built, not as the site plan indicated near Crystal Street, but in another location some 40 chains closer to Menindee, trailing off the main line on the down or south side, as the line entered the outskirts of town.

The month of November 1927 was significant for Broken Hill. Weekly Notice No.44 stated “On Friday, 4 November 1927 between the hours of 8am and 5pm, the new loco sidings laid-in off the Stock Siding at the Menindee end of the Yard, will be brought into use”. In the same month, a drawing was issued showing the proposed arrangement of machine tools (lathes, etc.) in the new loco shed. This drawing was signed by Chief Mechanical Engineer, Mr E.E. Lucy. In addition, the Locomotive Officers Conference (LOC) held in November of that year, approved the installation of a 4” water main to be connected to the 20,000 gallon loco water tank and the provision of locomotive inspection pits and screw-down water hydrants within the shed.

Four weeks later, Weekly Notice No.50 for December 1927 stated “... with the opening of the line from Ivanhoe to Broken Hill, etc. the Broken Hill...
Late afternoon in October 1956, 3379 stands fully-coaled on No.1 coal road in Broken Hill loco. Two wooden-bodied ash trucks, an A and a D (right), and two water gins on the elevated No.2 coal road behind the engine complete the scene. M. Farrell

Right: In November 1956, 3381 stands on an outside road in loco. This engine hauled some important trains in Broken Hill in June 1957 (refer text), but ended its days on local working out of Broadmeadow depot during June 1965. Note the wall bracing on the side of the roundhouse - an attempt to provide resistance to the strong winds in the area. M. Farrell

Locomotive District will be Ivanhoe (excl.) to Broken Hill.”

The inspection pits and de-ashing pits referred to in the LOC were in service by early 1928 and, by July 1928, the new roundhouse, together with a coal stage, was in service. This roundhouse, with coal stages, pits, loco water tanks and other buildings would provide shelter for the 32 class engines and amenities for the local crews for the next 40 years. The Annual Report for the year 1928 announced the establishment of locomotive facilities in Broken Hill including the provision of a drop pit, trolley and jack.

The Local Appendix (West) for May 1929, shows the water facilities provided in Broken Hill at the time as “a tank with an 8” jib near the roundhouse and a stand-pipe on the down siding at the Sydney end of the yard”.

An undated drawing (circa 1930) shows the arrangement of the entire Broken Hill yard area, the carriage shed adjacent to Crystal Street station, and the new loco depot some distance from town. In September 1936, another drawing was issued showing the upgrading of the water service in the area of Broken Hill yards, and included the water services in the locomotive depot. Also shown on this drawing is the site of the former locomotive sidings and tank near the Crystal Street station.

In 1937, the stationary steam engine driving the line shafting for the machine tools in the depot was replaced by a 5 hp Hornsby engine. Not exactly associated with the roundhouse, but nevertheless important for train servicing, a 3000 gallon fuel tank was also provided by 1937 to enable the then brand-new Silver City Comet to be re-fuelled, and passenger car CCA223 was fitted out to accommodate the diesel maintenance staff for the Comet rail car set.

During the early 1940s, military trains became commonplace in all states of Australia and Broken Hill locomotive depot was indirectly involved. In 1941, additional locomotive servicing facilities were provided in the depot, as well as additional sidings for locomotive water tanks (water gins). Electric power supply was also provided. All these improvements were “for Defence purposes”. Over the next 15 years, few improvements were carried out; a pathway to the depot was provided in 1952 and, in late 1952, a new rest house (barracks) was constructed. Further improvements to the locomotive accommodation were documented in the Annual Report of 1953.

During 1957, a new passenger station was opened in Broken Hill, replacing the original Crystal Street Station, constructed some 30 years before. The new station was actually located in Crystal Street, Broken Hill, unlike its predecessor.
Dieselisation of the Parkes-Broken Hill line commenced with the delivery of 950hp, GM unit 4901 in 1960. By the mid 1960s, the only steam locomotive in Broken Hill was the solitary 32 class engine used for yard shunting (on occasions, two engines) and local trip working (see later reference in Locomotives section). By 1967, it too had been replaced by a 49 class diesel-electric unit. As a consequence, the old depot gradually fell into disrepair.

The through standard gauge link to Perth was planned to be opened in 1970 and a new diesel servicing depot was required. On 24 December 1968, a drawing was issued showing the arrangement of the new Broken Hill yards, and included a diesel-electric servicing depot to the west of the station.

The new diesel depot was built some 400 yards west of Broken Hill station virtually in the middle of the marshalling yards. The depot consisted of a straight two road engine shed and a two road diesel train servicing shed, all under the one roof. Office, locker rooms, store, diesel fuelling plant and a 40 bed barracks were built nearby, these also being located in the middle of the yard. A 75 foot diameter, manually-operated turntable was installed beyond the western end of the loco sheds. The old steam depot was then made totally redundant. The new loco depot provided accommodation for the Silverton Tramway Co. locomotives and mainline units from interstate, as well as NSW locomotives.

On 5 August 1970, tenders closed for the purchase, demolition and removal of the 20,000 gallon elevated water tank and stand, the locomotive roundhouse and seven associated departmental buildings.

By early 1971, the depot had been demolished and most of the materials removed from the area. However, the old 60 foot diameter turntable remained, at least for a few more years. Tenders closed on 19 October 1977 for the purchase, demolition and removal of the turntable, the last major link with the steam locomotives which had served the district for 60 years. A visit to the site in the late 1980s showed little remaining to indicate the one-time presence of the depot; some small sections of rusted structural steelwork, broken brickwork and uprooted concrete foundations were just visible.

**Description**

The first government locomotive depot in Broken Hill was located on a siding some 15 chains (990 feet) in length, trailing off the main line at the Menindee or Sydney end of Crystal Street station, on the down side of the line.

This depot consisted of a single road engine siding, a 20,000 gallon elevated water tank and stand, as well as a coal stage of 100 tons capacity. An inspection pit, some 60 feet long and, later, a drop pit were provided on this road. An ash pit, 40 feet long, was located on the same road as it passed between the coal stage and the water tank. It is of interest to note that the coal stage was positioned so as to allow a 3'6" gauge track (and therefore, locomotives) beside the stage for coaling purposes.

A single road carriage shed, 150 feet long, was located on a separate road nearby. In later years, this carriage shed was enlarged and became the stabling and servicing shed for the Silver City Comet diesel train set. It remained in this role for about 30 years.

As noted in the History, a three road sector roundhouse had been planned for the above-men-
mentioned site and the appropriate drawing of 1917 shows the future construction of the building and a turntable. These elaborate facilities were never built on this site.

By 1928, the new locomotive depot had been built on a site some 40 chains (1/2 mile) closer to Menindee. The description of this new depot is based on the drawings issued at the time.

The roundhouse was a three stall sector-style building with a saw-tooth roof profile. The shed was 80 feet deep, (i.e. length of sides) and the entrance doorways were set back 60 feet from the edge of the turntable pit. Roads within the shed, numbered 1, 2 and 3 in anti-clockwise direction, were fitted with a 70 foot long inspection pit with 4 steps down at each end and a standard dwarf drop-pit was located on No.3 road within the shed. Glass window panels were located in the rear or outer wall of the roundhouse. Over-run roads (small lengths of track opposite the shed roads) were not provided in the original layout of the depot area.

A standard form of construction was used in the design: steel columns (RSJ section) supported on concrete foundation piers, with roof trusses, beams and frame of timber. Wall cladding (in original designs) was 16" x 16" square fibro-cement slates fixed with the axis inclined at 45 degrees on the side walls and on the back wall above and beside the fitted windows. Again, in the original designs, the roof material was 6" x 1" thick, tongue-and-grooved oregon boarding covered in 3 ply roofing timber. Within a few years, most roundhouses which had this form of roof and side-wall construction, had the material replaced by corrugated iron or asbestos-cement sheeting. Broken Hill roundhouse fitted into this category.

Two timber work benches, each 20 feet long, were located inside the shed beneath the windows fixed in the outer perimeter wall.

A number of other structures associated with the depot were built simultaneously, including a three-roomed building measuring in total 41'9" long by 14'11" wide, (inside dimensions). This was divided into a store, 18 feet long, an office, 13 feet long and a sign-on room 10 feet long. This building was located beside the main locomotive shed between No.1 shed road and the main 'In Road' to the depot. A small toilet block (earth closet) was also built nearby.

In the original plan of 1919, a low coal stage measuring 80 feet long x 20 feet wide was located beside the 'In Road'. An elevated 20,000 gallon water tank fitted with an 8 inch jib was also located on the 'In Road' opposite the coal stage at the time of construction. Four water hydrants, two being located between No.1 and No.2 road and two located between No.2 and No.3 road were provided within the shed. These hydrants were supplied from the previously mentioned elevated water tank via underground 4 inch cast iron pipework and were used to provide a water supply for the much-needed boiler washouts, often required in locations of questionable water quality. During the next 20 years, a number of alterations to the trackwork and arrangement of depot facilities were carried out.

In its final form, Broken Hill locomotive depot consisted of the original three stall sector roundhouse and a 60 foot diameter manually-operated turntable. In addition to the original three shed roads, five roads radiating from the turntable were added, together with two short, stub, over-run roads. Loco arrival and departure roads, plus other trackwork, had been added and upgraded. The original coal stage and elevated water tank mounted on a timber stand, plus the 'earth closet', remained in the same spots, but the chargeman's office, the general store and the oil store were relocated to a position between the 'In Road' and the main line. A new coal stage measuring 100' x 15' wide was also
built adjacent to the store, together with additional ash and inspection pits near the coal stages. These facilities, as described, remained for the last 20 years of the depot.

The turntable installed in Broken Hill was a steel 60 foot diameter, manually operated ‘Newcastle' type, Way and Works number 1758.

**Locomotives**

Standard gauge railway construction in Broken Hill commenced in 1914 and, during the next two years, a contractor's steam locomotive and local steam tram motors assisted with the work.

Early in 1916, K294 class 2-6-0 tender engine No.298 (Baldwin 1884, B/N 7391) was delivered, in knocked-down condition, to Broken Hill via Port Pirie. It had previously been transferred to rail contractors Norton Griffins in 1915 for railway construction work in other parts of the state and was now to be used by that company for their part in the construction of the Broken Hill-Menindee railway.

By June 1919, K298 had been joined by sister engines K294 (the class leader) and K297. All three engines had been fitted with larger 55” diameter driving wheels prior to transfer to Broken Hill. In the 1924 class renumbering system, these engines were to become 1011, 1013 and 1014 (K294, K297 and K298) respectively, but it is doubtful if they carried their new numbers.

These three old, worn out locomotives continued working in Broken Hill and on the then-isolated Broken Hill-Menindee railway for a further seven years. A severe drought and acute water shortage in 1926 saw the transfer from Murrurundi depot to Broken Hill, of 28 class 2-8-0 tender engine 2805. (These engines were also known as 'little Js'). It was delivered by sea to Port Pirie and on to Broken Hill.

The severity of the drought and the continuing water shortage brought about the decision to transfer five 50 class 2-8-0 tender engines from Sydney to Broken Hill to work water trains in the area. The engines were to be transferred with appropriate vehicles for conveyance of water and were to be sent by sea to Port Pirie and on to Broken Hill.

The engines were obtained as follows:
- 5006 Eveleigh Workshops to Broken Hill
- 5125 Enfield to Broken Hill
- 5127 Eveleigh Workshops to Broken Hill
- 5166 Eveleigh Workshops to Broken Hill
- 5168 Eveleigh Workshops to Broken Hill

and were loaded in knocked-down condition aboard two ships which left Sydney for Port Pirie by 15 March 1926. The first ship arrived in Port Pirie and sections of the 50 class engines had been taken to Broken Hill when rain commenced falling in the area. Continual rain on 17 March saw the end of the drought in the city. The second ship steaming toward Port Pirie was recalled to Sydney and the dismantled 50 class engines already in Broken Hill were repacked and returned via Port Pirie to Sydney.

The 'little J', 2805, remained in Broken Hill, but all five 50 class engines were shown as re-allocated to Enfield depot by May 1926.

The through line from Parkes was opened in October 1927 and one or two of the 32 class engines were then allotted to Broken Hill depot at a time, specifically for working the new line between Broken Hill and Ivanhoe.

The original three (later four) locomotives in Broken Hill were then disposed of as shown:
- K294 (1011) withdrawn October 1927 (stored)
- K297 (1013) withdrawn August 1925 (stored)
- K298 (1014) withdrawn June 1927 (stored)

All three locomotives were hauled dead from Broken Hill to Chullora Workshops in April 1928, then set aside and finally scrapped. Engine 2805 was transferred in steam to Enfield depot in February 1929.

After 1927, the locomotives at work on the 422 mile section between Parkes and Broken Hill were, in fact, Parkes-based engines and 32 class 4-6-0s became the sole type of motive power to work the entire length of the line until the introduction of the diesel electrics in 1960.

The number of 32 class engines allocated to Parkes in those early years was as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>1928</th>
<th>1929</th>
<th>1930</th>
<th>1931</th>
<th>1932</th>
<th>1933</th>
<th>1934</th>
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<tbody>
<tr>
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<td>10</td>
<td>8</td>
<td>9</td>
<td>9</td>
<td>11</td>
<td></td>
</tr>
</tbody>
</table>

There was an exception to the above table - engine 3375 was known to have been allotted to Broken Hill for four years, December 1931 to November 1935. It was then returned to Parkes depot.

In September 1960, branchliner 4901 was delivered and, as the number of 49 class diesel-electric engines gradually increased, the working by the 32 class steam locomotives fell away dramatically. By the end of 1964, all 18 members of the 49 class engines were in service and allocated to Parkes. The remaining 32 class engines there, 3269 and 3366, had been sent to Broken Hill for yard shunting duties and, over the next four years, this situation remained, with one (sometimes two) 32 class in use on the local work.

On occasions, the Broken Hill shunting engine was in fact on loan from Dubbo depot, as Parkes had lost its allocation of 32 class engines by mid 1964. Typical examples were Aug.-Oct. 1964: 3237 (loan from Dubbo) and Oct.-Dec. 1964: 3203 (loan from Dubbo).

A single 32 class engine was able to carry out the shunting duties in Broken Hill for the next four years, as the steam engine was only used when the 49 class diesel electrics were unavailable. It was usual for the 32 class to be steamed only on Wednesdays and Saturday mornings at that time.

During 1966 and 1967, the shunter was changed over quite frequently. Often a Dubbo-based engine was sent to the far-western town to become the shunter engine. All exchanges between Parkes and Broken Hill were made light-engine and this was noted at the time as “one of the longest light-engine runs in the world - over 420 miles.”

By 1968, the use of the steam shunter in Broken Hill...
The turntable could be used for turning a variety of things including, if necessary, an Austin A40 motor car and two old motorbikes. Engine 3289 could also be turned if required. Vintage transport equipment, all of which has passed into history.

Right: One coming and one going. Engine 3363 on the right has been fully coaled and coupled to its gin ready to work out of town, whilst on the left, 3286 has just arrived and is standing over the ash pit. The 20,000 gallon elevated water tank overlooks all.

M. Farrell

Hill further declined and in April, engine 3249 was sent on loan to Parkes and on to Broken Hill after general repairs in Eveleigh Workshops. Engine 3249 had replaced 3262 in Broken Hill and it remained there for the rest of the year, but the 49 class performed most of the shunting work during this time. In December 1968, 3249 was transferred from Parkes (its official depot) to Cootamundra.

This marked the end of steam locomotives in regular use in Broken Hill. Standard gauge steam engines had been in the city for 52 years.

Crews and Working

From the opening of through services in 1927 and for the next 20 odd years, train working in the Ivanhoe-Menindee-Broken Hill section was fairly routine from year to year. Records indicate that, apart from the occasional build-up of enginemen during times of water shortages (see later section on Water Trains), the number and frequency of trains in the area resulted in reasonably constant crew numbers.

By the mid-1950s, Broken Hill had 11 men in loco. This included four drivers (Tom Tully, Gordon Crisp, Jack Fields, Jack Fordham), two acting drivers (John O'Neill, Don Hales), four firemen (Mick Farrell, Brian Jory, Alec Creighton, John Doran) and a cleaner (Gordon Danzie). Two guards were also based in Broken Hill, Bill Bunyan and Jack Williams.

Broken Hill crews worked the main line as far as Menindee, being relieved there by either Menindee or Ivanhoe men. The section between Menindee and Broken Hill was worked mostly by the Broken Hill men, Menindee crews only working that section of line on odd occasions.

The 32 class engines handled large loads on the flat areas around Menindee and Broken Hill, grades such as 1 in 440 being common. The goods load for a 32 class between Menindee and The Gorge was 880 tons, but between The Gorge and Broken Hill (17 miles), the grade steepens to 1 in 150 and only 720 tons could be officially conveyed on this section. It is obvious that reducing the load by 160 tons at The Gorge on the last climb into Broken Hill was a bit impractical, but obstacles were meant to be overcome. An old, experienced Broken Hill driver enlightened his keen, fresh-faced new fireman, “We are supposed to reduce the load here, but I never do. If everything goes OK, we will make it without much trouble.” With an engine overdue for workshops (as most were out there), complete with hollow tyres and an overloaded train, they slipped all the way up the long climb. They ‘made it OK’, just as the driver had said, assisted by our fireman walking alongside the engine, shovelling ashes and sand ballast in front of the driving wheels. The driver later announced that patrons in the pub across the way from the summit of the grade, at the north end of town, often had bets amongst themselves as to whether they were going to make it up that last, long grade.

As well as main line work, yard shunting occupied a Broken Hill crew almost continually. Shunting the large railway yards was a full-time job due, in part, to the change of track gauges between the NSW system and the 3'6" gauge of the Silverton
Tramway system. This necessitated the transhipment of freight, as all through goods from the eastern states to the west required extensive shunting of vehicles. Complete re-marshalling also applied in the other large 'break-of-gauge' yards of Tocumwal, Oaklands, Albury and Wallan-garra.

It was usual for a Broken Hill engine crew to be rostered for shunting morning and afternoon, seven days per week. Practically none was done at night. The shunting duties involved a 32 class engine, a Broken Hill driver (or acting driver) and fireman, as well as a couple of shunters. Being away from the prying eyes of Head Office in Sydney and often out of sight of the local boss (the Station Master), some short cuts and 'local arrangements' were often invoked.

The Station Master was fully aware of the 'local arrangements' applying in Broken Hill and; provided the work was done in the time allowed and there was no harm to anyone as a result, he turned a blind eye to some of the proceedings. One 'cardinal rule', which the SM insisted upon, and told the men in no uncertain terms, was, "I don't care how you do your work out here, but remember, above all else, you must not block the Comet under any circumstances." It was common knowledge amongst all men in that remote railway outpost that blocking of one of the most famous trains in Australia, through taking a few short cuts, would surely incur the wrath of 'Sydney'!

One of the Broken Hill drivers suffered from severe arthritis in his wrists and hands and when rostered for long shunting shifts in the yards, especially on Sundays when no-one was around, he invoked one of the 'local arrangements'. He would 'mind' the meal room, boil the billy and prepare the dinner for himself and his mate, the fireman, who, in the meantime, would work in conjunction with the shunters and carry out the work. With pre-determined hand signals and waving, and the shunters riding the trucks and working from the ground, the fireman would carry out both driving and firing on the steam engine.

On one occasion, when the old driver was sitting in the meal room, he observed a string of trucks, mostly four wheelers, accelerate past the window. He remarked to the others seated at the table "I will have to kick that fireman's bum when I see him; he is shunting too fast in the yard".

Unknown to the driver, to the fireman on the engine or to the yard shunters, the rake of trucks sped uncontrolled out of town, a slight misunderstanding during the 'kick shunting' having led all to believe that 'someone else' had control of the vehicles. They travelled out of town at considerable speed, and down the 1 in 150 grades toward The Gorge and Kinalung. A short time after, the error was realized and one of the shunters (of distinctly
Picnic Trains have been operated for railway staff and their families for many years, usually running from centres of railway activity to a suitable picnic ground nearby. On 3 October 1920, the employees in Broken Hill went on their Annual Picnic to the Darling River at Menindee, travelling via special train. It was hauled by one of the old K class 2-6-0s and consisted of a 7000 gallon bogie water tank, an HG four wheel brakevan, followed by six open, steel-bodied S trucks and a couple of ancient Redfern-type passenger cars. Ladies, gentlemen and children, all in their best dress, have crowded into the vehicles for the 73 mile trip to the Darling River town. A 'refreshment' stop was made at Box Tank, 55 miles out from Broken Hill, where the 'Ladies Powder Room' would have been a far-from-lavish affair.

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British origin), decided to go after them. He took off out of town in his car and drove straight to a level crossing some seven miles east. He waited at the crossing and as the vehicles slowly approached, wound on several hand brakes and brought the collection to a stand. The shunting engine then left town to retrieve the runaways. Of course, the ultimate responsibility for the adventure rested with the driver and, on hearing the trucks had been safely brought to a stand, he was heard to say to the shunter, with a smile "No wonder you blokes won the war". All would have been 'squared up' and forgiven, had not the wife of a local property owner, waiting at the level crossing near Crystal Street station on the northern edge of town, observed the passage of this most unusual train. Not wanting to keep this to herself, she informed the local radio station of this remarkable event, a train proceeding out of town with no brakevan and no engine. It was normal for a flagman to be present to warn motorists when trains were to pass over this crossing, and, unusually, no flagman was in attendance when this uncontrolled entourage sped past her. Unfortunately, senior officers such as the Broken Hill Station Master do not have a strong sense of humour and quite a lot of bums were kicked in town that particular day.

One interesting working in Broken Hill was a train simply called 'the shopper'. This was a local train, intended to allow the people of Menindee to have a day to shop in Broken Hill.

In earlier days, a spare Silver City Comet car set would depart Parkes on a Wednesday evening (7.00 pm in 1952) after the connecting Central West Express had arrived from Sydney. The Comet set arrived in Broken Hill on Thursday morning (4.50 am) after an overnight 422 mile journey, and terminated. On Friday morning, the set left Broken Hill (5.40 am) and ran a return trip to Menindee, arriving back in Broken Hill the same afternoon. At 9.47 pm that same evening, the set departed Broken Hill and headed for Parkes, returning any 'shoppers' to Menindee on the way. The Comet arrived back in Parkes on Saturday morning (8.00 am) in time to connect with the up Central West Express through to Sydney. An Ivanhoe driver worked the 'shopper' from Ivanhoe to Broken Hill (into barracks), then Broken Hill to Menindee and return (barracks again), then worked the Comet set back to Ivanhoe and home.

By 1956, the Silver City Comet set was replaced by a steam-hauled mixed train, worked by a 32 class engine. The mixed (No.51), conveying heavy corridor and both sitting and sleeping cars, arrived in Broken
“Do not block the ‘Comet’. The Silver City Comet in the far western desert area of the state. It was almost a travelling oasis and showed the local people that they deserved an exceptional train service. Tuscan DP103 roars across the desert with No.46 up Comet near Mt. Gipps in August 1966.

Tony Eyre

Below: A work train near Mt. Gipps. Engine 3278, with its bogie water tank, leads a covered S truck, PHG van and number of S trucks loaded with material and ballast in November 1956.

M. Farrell

Hill in mid-afternoon, Thursday. Early Friday morning, the cars were used to run to Menindee and return to Broken Hill, arriving back around 11am, usually bringing the Menindee ‘shoppers’ with it. On Friday evening, the cars were marshalled to form the overnight passenger through to Parkes (No.26), and returned the Menindee folk, laden with their acquisitions, to that remote town. The steam-hauled ‘shopper’ was worked to Menindee and return by a Broken Hill crew.

With the opening of the standard gauge route through to the western states in 1970, crew numbers in Broken Hill increased. In 1992, 13 appointed drivers and 9 acting drivers were working out of Broken Hill depot, in contrast to the 11 enginemen of the 1950s. Two guards were also based in the city.

General Notes

According to the Local Appendix (West), May 1929, Broken Hill depot was (at the time) under the supervision of Steam Shed Inspector, Mr R.W. Harcus, who was also responsible for the locomotives...
Reframed 3249 stands on the main line at Kinalung whilst hauling No.48 up goods. The small platform and station building are behind the engine; the signal box is to the right of the photo. The track in the foreground is the siding (having both loading bank and stockyards), with the loop next to the main line. M. Farrell

Above Right: Kinalung, between Broken Hill and Menindee, and a work train hauled by 3201 stands on the main line whilst the staff is exchanged for the next section. M. Farrell

Below Right: Per-way maintenance is a continual job where extremes of climatic conditions exist and the Broken Hill area is no exception. Even work trains took a water gin. In 1956, Baldwin-built 3290 works with a crane and dragline near Mt. Gipps. M. Farrell

operating in the Broken Hill to Ivanhoe (excl.) area. Overall control of the Locomotive Branch for the area was exercised by the Divisional Locomotive Superintendent at Bathurst, Mr W.A. Harper.

As previously noted, Menindee, Ivanhoe and Broken Hill were sub- or out-depots of Parkes and consequently were not allocated a depot number under the depot-numbering system in use during the steam days. Of these three sub-depots, only Broken Hill is known to ever have used a cab-side mounted depot or shed plate. The plate bore the name ‘Broken Hill’, but without an appropriate number on it. To the author’s knowledge, no 32 class engine was actually observed carrying the cab-side plate in regular service, but a former Broken Hill fireman recalls seeing them in the roundhouse at Broken Hill during the early 1950s.

In country areas of the state, most railway lines are unfenced and straying stock cause problems for the owner of the animals, and for the safe and reliable operation of trains, not to mention to the animals themselves. In an effort to improve night visibility for the engine crew, five 32 class engines were modified by the addition of triple headlights in 1935, specifically for working the Broken Hill line. This intense light attracted animals to the line, so the modification was deemed to be unsuitable for that working, and was removed about 1937.

On Tuesday afternoon, 4 June 1957, the old Crystal Street station in Broken Hill was replaced by a new, modern station, also in Crystal Street, but on the opposite side of the main line and a few hundred yards to the west. The Commissioner’s Train, hauled by engine 3381 and conveying the Commissioner for Railways and some of his staff, arrived for the opening ceremony. Late on Tuesday night, 3381 departed Broken Hill, returning the special train to the East.

The first regular train ‘tabled to use the new station was No.45, the down Silver City Comet on the following day, Wednesday 5 June. During the trip, DPI04, the power unit hauling the Comet set, failed at Menindee. Assistance for the troubled unit was at hand, in the form of engine 3381 with Broken Hill acting driver Don Hales and fireman Mick Farrell.

A couple of hours late, the old engine departed Menindee towing the Comet set, and headed out across the desert for the 73 mile journey to Broken Hill. Acting driver Hales had a reputation for ‘not wasting any time’ in the long desert sections of the far West. Therefore, it was no surprise to ‘all-and-sundry’ in the SM’s office in Broken Hill, when the guard of the train rang in to report arrival at Kinalung; Don Hales and 3381 had run the Menindee to Kinalung section in the same time as the Comet diesel set. The following section (Kinalung-Broken Hill) was also run at Comet time and, some hours late, but nevertheless without extra loss of time, engine 3381 again entered the
new station, this time with the failed Comet set in tow. It was the second time in two days the engine had enjoyed a share of the spotlight. The Comet power car was repaired in Broken Hill during that night and worked No.46, the regular up service out of town the next morning, running on time to Parkes.

In railway towns throughout the state of NSW, one event was awaited with much anticipation, especially by the local children. Every two years (in some towns it was yearly), at the completion of its season in the city, Wirth's Circus would pack up, board a specially-marshalled mixed train and head for country New South Wales. The train was quite lengthy, made up of four-wheeled vans for animals, bogie flats and open trucks containing equipment, other four-wheeled flat wagons loaded with an assortment of motor vehicles and caravans, the whole assembly of freight vehicles trailed by quite an array of passenger cars, including sleepers and a brakevan. The train was always on the move, the Special Train Notices (STN) issued for its journeys quoting stops in some towns of only 10 or 12 hours, enough time for a single performance before moving on to the next town, perhaps a mere 50 miles away. Such was the weight of the train that, in the 1930s, instructions were issued that only superheated 50 class engines were to be used throughout, the exceptions being where these 2-8-0s were not permitted to run. The Wirth's Circus train came to Broken Hill every two years and, like all other trains in that part of the state, was 'tabled for 32 class haulage.

On one occasion, the Circus train was 'tabled for an overnight stop in Menindee, with the locomotive leaving the train there and proceeding on to Broken Hill. There was ample time for a number of circus
performances in this town beside the Darling, before the train had to move on to more of the same in Broken Hill.

At the conclusion of the evening performance in Menindee, all was packed aboard the train ready for travel west. It was intended that a crew, fresh from barracks in Broken Hill, only 74 miles away, would bring the engine 'light' from there, couple up to the heavy train in Menindee and return to the Silver City. As morning approached in Broken Hill, the local 'boss', the Station Master, expressed his surprise when he found the extra engine still at the 'Hill instead of where it should have been, in Menindee, preparing to work the Circus train. The rostered driver (and the engine) were still in bed in Broken Hill; 'slept-in' is the usual excuse. Considerable delay to the schedule of the train seemed inevitable, but a knowledgeable Train Control Officer had other ideas. He spoke to the 'boss' and requested the immediate assistance of Don Hales, the driver with the reputation of getting things done in a minimum of time. Don Hales and his fireman took off out of Broken Hill with a 32 class, light engine, bound for Menindee. Normal running times were thrown out the window, as was usual with this driver and, on arrival in Menindee, the engine was turned on the triangle and coupled up to the Circus train. A punctual arrival in the 'Hill was almost essential for this train, performances had been advertised, tickets sold, the 'show must go on, etc.' A heavyweight passenger train, appalling track conditions, a locomotive over 50 years old and a late start for the trip were all the ingredients for a cancelled show. It is sufficient to state however, that Don Hales and his fireman brought the train back into the city after a dash from Menindee and there was no need for any cancellation.

Once a year, the workers from the mines in Broken Hill travelled by train to 'the big smoke' for their annual holiday. These large trains (sometimes two or three trains) consisted of heavyweight cars and were steam-hauled for their lengthy journey. They were known as 'Miners' Specials' and were given priority over all other trains, with the exception of the Comet, on the 422 mile run to Parkes.

The aforementioned acting driver Hales was also

Above Right: A rare bird indeed! Baldwin-built 3278 was the second 32 class withdrawn from service, 3264 being the first. In November 1956, the engine heads a work train near Mt. Gipps, its removal from service being only a few months away. M. Farrell

Below Right: Mt. Gipps is 32 miles east of Broken Hill. On occasions, it has been a Staff and Crossing Station and, during the mid-1950s, three tracks, including a Public Works Siding, passed the platform. The loneliness of the area, shown in this 1969 photo, is deceptive: behind the photographer is a stone hotel, while there are several houses nearby. P. Neve

Below: The maximum load for a 32 class in the section between The Gorge and Menindee was 880 tons and, at Kinalung in October 1956, class leader 3201 appears to have somewhere near that load. With full boiler pressure, the old engine seems ready to take on the next 37 miles to Menindee. M. Farrell
well known when working the Miners' Specials. On one occasion, a Locomotive Inspector joined Don Hales on the engine in Broken Hill prior to his departure with a Miners' Special, explaining to driver Hales about the weight of the train and the reasonably fast running times called for in the timetable. When the guard signalled the 'right-a-way', the Locomotive Inspector urged our man “to go as hard and as fast as you can.” This was all Don Hales needed, full authority to send her along, something he normally did anyway. With the old 32 class speeding across the sand-and-no-ballast track formation, staying aboard the locomotive became a bit of a challenge. Finally, the distressed Loco Inspector touched Don on the shoulder and shouted, “You can slow down a bit, if you like”.

Don Hales was one of the characters in the far west. On one particular occasion, after a long stint on the engine, being extremely dirty, hot and sweaty, Don had a clean-up in the barracks bathroom and prepared his meal in the kitchen, along with a few others. When all was finished and Don turned to retire for the evening, it was obvious to all present that he had washed everything except his feet, black ankles being a sure sign of the sweaty conditions on the engine. Thereafter, Don Hales was
Plan of Engine Shed, Broken Hill 1919
known as ‘Ankles’ throughout the area. His reputation for fearlessness when driving steam engines spread. A senior Loco Inspector from the parent depot of Parkes was overheard to say to him, “Ankles, if you ever get off the road, they will need black-trackers to find you. I don’t care what you do out here, but you are not to come over my side of the Darling River bridge.”

In the 1950s and early 1960s, there were two alternatives for rail travel between Parkes and Broken Hill. The Silver City Comet provided a day-time service from Parkes on Monday, Wednesday and Friday, retracing its steps from Broken Hill to Parkes on Tuesday, Thursday and Saturday. “On the seventh day, He rested”. The other method was much more adventuresome and came about with the electrification of the Sydney-Lithgow section of the main western line. As a result, the locomotive-hauled Central West Express train was then terminated in Orange, thus providing a day return trip between Sydney and that city, the air-conditioned car sets no longer running on to Parkes or Dubbo. The Orange-Dubbo and Orange-Parkes passenger services were then to be provided by a ‘spare’ Silver City Comet car set and this set was obtained by withdrawing it from the ‘Shoppers’ Special’ between Menindee and Broken Hill. Steam-hauled cars returned to the ‘Shoppers’ Special’.

Late on a Wednesday afternoon, a 32 class engine was prepared in Parkes loco depot. The engine faced west and was rostered to work No.51, the Broken Hill mixed. The old 4-6-0 looked forward to a 231 mile trip before being relayed by another engine at Ivanhoe, some 11 hours hence. The author was fortunate enough to travel on this train in the summer months of late 1960, the engine rostered on the particular afternoon being low-framed, ‘old campaigner’, 3353. Preparation of the engine was well under way in mid-afternoon upon entry to Parkes locomotive depot prior to the trip. Normally, the tender of a 32 class engine carries 9½ tons of coal, but when observed in the depot being readied, the tender of the engine rostered to work this train seemed to have a few extra tons aboard. The coal was piled high to form a sharp-peaked pyramid, giving the distinct impression that, should a single piece of coal be lobbed onto the heaped pile on the tender, 2 tons would immediately tumble off.

In the early evening, a most unusual looking train was assembled in Parkes’ main platform. The load of No.51 mixed consisted of a number of four wheelers marshalled leading, a few bogie vans (MRC, TRC, LLV types), three or four carriages including a couple of heavyweight, 72'6" cars and a passenger brakevan bringing up the rear. The load prescribed for this train from Parkes was 444 tons and, on this particular day on which the author travelled, there was no doubt that this loading was being conveyed.

At 6.20pm, engine 3353 announced to the local residents that departure was near and a few minutes later, No.51 Broken Hill mixed struggled out of
Every two years, the circus came to town and everybody attended. With close to maximum tonnage, 3290 struggles up the last 1 in 150 grade on the outskirts of the city, in order to keep an appointment with the kids of Broken Hill, the Wirth's Circus Train in tow.

M. Farrell
The Circus Train was, in effect, a heavy mixed train. Behind 3290 and the mandatory 7000 gallon water gin, a large load is strung out on the heavy grade. Included are several E flat wagons loaded with circus trailers, two old style BCW bogie cattle wagons, five special CW (four wheel cattle wagons loaded with elephants), several more E wagons with equipment, one ‘dogbox’ express lavatory carriage, one TAM sleeper, three more ‘dogboxes’ and a van. One can assume, of course, the TAM was for ‘management’ and the lion tamer; the rest of the staff enjoyed the comforts of the ‘dogboxes’!

M. Farrell
Sunday morning in Crystal Street station and 3253 stands at the head of No.58 up goods prior to departure. The track in the foreground led to the servicing shed for the Silver City Comet diesel train. M. Farrell

Above Right: Late afternoon and a stock special hauled by 3366 prepares for departure from Broken Hill. The 7000 gallon gin is essential, as it will be more than three hours before another water column comes into view. M. Farrell

Below Right: Goods was transhipped in Broken Hill between standard gauge and Silverton Tramway trains, using the large travelling gantry cranes shown. In April 1957, engine 3289 stands ready to depart Broken Hill yard with No.56 up goods. M. Farrell

Below: Low framed 3343 awaits the right-away in Broken Hill yard, on No.48 up goods. The transhipping yard cranes are on the left, with mine tailings forming a backdrop to railway operations. M. Farrell
The Menindee 'shopper', No. 33, swings into the Crystal St station area with 3201 hauling a van and an MCE corridor car in February 1957. The building on the right is the Comet servicing shed.

M. Farrell

Parkes station and on up past 'loco. This section (1½ miles of 1 in 100 grade) is virtually the 'ruling grade' for the line and according to the Working Timetable, we waited at Goobang Junction to cross No.18 up rail motor from Condobolin, although I do not recall this happening. After picking up a token for the single line section to Bogan Gate (22 miles), we were away on an all-night trip to Ivanhoe. During the night, a 7000 gallon bogie water gin was attached at Euabalong West, bringing the load to the scheduled 500 tons. A crew change also took place at Euabalong West.

Early the next morning in Ivanhoe, 3353 gave way to 3368 with a fresh crew and, some 5 hours later, No.51 mixed pulled into Menindee. It had taken 17 hours to reach Menindee from Parkes and another crew change took place there. No.46, the up Silver City Comet was crossed in Menindee and No.51 Mixed continued on its 3 hour journey to Broken Hill. This mixed train took 21 hours to travel 422 miles, at an overall average speed of 20 mph, with three crew changes (Euabalong West, Ivanhoe and Menindee) and a change of locomotive, an epic journey through intense summer heat and desolate country.

The cars off No.51 Mixed were then used to run to Menindee and return on Friday, as No.33 'Shopper's Special', before returning to Parkes as No.26 up passenger, running on Fridays only.

A friend of the author returned from Broken Hill to Parkes on No.26 passenger in August 1960. Departure time was (at that time) 7.15pm, the load

Left: High summer at Menindee and No.51, the Broken Hill mixed with 3368 in the lead, stands on the main line. This engine had replaced 3353 in Ivanhoe some five hours earlier. R. Love

Right: Fully coaled for the 191 mile trip to Ivanhoe, 3253 awaits right-away in Crystal St. on the Sunday goods, No.58. This engine finished its days in 1960 on coal-road working out of Port Waratah depot.

M. Farrell
The cars off No.51 mixed returned from Broken Hill to Parkes on Friday evening, running as No.26 passenger on an overnight trip. The passenger, hauled by 3202, draws to a stand in Parkes station, behind the last car of a Comet set forming the Orange-bound connection to the Central West Express.  

B.J. Tulloch
In 1951/1952, an intensive water lift was undertaken to save the city of Broken Hill from the effect of a severe drought. A train of bogie water tank cars is refilled on the main line at Menindee before heading for Broken Hill. SRA Archives.

In 1951/1952, an intensive water lift was undertaken to save the city of Broken Hill from the effect of a severe drought. A train of bogie water tank cars is refilled on the main line at Menindee before heading for Broken Hill. SRA Archives.

being 1st class car, 2nd class car (both 12 wheelers), TAM sleeper and MHO van, hauled by a 32 class engine out of Broken Hill. Sixty mile-per-hour running was the order of the day and, at Menindee, the engine uncoupled from the train and was serviced in the nearby sidings. A fresh crew then worked the train to Ivanhoe where engine 3208 replaced the original locomotive. Near Euabalong West (about 6 am), floodwaters were in evidence for many miles, the sleepers actually being covered in numerous places, but the 60mph running continued. The train arrived in Parkes on time, 10 am Saturday morning, with an overall average of 28mph for the 422 mile trip. As with the previously-mentioned Wednesday mixed, there were three crew changes and a change of locomotive on the overnight passenger run.

The rail pay-bus visited Broken Hill once per fortnight to pay the local railwaymen. It left Parkes (as No.9) on a Monday and paid fettlers, station staff, pumpers, train crews, etc. along the way as it headed west. It spent the night in Ivanhoe, then departed Tuesday morning (as No.11) and headed for Broken Hill. The arrival of this four-wheeled vehicle was a much-looked-forward-to event in the small hamlets along the way, its contents meant 'everyone could live for another two weeks', provided of course, the pay-bus was punctual.

Lunchtime in the meal room in Broken Hill was usually a bit of a social gathering - time for most of the local yard crews, shunters and a few fettlers to have a respite from the high summer sun in this western outpost. The pay-bus was due to arrive early that 'pay Tuesday' afternoon, the much needed cash was to follow. The meal was rudely interrupted with news - the pay-bus was in the dirt (sand in this case) some distance from town, near Mt. Gipps. Normally, a so-what? attitude would prevail with this announcement, but it was well known amongst all present that the Paymaster had to be at the bank that afternoon to make arrangements for the supply of cash for the men. Panic reigned and all present in the meal room (plus some others) departed in rather a hurry.

The transport which these men-with-a-mission took out to the scene was in all forms - trucks, cars, fettler's trikes, - described by one railwayman present as "anything with wheels".

It was obvious by the sheer number of men proceeding to the scene that it was intended to physically re-rail or lift the light-weight vehicle back onto the tracks to permit it to resume its 12 mile journey to Broken Hill. A short time later, the true intention of the army of railwaymen was realized; the crew of the pay-bus was escorted into town via the road by an entourage of anxious workers. The pay bus remained in the sand some miles from town, but at least the Paymaster was able to get to the bank in time.

The Water Trains
The New South Wales Railways has long been a provider of water transportation. For many years, water trains were the sole means by which fettlers and their families, living adjacent to the running lines, received their household water supplies. On numerous occasions in many parts of the state system, the railways were called on to supplement the water supply of entire communities, by carrying water from a reliable river supply some distance away.

The city of Broken Hill was a different proposition. Drought conditions and an inadequate local storage, coupled with the absence of a nearby river system, caused the NSW Railways to carry out major water lifts, virtually to save the city and its industries from disaster, on no fewer than seven occasions over a 26 year period.

Although water trains are not the specific subject
In early 1952, as the pipeline advanced from Menindee, Horse Lake became the loading point for water trains destined for Broken Hill. A water train, consisting of fourteen bogie tank cars and a van (810 tons) fills with water on the triangle constructed at Horse Lake.

SRA Archives.

of this essay (nevertheless, they would make a very interesting subject), the running of these essential services was carried out by the railwaymen of the area, our particular interest being the loco and traffic men, together with the steam locomotives then in use.

The average rainfall in Broken Hill is approximately 9½ inches per year but, on many occasions, below-average rainfall caused concern about the ability of the town's water supply to sustain the needs of the community.

Droughts in 1888 and again in 1891-1892 caused water to be brought from South Australia to Broken Hill. In 1926, a drought in Broken Hill required the despatching and transport of locomotives and vehicles from Sydney, for the sole purpose of carrying water from the Darling River at Menindee to Broken Hill. Fortunately, the drought broke soon after. The same situation occurred in 1927, the year the through line was opened from Sydney and again in 1929, with rain saving the situation.

In 1944, drought conditions returned and water trains commenced running, extra staff, vehicles and locomotives being sent to the area to assist with the water lift from Menindee to Broken Hill. Amendments to the Instructions for Running of Special Water Trains between Menindee and Broken Hill were issued via Weekly Notice. The loads were set at 820 tons, consisting of BE wagons and a bogie brakevan (full trains on the down journey) and 380 tons (empty, on the up journey). Maximum speed was set at 30mph (down) and 35mph (up) and "these must not be exceeded". Extra crossing loops had been opened to assist with traffic flow, the sections being Menindee - Box Tank - Kinalung - Tuina - Broken Hill. This situation was repeated in 1945 and again in 1946.

As can be seen from this, emergency water lifting arrangements involved the then-NSWGR on many occasions over the years. To illustrate the work involved in such an undertaking in an inhospitable and disagreeable environment, the huge water lift which took place in the year of 1951 is presented as an example.

In 1951, below average rains fell in the far western areas of the state and Broken Hill's water supply reached a very low level.

On 1 December 1951, due to existing drought conditions, a planned water lift commenced using two water trains, each of 14 E type bogie flat wagons fitted with 7000 gallon tanks, and a bogie brakevan. The capacity of each train was 98,000 gallons, the total weight being 810 tons. This was within the load for a 32 class in the Menindee - The Gorge section (880 tons) but a few tons over the load for the section The Gorge - Broken Hill. By this means, 11 million gallons of water were delivered to Broken Hill during the month of December, the two trains
In Broken Hill, water was discharged into a flume adjacent to Crystal Street, near the marshalling yards. The water then flowed into a tank in the nearby street. By March 1952, the water trains terminated at Mt. Gipps, nearest railhead to Stephens Creek reservoir.

SRA Archives

making 124 trips between them. The drought continued, with the water storages falling to critical levels. To further assist with urgent water delivery into the early part of 1952, three extra 32 class engines, together with 28 tank cars and 3 brakevans were added to the existing locomotives and vehicles then at work in the area. In order to operate all these extra (and essential) services, more than 80 extra loco and traffic men were sent to the area, including enginemen, guards, safeworking staff, pumpers, and fuelmen. Additional living accommodation was provided in Broken Hill. An intermediate crossing loop was established at Kinalung, as well as the newly established loops at Box Tank and The Gorge in order to improve train operations.

The drought continued into early 1952 and it became necessary to divert the regular water train which usually ran in the opposite direction (between the Darling River at Menindee and the loco depot in Ivanhoe), onto the Menindee-Broken Hill run. This train was normally used to supply water to loco Ivanhoe and assisted with Ivanhoe’s town supply.
Above: Broken Hill yard looking towards the north. A water train has arrived from the east and is discharging its load into the flume built adjacent to Crystal Street. On the right, the yard is full of wagons, all within easy reach of the transhipping cranes spanning the two gauges.

Right: The Crystal Street storage tank. In the middle of a drought and miles from a river, it must be tempting for these local kids to have a quick dip. Admittedly it is the town’s drinking water supply, but on a hot day, who is going to tell?

With the diversion of this train to Menindee-Broken Hill running, five water trains, each with 14 bogie water tanks (7000 gallons each) continued the task of urgent water delivery to Broken Hill. To replace the set of tank cars previously used on the Menindee-Ivanhoe run, another unusual water train was assembled, made up of 23 specially-fitted four-wheeled K type open wagons. These vehicles had their doors welded up, the insides sprayed with a waterproofing plastic solution, baffle plates fitted inside and a timber roof added.

With all these arrangements, an additional 32 class was sent to the area and this allowed 42 trains per week to deliver 16.9 million gallons of water to Broken Hill over a 31 day period.

In the early 1950s, a pipeline had been planned to link Menindee with Broken Hill but, by early 1952, as a result of manpower and materials shortage, the pipeline had only reached Horse Lake. When this occurred, this small outpost became the starting point for the water trains, reducing the haul to Broken Hill from 73 miles to 46 miles. Later,
The 32 class engines hauled everything in the Broken Hill area, including Circus Trains, Commissioner’s Trains and water trains. In mid-afternoon of an April day in 1957, engine 3365, still fitted with original frame, wooden buffer beam and slide bar dust covers, stands beside the roundhouse. Bogie water gins were connected via the hose at the rear of the tender. M. Farrell

in March 1952, a temporary gravitation pipeline, 7 miles long, was constructed from Mt. Gipps to the Stephens Creek reservoir (one of Broken Hill’s stor- age dams) and Mt. Gipps became the terminus for the water trains, a haulage distance from Horse Lake of only 34 miles.

This situation existed for most of the first half of 1952 and, for the 5 month period ending April 30, a massive 102 million gallons of water had been carried.

The lift finished on 14 June 1952 with completion of the pipeline. By that time, a total of 131 million gallons had been carried. At the height of the operation, locomotive staff had been increased by 26, traffic staff by 29. A total of 82 extra men, including pumpers, etc. was needed and with these men, it was possible to work 15 water trains every day of the week for the period.

Train operations were also interesting. Normally, Orange Train Control supervised all train movements between Orange and Broken Hill, but as a result of the dramatic increase in traffic, a local Control was set up in Broken Hill. This controlled the Ivanhoe-Broken Hill section during the water lifts and the limit of control by Orange was then altered to the Orange-Ivanhoe section.

When the Menindee to Broken Hill pipeline was completed soon after, this brought to an end the frequent water lifts performed by the then NSWGR in that barren and normally dry section of the state.

Other water trains continued to run within NSW for some years, mostly associated with supply to felltlers along the per-way or on occasions, to supplement a drought-affected town water supply. In the mid 1950s, water trains were run from Quirindi to Werris Creek to assist with town supply, but this was nothing like the scale of operations in Broken Hill in the 1951-1952 period.

With the general upgrading and enlargement of water storages throughout the state in more recent years, the water trains have faded from the rail scene.

The Silver City Comet

The Silver City Comet was an air-conditioned diesel train which commenced running between Parkes and Broken Hill (‘The Silver City’) in 1937.

From the outset, it must be pointed out, no attempt is being made here to present the full history and details of the Silver City Comet or its running in the far western area of NSW. A number of publications have been devoted to the history of the train and these are noted in the further reading references at the conclusion of this essay. It is intended to present some notes on the operation of the train and how the working involved the far western out- depots of Ivanhoe, Menindee and Broken Hill.

As mentioned previously, by the 1950s, Ivanhoe had six appointed drivers and ten acting drivers in the depot. All the appointed drivers were qualified
The down Silver City Comet (No.45) at rest in Broken Hill station in January 1963 after the 422 mile dash from Parkes. Power unit 103 will have an inspection in the shed before returning the train to Parkes the following morning. An ‘express lavatory’ carriage stands behind the diesel set. R.K. Booth

for Comet working. In addition, the four most senior acting drivers who, in any case, were usually driving full-time on mainline steam working, were also passed for working this train.

It was usual in the 1950s for Parkes drivers to work the Comet from Parkes to Ivanhoe (231 miles) and go into barracks there, returning with the up service to Parkes the following day. On arrival in Ivanhoe, an Ivanhoe driver would take over the Comet for the run to Broken Hill (191 miles), go into barracks there and return to Ivanhoe the following day.

To quote an Ivanhoe driver “When driving the Silver City Comet after a severe dust storm, the sand would build up in the rail joint gap to about an inch above rail height. Although it was safe, it was very annoying and a fairly rough ride as this type of sand would consolidate. To run the Comet to time, we had to average about 60mph and there were always very heavy ‘out-ofs’ at Condobolin, Euabalong West and Ivanhoe, whilst at Menindee there were a lot of food supplies to put out. We were only allowed three or four minutes to do these. Consequently, we were always late away, but always managed to regain the time. Of course, this meant a little more than 60 mph over those rail joints.

“The unique feature of the sand in this area is that it is moving dunes and always moves from north to south. For years, it was shoveled back from the line with shovels at night and horses pulling scoops by day. In later years, bulldozers were used. Somebody came up with the idea that it would be better to shift the sand across the line and let it keep going as was its natural course. It worked.”

There was a period when, on a Saturday, an Ivanhoe driver worked the Comet to Parkes and went into barracks there. On Sunday, the same man worked the Forbes Mail to Forbes and then returned to Parkes. He then worked the Comet home to Ivanhoe on Monday morning. This working also applied up until the 1980s. For a period in the early 1980s, Broken Hill drivers joined in, by working the Broken Hill-Ivanhoe section, relaying at Ivanhoe with Parkes men.

There were also some unusual operations with the Comet set. In times of flooding on the Condobolin-Euabalong West section and with the Comet trapped on the Broken Hill side of the floodwaters, Ivanhoe drivers have worked the Comet to Roto and down through Hillston, Griffith and Narrandera, there to meet up with the South West Mail. Again, to quote an Ivanhoe driver, “When the water was over the line near Gunebang, I worked a steam-hauled train from Ivanhoe to Griffith, went into barracks there, then continued on to Temora and finally returned home passenger from Temora on the Comet set.”

The Silver City Comet, an institution in the far west and, for many, the sole means of transport between the isolated communities, was withdrawn
Above: Twenty-five years after the previous photo, DP103 with four trailers and a van, stands in Broken Hill ready for departure with No.46, the up Silver City Comet. During this period, Broken Hill drivers worked the set through to Ivanhoe, instead of Ivanhoe men.

R. Love

Left: A failed Comet set resulted in a substitute. On a bleak day in May 1957, 3365 drifts out of town leading three cars and a gin, standing-in for the diesel train.

M. Farrell

Left: On 15 June 1965, metal fatigue in a wheel of the Comet power van, caused this derailment near Kinalung. The Train 'hit the dirt' at 60mph, with Ivanhoe driver 'Sandy' Lamont in charge. There were no injuries to the 100 passengers aboard and Driver Lamont received a 'Commendation for Skill'.

A. Lamont collection
The 49 class diesel-electrics displaced steam on Broken Hill working by 1961. However, one or two 32 class continued shunting there for a further eight years. On 25 August 1966, shunting engine 3230 rests in 'loco in the late afternoon.

A.J. Eyre
from the run on 2 November 1989 and replaced by a bus service from Dubbo to Broken Hill via Cobar. The Silver City Comet served the area for 52 years. The crews and maintenance staff from Parkes, Ivanhoe and Broken Hill depots helped run an essential service in difficult conditions. Even in its final days of running, 80 mph across the desert was a normal, everyday performance.

Epilogue
The whole railway scene has changed in that far western section of the state, as it has everywhere. The main difference between the steam days and latter diesel days is the fact that, instead of that section of line being a 422 mile long branchline as it was for 43 years, it has now become the main east-west interstate route. It is hard to believe, when one visits the area, that old steam locomotives, with more than 50 years of hard work already behind them, continued to provide the regular railway link between the east coast and the far west of the state, into the late 1950s.

The reminders of the past are to be seen in a few locations along the line between Parkes and Broken Hill. An elevated water tank can be seen in some locations, an occasional bogie travelling water tank stored in a weed-covered siding in others, but most remnants of the past have long gone.

The most recent and suitable method of inspecting this far flung section of the railway system was from the cab of the Silver City Comet as it roared across the desert at 80 mph and this author was fortunate enough to have travelled the entire journey from Parkes to Broken Hill and return, up front, on quite a few occasions, the first being in the sand and no-ballast days of 1960. It was an experience then and, in 1989, 29 years later, when I last rode the Comet, it was still an experience.

In recent times, the common motive power on goods trains and the Indian Pacific, are the 80 class diesel electric locomotives and for some strange reason, they seem to belong there. These engines have been synonymous with the area for some years, their air-conditioned cabs being most welcome.

The old 32 class steam engines were also associated with the area and I was able to observe them first hand in the Parkes to Broken Hill area during 1960. True steam railway people can rest easy in the fact that the old 32 class will have had a longer association with that most remote part of the system than the modern, air-conditioned 80 class can ever expect.
Above: This Sydney Yard scene, looking north towards Sydney station in March 1975, shows No.4 signal bridge or gantry. The gantry straddles the up and down Main lines on the left plus the up and down Suburban lines on the right. An interesting mixture of semaphore signalling practice is displayed, but all signals are operated electro-pneumatically. The tallest signals apply to up or arriving trains and are lower quadrants still retaining their McKenzie and Holland finials. Stencil light indicators, a more recent addition, displayed the platform to which the train was being directed. The upper quadrant signals controlled down or departing trains. Various shunting moves were controlled by glass-enclosed banner signals. Station West signal box is on the far left, old Station box is in the front of the city buildings, while Station East box can just be seen to the left side of the eastern carriage sheds, at centre of picture. At the right of the picture can be seen the flyover network used by suburban electric trains moving to and from Central electric station.

Left: Fred Saxon is here pictured, circa 1961, at his desk in the Ticket Collectors’ Office at Sydney railway station with enlargements of a selection of his railway photographs on the wall behind him.

Above Right: With 3295 light-attached, 3303 departs Sydney station on Monday, 27 February 1961 at the head of a LUB set, comprising the 2.50pm passenger service to Kiama. Although 32 class engines could be seen in good numbers at Sydney station at this time, it was quite a rare experience to witness two of the class double-heading.
In *Byways of Steam* 6, I outlined my early railway career, commencing with my first duties as a junior porter at Lawson station in the Blue Mountains from 1934 until 1938. After a short time at Blayney station in 1938, I transferred to the Sydney carriage cleaning sheds and continued with these duties until about 1945 when I joined the staff of the Ticket Collectors' Office at Sydney station. For most of the time I spent working at Sydney station until my retirement in 1977, I filled various positions in the Ticket Collectors' Office.

To give you some idea of the duties of a ticket collector I will relate the typical activities of one of the rosters to which I was assigned in 1967. Sign on 2.30pm, sign off 10.30pm, 20 minutes crib, No.2 platform, barrier, spare time spent sorting tickets. Most shifts were eight hours including a 20 minute break. Other rosters would have involved checking tickets for certain outgoing trains and collecting tickets from trains coming in. In between trains we had to cancel all collected tickets, put suburban tickets into a canvas bag and sort out country tickets in piles on ticket tables in line order, i.e. North, North Coast, South, West and Illawarra. First class singles, second class singles, forward portions of return tickets each for first and second class, were all placed in station order as per ticket sheets and in consecutive number order. Return butts were cancelled and placed into a bag. Tickets then were sheeted and tied up with string, in bundles of 250. Tickets for pensioners, school excursions, school pupils, bicycles, dogs and other purposes were entered in separate, special categories. Any excess fares collected while on the barriers or when checking first class carriages were paid into the office with an Excess Fare Sheet showing tickets sold and total fares paid.

All barriers were manned for outgoing trains, with two collectors for each train but, for incoming trains, three or four extra men would be rostered to collect all tickets, especially on crowded trains. These were supervised by the Head Ticket Collector during the day and by Assistant Head Collectors in the evenings. There was one Head Collector (day shift), in addition to two Assistant Head Collectors (one each for morning and night shift) and one Relief Assistant Head Collector. Originally, a ticket collector was assigned to each car on all mail and express...
Left: This group of ticket collectors at Sydney station is well rugged up against the cold as they sort collected tickets and arrange them in order prior to sheeting them. Ever-ready with a camera to record some item of railway activity, Fred Saxon has here captured several of his colleagues undertaking this laborious task, circa 1959.

Above Right: Engine 3607 makes a smoky departure from Sydney station's No.4 platform, late in the afternoon of Monday, 4 February 1963. The train is the Wollongong passenger service which departed Sydney at 5.09pm.

Below Right: Yard shunters 3025, 3107 and 3053 congregate around a water column as 5263 undertakes a similar activity further across Sydney yard. Tuesday, 30 January 1968.

Left: This photograph, circa 1956, shows many hundreds of collected tickets in the process of being sorted on a ticket table at Sydney station. Ticket sorting was a routine task undertaken by the ticket collectors on various rosters when they were not engaged on barrier work or checking tickets on trains.

All photographs by the author.

Left: These well-at-tired ticket collectors pose, in about 1956, for the camera at Rosehill Racecourse on the occasion of a race meeting. Special trains were run for these race meetings and many ticket collectors were rostered to check tickets on the race trains. From left to right, the gentlemen are W. Meek, W. McNa-mara, R. Johnston, R. Taylor, H. Davey, N. Dixon, G. Greenwood and H. Grant.
Sydney Station West signal box straddled the goods lines leading to Darling Harbour plus Nos 1 and 2 Botany Road sidings, used for storing carriage sets. This box was set transverse to the running lines to conserve space. Station West box controlled signals and points leading to Sydney station platforms 1 to 15. 3 March 1975.

Station West box consisted of two parallel frames, mechanically connected and interlocked under the floor. The frames were positioned longitudinally near the north and south windows with a wide floor space in between. Thus, the signalmen worked back to back. Pistol-grip slides acting horizontally were used instead of the usual levers. Close spacing was achieved by setting the pistol grip handles alternately up and down. Signalman John Stormont is shown at work on 6 May 1971.
Sydney Station East box controlled suburban electric train movements across the flying junctions (or flyovers) approaching Central (electric) station. None of the trains controlled by this box could be seen by the signalmen, who used illuminated diagrams - one for the up lines and one for the down lines - and the timetable to carry out their duties. The four box-shaped cases above the frame console displayed the timetable sequence plus any printed special train notices of altered running. The frame is a miniature electric lever type rebuilt from a part of the original frame installed in Station box in 1906 and made redundant when replaced by Station West box in 1924. 13 June 1971.

Yardmaster Ossie Hartley (left) and a colleague are pictured doing signal duty at Station West box in Sydney Yard on 6 May 1971. Sydney station platforms 1 to 4 can be seen through the window at top right. The yardmasters and signal staff spent a good deal of their time giving and receiving telephone messages as they oversaw train and engine movements in Sydney yard. The manual 'Sydney Yard Working' is on the desk in front of Mr Hartley.
trains to check on reserved seats and tickets. On composite cars, sleeper tickets were checked as well but, on sleeping cars, a conductor was provided, one to each sleeping car. In later years these were abandoned and only one or two conductors were provided for each train.

One roster, No. 44, had to sweep and clean the mess room, scrub the tables and mop the floors before taking up duty checking such trains as the Newcastle Express. We were all issued with checking nippers, each with four numbers in a pattern such as 213 (mine was 11), which had to be signed for, and also a pair of cancelling nippers which took out a sizeable V-shaped chunk from the ticket. In latter years the ticket collectors were issued with double-breasted uniforms and we had silver braid on our caps but reverted to single-breasted uniforms in the lighter blue material.

On 'off' nights, when there were few trains running, several of us were sent out to check trains in the suburban network, travelling between Wynyard and Hornsby, Strathfield and Parramatta, Sydenham and East Hills, Bankstown or Kogarah, or on the Short North. Certain rosters had to check electric trains (for tickets) to Sutherland and then check the trains to Royal National Park on Sundays. On race days we were also rostered to check the special trains to Rosehill, Warwick Farm and Canterbury.

During the week, different rosters would check tickets on the suburban electric trains to Lidcombe, where we would change and catch the Homebush Abattoirs train (usually a 30 class tank hauling a LUB set). Some of us would alight at Pippita and issue tickets on the platform for employees returning home from working at Ford, Commonwealth Aircraft, and Dairy Farmers. Two or three of us would go on to Abattoirs and issue tickets there and on the train back (including Brickworks) to Homebush. Some trains came right through to Sydney to form an Illawarra line train and some would go west, to Richmond or Penrith. Typically, I would catch one of these trains to Strathfield, change trains and travel back to Central on an electric train.

On Sundays, two rosters went to Rookwood, to issue any tickets required there or collect any tickets from

**Right:** In the late afternoon of Thursday, 11 April 1968, engines 3811 and 3219 stand with their trains at Sydney terminal station awaiting departure. The 4.57pm Moss Vale passenger service, headed by 3811 is in No. 13 platform, while the 5.02pm Campbelltown passenger waits in No. 14 platform with 3219 at the front. 3219 is fitted with a rebuilt 32 class six-wheel tender for turning on Campbelltown's 50 ft. turntable.

**Left:** "When in doubt, ask the Man in Blue." Information and Complaints Officer, Arthur Hanna, the original 'Man in Blue' is here photographed at his desk at Sydney station, circa 1955.
passengers alighting. Rookwood is the location of Sydney's largest cemetery. Originally we used to go right into the cemetery and stay there some hours until the train returned.

On Saturdays, two rosters went on the train to Anzac Rifle Range which conveyed many shooters to and from the large Anzac Rifle Range at Holsworthy, just beyond Liverpool. The train ran via the Illawarra Steam Dive, Sydenham, Enfield and Chullora Junction. On its outward journey, it departed Sydney shortly after 12 noon and picked up passengers at Sydenham, Canterbury, Campsie and Cabramatta before proceeding to the rifle range, where it would stay for almost four hours until the train returned to Sydney. This train was worked by a 30 class 4-6-4 side tank locomotive with whatever carriages were available. I can remember it with a CUB set, with American suburban cars and even with a mixture of heavy corridor cars. I did this run many times and always enjoyed it. A driver who was often rostered on this train was Joe Kirkwood who was, himself, quite a marksman. The last official passenger train to Anzac Rifle Range ran on Saturday, 25 June 1960, hauled by 3046.

There was one elderly ticket collector who was on permanent light duties at Sydney terminal station, having lost a leg during the time he was a guard. He always had the same roster, on No.6 barrier if my memory serves me right. As each day drew on he became more inebriated which, for a long time, puzzled us, as he never left his barrier. One cold day I was rostered opposite him on the same gate. After a while he opened his uniform coat in which were two large pockets, one on each side. On one side was a long pocket and on the other side was a smaller one. In the big pocket was a bottle of 'plonk' and, in the other one, a mug. He opened the bottle, poured some of its contents into the mug and said 'Here!'. I was astonished but, as it was rather cold, I accepted. That answered the mystery of his afternoon behaviour.

In the latter years of my time at Sydney station I spent some time on clerical duties, which kept me in the office all day. I had to receive all excess fares paid to the ticket collectors and account for the money collected. As mathematics was not my forte, sometimes I found that I had less money than I was supposed to have and had to make up the difference. Of course, if I happened to have more than I was supposed to have, I had to pay that in too! Passengers who had insufficient money on them to pay for their tickets or excess fares were brought to me by the ticket collectors on the barriers so that I could check their name and address against the electoral roll. Sometimes this degenerated into a farce, as false names and addresses which did not correspond with the electoral roll were quoted. Such passengers generally had to go to court. This involved the Head Ticket Collector and was not a pleasant duty to enforce.

Older readers may remember the first 'Man in Blue' at Sydney station. The 'Man in Blue' was actually an Information and Complaints Officer, who originally had an office in the old Interstate Booking Office. Anyone seeking information regarding trains or directions could go to him, although he was mostly seen on the concourse. His purpose was well publicised in NSWGR advertising of the time with the slogan “When in doubt, ask the Man in Blue”. He was a senior officer, of Station
Left: No.1 locomotive and tender, as well as a replica of the original third class carriage, were photographed on display at Sydney railway station for the Centenary celebrations between 28 July and 27 September 1955. These exhibits were loaned to the Department of Railways by the Museum of Applied Arts and Sciences for the duration of the exhibition.

Above Right: Long before it was selected for preservation, 3820 takes No.59 Moss Vale passenger train through Sydney yard late in the afternoon of Wednesday, 1 March 1961.

Left: A relatively new parcels tractor is put through its paces with a test load on Sydney station's No.2 platform in 1964.

Below Right: A beautifully painted and detailed 3264 is on display with the dynamometer car at Sydney station's No.14 platform during the NSW Railway Centenary celebrations in September 1955. Eveleigh engine 3264 was a classical example of the low-framed 32 class built by Beyer, Peacock to the original design and modified, subsequently, by superheating.

Left: Late in the afternoon of Tuesday, 4 August 1959, 0-6-0 tender engine 1925 ambles through Sydney yard past yard shunter 3023. The old but trusty 19 class engine is returning to Eveleigh depot after a day's shunting at Darling Harbour.
Left: This is a view of reconstruction works in progress on No.1 platform at Sydney station in November 1971. At right, signs indicate the Station Master’s office and the Telegraph Office. The open archway at right is the vice-regal entrance.

Centre Left: Engine 3201 is here shown, about 1955, backing down to the buffer stops at Sydney station’s No.2 platform, prior to taking out a South Coast passenger service. The sign board attached to the rear of the tender signified the train for which 3201 had been allocated. This practice, to aid signalmen and train controllers in Sydney yard, was common in busy holiday times when additional trains were run. The Baldwin-built bogie tender, tab No.685, was originally attached to engine P685 (3284 in 1924).

Below Left: This photograph of class leader 3201, sporting its original low frame, was taken at Sydney station around 1955 when 3201 was allotted to Eveleigh depot. Of particular interest is the old, double jib water crane near the buffer stops, at left of picture. This old water crane is about to be replaced with a new water column, the concrete foundations of which have just been poured.
During reconstruction work at Sydney station’s No.1 platform, construction trains were used to convey special vehicles. Here, in February 1962, 5617 is at the head of such a train conveying a crane for lifting steel girders.

As numerous 30 class tank engines were withdrawn from service and 30T class engines were transferred to Enfield depot from country depots, some of the 30Ts from the country, as well as those recently overhauled at Eveleigh Workshops, took a turn at shunting in Sydney yard. Here 3108, with bogie tender, shunts a pair of MB covered vans in March 1971.
Master rank, who could issue authority to travel on certain trains which normally wouldn't stop at a particular place, in extenuating circumstances or in cases of emergency. The original 'Man in Blue' was Arthur Hanna, although, as time went on, there was more than one 'Man in Blue', working on different shifts.

When I first joined the Ticket Collectors' Office there was a huge staff. I was No.112 on the sign-on book. Staff numbers were gradually reduced over the years and my seniority increased. When I left in 1977, I was No.1 on the book. The older, senior ticket collectors would barely speak to their junior colleagues in the 1940s; it was beneath their dignity. However, as time went on, things became more relaxed. In the early days, all ticket collectors were men but, eventually, we had lady ticket collectors. One of the early ones I remember chose to work the backshift, from 12.30am to 8.30am if my memory is correct. She stayed on this shift for years, which surprised me. When it was my turn to work this shift, I was always glad to get rid of it! The duties of a ticket collector changed little during steam days but, as steam motive power disappeared, so did many of the practices which had been customary for decades. One of these was the practice of recording

The electrification of Sydney yard necessitated major changes to the water columns to ensure that enginemen did not come into contact with the overhead wiring. Here green 38 class locomotive 3813 takes water after bringing a train into Sydney station. The fireman has mounted the specially constructed platform beside the tracks, from which position he can operate the water column with safety. This system was brought into operation generally for electrified areas. Wednesday, 23 March 1960.

An MLV louvred van is being loaded with mail bags in the evening of Tuesday, 27 April 1971. The MLV is attached to one of the mail trains due to depart Sydney station.
so much information concerning the tickets that were collected. This recording of details was done for audit purposes, but the practice was suspended in the 1970s, thus saving a great deal of human effort and, no doubt, cost. The sorting and recording was considered so necessary and important in the 1940s, '50s and '60s, yet it was discontinued in the rationalisation that took place after the demise of steam.

Speaking of the need to account for all collected tickets reminds me of the story told about the junior porter who preceded me at Lawson station in the early 1930s. Dreading the thought of all the paperwork associated with accounting for the day's collected tickets, and being a resourceful young fellow, he conceived a plan to eliminate a great deal of work. He would burn the tickets to remove all trace of them, and the best way to do this was to throw them into the firebox of a steam locomotive. The opportunity occurred when a pilot engine returning from Katoomba stopped at Lawson station to wait for the road. He boarded the engine and when the

Special passenger trains to convey railway workmen from Enfield and Chullora were run in the late afternoon. These were typically worked by a Standard Goods engine up until the early 1960s though, on occasions, anything suitable that was available at Enfield could be found at the front of these trains. Here engine 5205 arrives at Sydney station with such a service on Thursday, 5 September 1957.
signal cleared and the engine was about to depart for Valley Heights, the tickets were flung into the firehole. "That's the end of them!" he thought as he jumped from the cab onto the platform. However, there was a flaw in his plan. Just as the tickets were cast into the firehole, the engine started to slip furiously, due to the driver opening the regulator too quickly. Within seconds, there were partly burnt tickets floating down all over the station from the plume of smoke thrown high by the slipping engine. This was a source of amusement for all except the hapless junior porter. On another day, the station

master found a bundle of collected tickets underneath the coal bin used as the station's coal supply. Goodness knows how many tickets actually went missing!

A highlight of my time at Sydney station was the Railway Centenary Exhibition held on No.14 and 15 platforms in September 1955. Both platforms were taken up with a model railway layout as well as locomotive, carriage and equipment displays. The exhibition was very well attended and admission fees went to the Anti-Tuberculosis Association of NSW. Scaffolding and seats were erected over the lines on 15 platform. There was a small hut near the end of 15 platform where there was a tape recorder with microphone. I was elected to make announcements through the station and some days advertised the sale of the book *A Century of Locomotives* for twelve and sixpence. This book subsequently became something of a collector's item. Engines 1948 and 3264, beautifully painted in black with red and yellow lining, were placed adjacent to No.14 platform while similarly painted 5805 and 6020, as well as green-painted 1243 and 3813, were on tracks specially built for the exhibition. Electric locomotive 4501, a 40 class locomotive, a two-car diesel train and many other exhibits were also on display.

Quite soon after the electrification of Sydney yard, a fireman climbed onto the tender of a 38 class engine at No.10 platform, as had been normal practice previously, to direct the water column to replenish the tender. His head came into contact with the overhead wires and he was killed instantly. I arrived for work shortly after and saw the aftermath of this tragic accident. If I can remember correctly, the engine was a green non-streamlined 38. All water columns at Sydney terminal station and in Sydney

This photograph is full of railway interest. Taken from the front of the train returning from Anzac Rifle Range (No.420) late on a Saturday afternoon in summer, circa 1953, it shows train engine 3024 and driver Joe Kirkwood about to pass Sydney West signal box. The indicator on the signal above 3024 shows that the train is being directed into No.3 platform at Sydney station. Saddle tank engine 2604 can be seen shunting the west car cleaning sheds, while the lines to Darling Harbour are shown curving beneath the signal box.
One of the more interesting trains to arrive at Sydney station was No.228 'Picton milk pots', which ran on Mondays to Saturdays, arriving at Sydney just after 1.00pm. Here engine 3243, at the head of two dogbox carriages, EHO van and bulk milk vehicles LV, BMT and MLV has just passed beneath the Cleveland Street overbridge and signal gantry and is entering Sydney yard. To the left of 3243 is the sandstone structure of St Paul’s Anglican Church at Redfern. Monday, 19 March 1962.

yard were soon altered to a design which permitted enginemen to operate the column from beside the tracks, eliminating the need to climb onto the locomotive or tender and risk contact with the overhead wires.

Some time after my retirement, I was honoured with the presentation of the Imperial Service Order, with a citation from Her Majesty, the Queen. The medal was presented at Government House, Brisbane on 30 March 1979 by Governor Sir James Ramsay. The citation on the medal reads “For more than 43 years of conscientious service with the NSW Public Transport Commission”. By then, I had moved to Queensland, in retirement.

This is a 1957-era view of the Parcels Post Office and the Outwards Parcels loading dock at Sydney station, showing the considerable activity that occurred there in the late 1950s and early 1960s. Sydney yard can be seen in the background at left.
Above: The diesel electrics ruled the North Coast line from 1958, with a few oil-burning 59 class carrying out shunting and pick-up work. Ten years later, the unthinkable!! A shortage of diesels saw a return of 59 class (by now converted to coal-burning) to limited running between Broadmeadow and Taree. In December 1968, 5912 and 5902 leave Dungog behind as they work out of town heading for Broadmeadow.

Tony Eyre

Above Right: The 35 class 4-6-0 express locomotives played a big part in passenger and fast goods operations on both the Main North and North Coast lines for many years. Their former classification was 'NN' (being affectionately known as Nannies) and most crews had a kind word for them as they seemed to do everything which was expected from them. In August 1944, lined, green 3526 stands at Gloucester with an up North Coast military special, the crew also having a spell from the cab.

John L. Buckland
Relief Staff - South Grafton District

My appointment as an Assistant Station Master on the relief staff really meant that I was to relieve officers on annual leave and for any other type of work as directed by the Staff Clerk in the Superintendent’s Office at South Grafton. Every relief officer in a similar situation was allotted a home station and, while an officer was employed at his home station, he was not entitled to be paid expenses. However, as soon as he relieved at another station, expenses were paid to cover accommodation, etc.

Coopernook was to be my home station and, like the name Merrygoen, had to be looked up on the railway map. It was a small village situated about 30 miles north of the city of Taree, with the station placed some two miles from the township.

On instructions from the office at South Grafton, received before leaving Merrygoen, my first ‘port-of-call’ was to be another peculiar-sounding place called Coramba, about 30 miles north of Coffs Harbour.

The small village of Coramba was in the midst of the banana growing region of the coast and one of the main consignments from the station was, of course, bananas.

The Orara River divided the township in two, with the railway station on one side and the houses and pub on the other side. The pub was called the Hotel Coramba and it was at this establishment...
In March 1951, Wal Jenkins left the western outpost of Merrygoen and took up duty as an ASM at Coramba on the North Coast. A few weeks after arriving there, Wal poses with a couple of local identities on the platform. Normal station equipment of the day, wall-mounted kerosene lamps, station seat and platform scales add to the scene. Courtesy Jenkins Family

that I deposited all my worldly possessions for my stay of approximately four weeks.

Most station buildings on the 'Coast seemed to be of similar construction and Coramba was no exception. This station was opened on 17 July 1922 and the name is a corruption of the word 'Corambara' which was supposed to have been the aboriginal name for the area. It is situated 390 miles from Sydney and is 326 feet above sea level.

Much of my early training was gained here and a lot of credit must be given to a friend and colleague, Brian Daly, who was also relieving at Coramba during my stay and we both boarded at the hotel. He was a first class hand with much experience and he taught me a great deal regarding the running of the station, accounts and safeworking.

It is one thing to be conversant with the theory of railway working, but the 'nitty gritty' of actually taking charge and running a station on your own had to be learnt from the 'university of hard knocks'. Brian was only a few years older than me but he took me under his wing and imparted much of his knowledge and experience to this 'raw hand'.

I was to come into contact with Brian over the years and followed his career with interest as he climbed the various grades of Station Master, Inspector, Senior Inspector, Chief Inspector and finally a full District Superintendent at Wollongong. At one time he was the Traffic Inspector at Kempsey and we came into contact many times. He was in a position of power that goes with that job but at no time, to my knowledge, did he ever abuse the position of trust. I was saddened in later years to hear of his death at the age of 59 years.

A full uniform had been supplied for my use before taking up at Coramba. This consisted of dark, almost black, trousers, coat and a cap with gold braid, and a gold-coloured crown affixed to the front of the cap. (We were told that when this crown was worn, allegiance was to be given to the King and Queen; I considered this to be all 'hooey'.)

All relief staff were supplied with first and second class duty passes to enable them to travel through-out the district. My pass was available for travel in carriages and brakevans of all trains and covered an area that stretched from South Brisbane to Dungog.

This pass enabled me to travel to other stations on relief duties and came in very handy when used to gain food supplies from major towns by means of train travel.

My date of appointment to this relief position was 12 March 1951 so, from memory, it would have been in March of that year that I arrived at Coramba. After three or four weeks, with much wisdom, the office decided that I had been on 'expenses' too long, so they directed me to proceed with haste to my non-expense home station at Coopernook.

The name 'Coopernook' was derived from the aboriginal word meaning 'elbow'. (I can tell you that much 'elbow' bending was carried out by the locals at the pub.) The station is situated 251 miles from Sydney and only 22 feet above sea level. The post office opened on 1 November 1876 and the school was opened in July 1877.

The actual township was located about two miles from the station, with most entraining and detraining passengers heading to and from the fishing village of Harrington at the mouth of the Manning River.

On my arrival at Coopernook, I was advised that the only accommodation available was at the Hotel Coopernook and as this was rated, for some reason, a first class establishment, the cost of boarding there was beyond my means, especially as there were no expenses available.

The ASM on duty suggested that I may be able to obtain private board with a family in the township. The first family he called up on the phone said they would take me in. Store keepers, Les and Meg Eggins were pleased to have that little extra income and I was as happy as the proverbial Larry to have a room to myself with beautiful cooking thrown in.

I became good friends with Les and Meg and their two small daughters and at times was invited along on fishing trips. Shift work was a little awkward for Meg and she tried to keep the children quiet during
the day when I was in bed. To make up for any inconvenience caused by my stay there, I was quite happy to cut all the firewood for Les.

One of the locals told me that there was some pretty good duck shooting in the swamps at the back of Coopernook. So I decided that the next time I travelled to Lithgow to see Joan, my fiancee, I would bring back my five-shot Browning automatic shotgun and endeavour to reduce the ducks' numbers.

The gun could be packed in two pieces for carrying and when I arrived back at Coopernook on the train, the first question from the ASM on duty was "Can I have a look at it?" I wasn't really keen on this idea but with a twisted arm, unpacked the suitcases and assembled the gun. The ASM asked, "Have you got any shells?" "Of course," I said. He then said, "Well, give me a shot." With much reluctance I placed one shell in the chamber and told him to be very careful and only shoot at the opposite bank of the cutting across from the station.

You wouldn't believe what this ratbag did! He pointed the gun skywards and blew a great hole in the station awning roof. He laughed his head off and apologised. I found out later that he was a known practical joker and that what he had done was no accident. He caught me out with another of his so-called 'jokes' one night. I had arrived at the station at about 10.45pm to commence work at 11pm, taking over from the afternoon shift officer. He had a roaring, open-grate fire going and, after handing over the responsibilities to me, said goodnight.

Unknown to me, as he passed the fire on the way to the doorway, he threw a railway detonator into the roaring flames. I had my back to the fire and when this huge explosion rocked the room I thought all my days were numbered. It blew me off the chair and covered the whole of the office with fine ash and embers. Between fits of laughter, he came back to apologise and help clean up. His name was Ray Jenkins and I can say that he had no relation to me, thank heavens!

Ray was a real friendly cove and it was impossible to hold any grudge against him. He lived with his family in the only railway cottage available to the staff. It was located north of the station on the opposite side of the line, with access being obtained by passing beneath a rail bridge. Because of the two mile distance to Eggins' store in the township, Ray travelled by pushbike to obtain supplies. To give his young son a ride, he constructed a small two-wheel trailer which he connected to a coupling beneath the bike seat. This was a great idea, not only for the youngster, but for carrying groceries etc.

My one and only experience with a bicycle at Coopernook was unforgettable. I borrowed a bike one morning to travel from the station to the shop and return. The forward trip was okay but on the return, down a dirt hill, the handlebar broke in half and I ended up on the road. I was winded and had a badly grazed right hand with, I found out later, a small broken bone in this hand.

A passer-by picked me up and, after loading the handlebar-less bike in the back of his ute, I continued the trip to the station. I had borrowed the bike from the ASM on duty and he was most upset about the accident, especially as he had travelled this same road many times without incident. In retrospect, I think he was more concerned about the bike than my injuries.

On 14 June 1951, I received my first 'reprimand' from the Railways for failing to surrender 1st Class Privilege Pass No.106754 within 48 hours after date of expiry. These reprimands and nasty reports were all classed under the name of 'bungs'. I'm sure that a lot of these reports were issued by clerks to build up files in order to justify their own jobs.

A second reprimand was issued to me one month later on 23 July and was worded thus, "Responsible for avoidable delay in returning one empty portable magazine to Darling Harbour". A portable magazine was a wooden container used for the carriage of small consignments of explosives on trains. They measured 4' long, 3' wide and 2' high (approximately), with a hinged lid. They were painted red and sheathed in thin metal, with the word 'Explosives' printed on the lid.

We were all told that if we received too many reprimands we would receive the 'royal order of the boot' and be dismissed. I must have pulled my horns in as the next reprimand did not come until five
years later, in 1956. This was not because I decided to be a 'goody-goody' but many things that were done were never reported by the inspectors.

After relieving all of the officers at Coopernook, I was directed to report to Craven to replace one officer while he cleared his annual leave.

Craven is 181 miles from Sydney and 437 feet above sea level, and was situated between Dungog and Gloucester, south of Taree. It was opened as a siding on 5 February 1913 and as a platform on 28 September 1913. The school opened in January 1915 and the post office on 13 November 1916. The area was previously known as Craven Flat, with the name possibly originating from Craven in the West Riding of Yorkshire, England.

When I stepped off the train, the first thing that struck me was the 'nothingness' of the surroundings. Apart from the station, there were only two railway cottages and a large saw mill opposite the platform. This meant, of course, that I had to settle down with the rats in a small 'out-of' goods room at one end of the platform.

I had earlier purchased a collapsible bed and this came in very handy to keep myself off the hard floor. My other possessions consisted of a Primus kerosene stove, a frying-pan, one saucepan and a kerosene lamp, with warmth being provided by a couple of rugs.

Supplies were a problem when relieving at a station where there were no shops in the village. It turned out there wasn't even a town at Craven, so I had to make occasional trips by train to nearby Gloucester, where at least I could buy a few 'snags' as fresh meat. It was pretty rugged living and, apart from 'spuds' and onions, most of the food came out of tins.

My trusty old tennis racquet accompanied me wherever I relieved. It came in handy for an occasional game at Coopernook and, as there was no court at Craven, the other ASM and I scraped out a court of sorts at the back of the two cottages. There was no net, but we sweated out many a bash and let our imagination believe that everything was there, including white lines.

For safety reasons, the station booking office and waiting rooms were always separated from the signal box. The official thinking must have been that, if the main buildings were to burn down, the signal box may be spared. Because of this arrangement, most of our time was spent in the box manipulating the levers that controlled the signals and points.

Depending on the location, there were on average, about twenty levers in most signal boxes on the North Coast and it was thus possible to walk into any box and manipulate the levers without being instructed. Red levers controlled the signals by means of wires connected to the end of the lever which ran along pulleys to each signal. When the lever was pulled over, tension on the wire enabled the signal arm on top of the signal post to drop to the clear position, indicating to the driver that he could proceed.

Blue coloured levers controlled the movement of
 Whilst the 35 class did their fair share of passenger work on the 'Coast, the heavy expresses (and some mails) were hauled by the larger 36 class engines. The refreshment stop at Coffs Harbour is enough time for the crew to check over 3612 standing at the head of a 9 car express. Note that 3612 has been fitted with a unique style of smoke deflector, a cabside number plate is also attached, only a few engines being so fitted. The BRC vans in the siding at left, are possibly loaded with fish or fruit for the Sydney market.

G.H. Eardley

the points by means of a wire and chain that applied tension to channel irons that ran alongside the track, and by means of 'elbows' the points could be moved when the lever was pulled over. Another lever had to be manipulated in conjunction with the points lever. This was a locking mechanism that ensured that, when the points were moved into position, a 'depression' bar locked the points so that, if an engine or truck was standing over the points, they could not be moved and cause a derailment.

These small stations were classified as 'Standard Crossing Loops' and usually consisted of the main line, loop and goods siding. At Craven, an extra long 'stow road' was located behind the saw mill and was used to place a third train out of the way to enable a normal crossing to take place.

During the War years, signal boxes were located on some long sections between two main stations to reduce the crossing time of troop and ambulance trains. These signal boxes were basic crossing loops and consisted only of a main line and a loop.

As mentioned in “The ASM: Learning The Job” (Byways of Steam: 6), the main safety system for train working on the North Coast was the 'Miniature Electric Staff'. To save delay to each train, these staffs were exchanged while the trains passed through without stopping. There were two methods of handing the token or staff to the engine crew. One method was to secure the staff to a 'cane sling' and as the locomotive went past, the fireman exchanged his staff with the staff held up by the signalman. I received many a whack on the face before learning to stand back before the actual exchanging took place.

All express passenger trains and express fruit trains used the other method to exchange the token. This was called 'Automatic Staff Exchange', in which the tokens were secured to a leather pouch and exchanged at high speed. Nothing was carried out by hand by this method, as each loco had its own
pouch and ‘horn’ to deliver and receive the token from a similar ground exchanger which we had set up.

When not in use, the metal exchangers were kept in wooden boxes located at either end of the platform. When the lid was opened, the exchanger was lifted up and locked into position by means of a support pin. It had a similar pouch and horn and after the exchange had taken place the pin was removed and the exchanger dropped back into the hole and the lid closed.

During some heart-stopping moments, the incoming staff would not be deposited on the horn and a diligent search had to be made. Sometimes, it was not found for hours after and in the meantime ‘pilot working’ had to be established wherein a ‘pilotman’ was used to take the place of the staff. This meant the pilotman travelled on each engine as it passed through the affected section.

To expedite matters, when a train was waiting to enter the section, a proceed order was issued by the Train Control Officer. This was a paper order and much care had to be carried out with its issue. When the outgoing staff was not picked up on the loco’s ‘horn’, the driver had to apply the emergency brakes, come to a stand and not proceed until the staff was found (only a ten minute search was allowed) or he was issued with a proceed order or awaited a pilotman.

The 11pm shift, or ‘dogwatch’, was never appreciated much by the men, as you either arrived at work tired, or became very weary during the long night. The hours from 2am to 4am were always the worst. The scientists reckon that shiftwork upsets the ‘circadian rhythm’, in which the body should be in bed. Where possible, I always had a lie down on the hard counter between trains, especially during those hours. In later years, and even up to the present time, I could lie down anywhere and be asleep within minutes and, after only 20 minutes, wake up refreshed.

Usually when I relieved at a station, the senior officer claimed the daywork shift, even though I was sent to relieve him. This suited me fine because it allowed me more leisure time, especially on afternoon shift, when we then had all morning to ourselves to obtain supplies etc. After ceasing duty at 7am at the completion of the 11pm shift, it became very difficult at Craven to sleep with the trains going right past the door.

One particular 11pm shift at Craven that remains in my memory commenced with my being informed by the officer going off the 3pm start afternoon shift that a steam locomotive was stowed in the goods road with a burnt-out boiler. Now boilers don’t burn out without a reason, so I asked him what had happened to cause this. He replied that the whole crew had got on the grog somewhere along the track and had run out of water, with the result being a burnt-out boiler.

There was no sign of the two enginemen or the guard so, after the 3pm officer had gone home, I checked the loco over. Not knowing much about it, everything seemed OK to me. This hasty decision on my part was changed during the night.

It must have been my second or third check on the loco that revealed that the fire in the firebox was still burning from the coal and ashes that the crew had not dumped. This was a serious situation because of the lack of water in the boiler and I imagined all sorts of dire things happening. The matter was reported to the Train Control officer who was located at Newcastle. On his advice, the next train due was directed to pull up alongside the disabled loco and the driver was to endeavour to extinguish the fire using the water from his own loco. After 20 minutes or so the train departed, with its driver reporting to me that the fire was out.

![Image of Wal Jenkins raising the exchanger](image)

On single line sections, the electric staff system provided safeworking for train operations for both following and opposing movements. The staff exchangers, one for each direction of train travel, were mounted at each end of the platform. In this photo, Wal Jenkins has raised the exchanger and locked it into position. The staff for the next section is strapped to a leather pouch and attached to the exchanger, the shaped ‘ram’s horn’ will pick up the incoming staff from the moving locomotive. When the staff has been retrieved, the exchanger will be lowered back into the recessed box in the ground.

*Courtesy Jenkins Family*
That should have been the end of the matter but a further inspection revealed that the fire had again flared up. For the remainder of the night, each passing engine driver tried his best to extinguish the fire in the firebox. I ceased duty at 7am and informed my mate of the circumstances and, in a sense, passed the buck to him.

Later in the day, I strolled up to the signal box for a yarn, only to learn that the three crew members had been suspended for being intoxicated on duty. This resulted in my being informed that I would be required to attend a Departmental Inquiry at Taree on a date to be fixed, to give evidence regarding the matter.

This was my first experience of a major inquiry and it ended up more like a criminal case in a court of law. There were over 30 witnesses called to give evidence. Of these 30 men, about 20 or more were punished for some breach of the rules. From memory, the driver was fined and reduced to the position of a fireman, the fireman was fined and reduced to the position of an engine cleaner, and the guard was fined and reduced to the position of a porter. This was one of the rare occasions that I wasn’t punished, so I reckoned that things might be changing for the better after all.

This particular ‘dogwatch’ shift was an exception because usually, apart from train noises, the whole atmosphere was one of complete and utter quietness. I can recall vividly an 11pm shift at Coopernook when this peace was interrupted by a most peculiar scraping sound outside the office. A bloke yelled out, “Hey mate, can I use your platform scales?” Now this was well after midnight and I reckoned this joker must have been ‘on the turps’, wanting to be weighed at that hour of the night. The first thing that entered my mind was that it was Ray Jenkins up to his tricks again.

I was wrong, as it turned out, as a complete stranger was standing outside the door. Over his shoulder was the biggest fish I had ever seen in my life. When I say over his shoulder, I really mean that the head of this jewfish was all I could see, with the tail touching the ground. He had his fingers through the gills and it was the sound of the dragging tail that made me curious. I can’t remember the weight, but for many years I retained a scale the size of a two shilling piece from this fish as a reminder of that night.

It was time to shift camp again and when advice was received from Grafton, I packed up all the gear in one large suitcase and a tea chest and headed to Eungai, north of Kempsey.

It was not always possible to use staff exchangers on the single-line sections. Some locations did not have ground equipment installed and some locomotives did not have exchangers fitted. Hand exchanging of the electric staffs using cane hoops then became necessary. At George’s Plains in June 1993, the 2nd person of an up goods reaches for the staff for the Bathurst section, whilst the signalman picks up the staff from the Newbridge section. R.T. Taaffe
The 35 class express passenger engines worked all manner of trains on the North Coast over a 30 year period, from pick-up goods, fast perishable and fruit trains, through to the Interstate expresses. Engine 3532 departs Nambucca with a load of louvre vans heading for Coffs Harbour in 1958. Fred Saxon

Because of this heat, at times, it was very difficult to keep awake at night. Sometimes one would wake up with a hell of a fright to find a fireman shaking your shoulder, with his train standing outside the door. All of us on shift work went through this experience and it became very embarrassing when we had to explain to the Control Officer the reason for the delay to the train.

Of all the stations I had relieved at, only Coopernook was worked from the station office instead of the signal box and, as a result, much walking was done to pull over levers and exchange staffs etc. at the box.

The station building at Eungai was unique in that it was constructed from concrete blocks and not timber. During the day shift, all clerical work was attended to in the main office with trips to the signal box to carry out train working. The office duties consisted of selling tickets, consigning and receiving goods and parcels, answering telephones, both departmental and private, overseeing the loading and unloading of trucks, making up daily balances of the books and balancing all accounts at the end of each month.

Afternoon shift usually began at 3pm and finished at 11pm, with the main duties being the selling of tickets when required, compiling a shift balance and attending to all train working from the signal box where it was much warmer. The only heating in the main building was by means of a two-bar electric radiator.

The 11pm to 7am shift was always confined to train working, with the other two officers handling the bookwork on their respective shifts, although sometimes the backshift officer was required to sell a ticket now and again for the early morning down North Coast Mail. This ticket sale had to be entered up in a special book and a 'handover' statement compiled, so as to inform the day work officer of the extra cash in the till.

The nights I spent in my 'hotel' room were wretched indeed; the only way to keep the place warm was to keep the Primus burning all the time and this only worked by pumping the thing up every couple of hours. I had no mattress and had to sleep on the bare hessian camp bed, with a couple of newspapers between me and the hessian.

The 'staff of life' - bread - was my main intake, with meat now and again, and a few vegetables thrown in if I could get them. Mince meat with vegetables and rice made a very good stew and I could rely on this to keep me going for a couple of days. Of course, there was no refrigeration in those days and things had a way of 'going off' very quickly, especially in the summer months.

I was never a 'hot shot' cook and this became apparent on my first attempt to cook boiled rice, which I dearly loved. I placed a handful of rice in my billy can, with a quantity of water, stood it on the Primus and waited with baited breath for this culinary delight to manifest itself. It came to the boil, simmered, and the next thing over the top it came, and came, and splattered the Primus and table with what could only be described as a gooey mess.

The next time I travelled to Lithgow to see Joan, I asked her what I had done wrong. When she asked how much I had put in and I replied that I'd put in about a handful, she said, "Good heavens! Didn't you know that rice swells as it cooks?" Humbled, and with my head lowered, I replied, "No, but I will next time." From then on only a dessertspoon was added to my faithful billy can and I became quite an epicurean at the art of rice cooking!

I recall the time when I was returning from Lithgow and had to be at Eungai to commence duty at 11pm. For some reason, the train failed and left me stranded at Kempsey, about 30 miles short of my destination. I contacted the afternoon officer at Eungai (I think it was Bill Varlow) and explained the situation. There was no way to continue the trip by any other train, so I hired a taxi cab in an effort to get to work on time. The driver was as-pleased-as-Punch to get this well-paid trip and asked me if I minded if he picked up his girlfriend for company. I replied, "Be my guest and, as long as I get to work on time, I couldn't care less."

It was an expensive trip but I ended up only being half an hour late. Bill said that he was quite prepared to do a double shift and for me to repay him later. I thanked him, but replied that I hated being late for work and would repay him the 30 minutes when he required it.

It was only a four or five week stay at Eungai. This suited me fine as I never got to like those weeks, especially the camping in the 'freeze box' of a hut. Another factor in my desire to get away was the lack of a tennis court in which to while away the leisure hours. It had already dawned on me that being on relief staff was a lonely life, where friends
In the early 1950s, No.11 North Coast Mail ran six days per week, terminating at Murwillumbah, some 581 miles and 23 hours after leaving Sydney. The train was commonly hauled over the various sections between Broadmeadow and Casino by 35 class engines as shown in this scene. The down North Coast Mail, with a horsebox, nine cars, and a louvre van bringing up the rear, approaches Coffs Harbour after a long overnight trip from Sydney.

were made and then had to be left on departure. Most relief officers agreed that it was only the extra money from the Expense Account that kept them going.

When advice was received from the office that I was required to report to John’s River, my first action was to grab the phone and inquire from the day work officer at John’s River as to what accommodation was available. He sounded a little sceptical as to why I wanted to know, but replied that the only place was an on-site caravan for the sole use of relief officers.

To me this sounded wonderful after my stay in the ‘ice box’ and, without further ado, I packed up all the doings and hit the track by the first passenger train south.

Classleader 3501 assists train engine 5229 with a north-bound goods at Nambucca in September 1958. The diesel-electrics were working most of the important trains on the 'Coast by this time and, by 1959, this line was advertised publically as being 'dieselised'; although pockets of steam remained.

Fred Saxon
On Good Friday, 27 March 1959, 3527 arrives at Hornsby station with No.97 Wyong passenger, which had departed Sydney at 1.42pm. Normally a 32 class roster, on this day 3527 was one of several 35 class engines from Broadmeadow depot working Easter holiday traffic between Sydney and Newcastle. Noteworthy items are the old overbridge, the old road bridge beyond it, the Tulloch power car heading the North Shore suburban service standing in No.1 platform, the old coin-operated scales on No.2-3 platform, the FJ carriage immediately behind 3527's tender and the, then-common Globite case held by the gentleman at extreme right.

All photographs by the author unless otherwise noted.

Above Right: Steam and smoke hang in the air as 3814 stamps impatiently up Cowan bank at the head of No.24 Newcastle express, tabled to pass through Hawkesbury River station at 8.59am. On Saturday, 21 November 1959, the morning Flyer is wasting no time on its non-stop run between Newcastle and Strathfield. The fireman is toiling with the shovel and the driver has 3814 moving at quite a pace on the 1 in 40 grade as they succeed in maintaining the exacting timetable. This was spectacular enginemanship to witness.

Left: On loan to Hornsby from its home depot, Eveleigh, tank engine 3105 is photographed from a passing train, as it shunts the western side of Hornsby yards on Saturday, 12 December 1959. Here 3105 is moving an S truck laden with locomotive coal, brought to Hornsby earlier by a pick-up goods. The coal truck will be shunted to Hornsby loco on the eastern side of the yards. Behind 3105 can be seen the retail businesses of the time, including Somerville's produce store at right of picture.
HORNSBY TO HAWKESBURY RIVER

Ian Wallace

Along with the Pacific Highway, the main northern railway line between Hornsby and Cowan follows the top of the high ridge that forms the divide between the valleys of Berowra Creek to the west and Cowan Creek to the east. This is essentially dissected sandstone country with steep hill slopes, and the easiest route between Hornsby and Cowan definitely follows the ridge line. Both Berowra Creek and Cowan Creek flow northward into the Hawkesbury River and both are tidal in their middle and lower reaches.

The section of the Great Northern Railway line between Strathfield and Hornsby, 14 miles 13 chains long, was opened for traffic on 17 September 1886, although the official opening was not until the following day. This was initially a single line, duplication finally reaching Hornsby on 7 March 1892. It is reported that, at the time of opening in 1886, Hornsby was a manned station but no platform or station buildings existed. Hornsby was the temporary terminus of the line until the extension was opened to Hawkesbury River. The original Hornsby station, when built, had a single brick-faced platform on the down side of the line, with a brick station building which still exists on Hornsby's No.4 platform, though substantial extensions have been provided. The brick station-master's residence, located near the present taxi stand on the western side of the line, was demolished in the 1970s to make way for a car park.

The remainder of Amos and Company's contract, the single line section between Hornsby and Hawkesbury River, was opened for traffic on 7 April 1887, a length of 14 miles 74 chains with a short spur of 36 chains to the River Wharf.

The nine miles northward from the site of the present Asquith station follow the location of the old Peats Ferry Road. Just north of Cowan station the line and road part company and follow separate routes from the ridge top down to the Hawkesbury River. The steeply graded section of railway line between Cowan and Hawkesbury River, approximately 5 miles long, is commonly known as Cowan bank and by some as the 'River bank'. Since the opening of the line in 1887, this bank, with grades as steep as 1 in 39, has provided a severe test for
locomotives and enginemen. Even today, with electric traction, we hear regular reports of up goods trains stalling on Cowan bank or experiencing excessively slow trips.

Reaching the southern bank of the Hawkesbury River, the line curves out on to a causeway carrying it across the narrow back channel to Long Island. Here the steep, massive sandstone necessitated a tunnel being driven to convey the line through the island before entering the half-mile long bridge over the main channel of the Hawkesbury River. Before the completion of this major bridge in 1889, the rails ended temporarily at the water’s edge, just beyond the northern portal of the original Long Island tunnel. The main line station of Hawkesbury River was established at the southern end of the causeway, over the mudflats of the mainland, while a second station was provided at River Wharf at the eastern end of Long Island, to be used for the transfer of passengers during the construction of the bridge. There were two platforms here, each brick-faced and 264 ft long. The passenger platform was the more easterly of the two, while the western platform was for goods intended for the river steamers. Locomotive accommodation befitting a terminus was provided, including siding, ash pit, coal stage, water column and a 50 ft turntable.

The small township at this general locality is commonly called Brooklyn. The school there was opened as Peats Ferry in 1871, the name being changed...
On Saturday, 14 March 1959, 4-6-4 side tank locomotive 3133 simmers quietly outside the northern end of the two road engine shed at Hornsby loco, the elevated water tank towering over the depot. At the extreme left of picture, parts of the sand house can be seen. It was common to see up to four 30 class tank engines at Hornsby depot in the mid-to-late 1950s. These engines were employed on the local “Cowan Squirt” and the water train.

to Brooklyn in December 1888. The railway station was originally opened as Hawkesbury River on 4 July 1887, the name was changed to Brooklyn in 1888, back to Hawkesbury River on 1 May 1889, to Hawkesbury on 1 January 1890 and finally, back again to its present name, Hawkesbury River, on 21 October 1906. Hawkesbury River railway station is only eleven feet above sea level.

The following account covers some of my recollections from travelling by train and photographing on the Short North between Hornsby and Gosford, focusing on the section of line between Hornsby and Hawkesbury River. Most of my travels by train over this line were in the period from the late 1940s to the mid 1960s. My parents owned a small holiday cottage at Saratoga on Brisbane Water, accessed via Woy Woy or Gosford. From time to time, mainly during public and school holidays, we would travel there by train to Woy Woy and small ferry to Saratoga or by train to Gosford and bus to Saratoga. We caught a suburban electric train from our home suburb of Eastwood to Hornsby, where we alighted to wait for the steam train that would take us to Woy Woy or Gosford. From the earliest time that I can recall, when I was a young boy of about 5 in 1950, until we regularly travelled by car in the mid 1960s, I can remember waiting at Hornsby station, always at the northern end of No. 4 platform, for our steam train to arrive. From there, I could look back down the platform and watch the train’s arrival. The train would first come into view about half a mile south of Hornsby, as it rounded the curve on the steep climb from Normanhurst. It was always interesting to see what type of engine was at the front. In the early days I distinguished three types of engine on country passenger trains. There were the small engines with the tall funnel that typically worked the all-stations stopping trains. Then there were the larger, more ‘rounded’ engines with a short-to-medium-sized funnel and the even larger engines with virtually no funnel at all. I subsequently found out that these were, respectively, the 32, 36 and 38 class engines. I suspect that, at that age, I did not distinguish between 32 class and Standard Goods engines. It was clear to me, though, that these engines with tall funnels and a tender were quite different from the smaller tank engines, which appeared to have an even taller funnel, that worked the local
passenger trains to Cowan. These were the 30 class tank engines that frequented Hornsby at that time. Their squeaky whistles were also a distinctive feature. It was interesting to watch the uniformed station officer change the metal destination indicators by reaching up with a hook and bringing into view with a metallic ‘clang’ a yellow painted sign with Brisbane, Newcastle or some other destination, painted in black. Other signs had different messages such as ‘Booked seat passengers only’ and these were hooked onto the bottom of the destination signs.

We regularly travelled north early on Friday afternoons when there were several trains from which to choose. The first of these was usually No.17 Brisbane Express via Wallangarra, which departed Sydney at 1.35pm and Hornsby at 2.19pm. It did not, as a rule, convey passengers to Gosford, its first stopping point after Hornsby. At peak holiday times, several extra trains were run. I remember that, more often than not, the trains on which we travelled were already crowded by the time they reached Hornsby. So crowded were many that there was not even standing room on them and we often had to give a particular train a miss and wait for the next one. On one particular day, the crowd waiting on No.4 platform at Hornsby station was very large and was not being reduced significantly even after the passage of several northbound trains. When the next train arrived, it filled almost immediately. At the front of the train was an empty, locked sleeping car which was being conveyed north for return working. After conversing with the station-master, the guard opened up the sleeping car ‘for women and children accompanied by adults only’, provided they promised not to get the car dirty. Being with my mother, I qualified and we enjoyed the treat of travelling in this rather luxurious compartment with quaint wash basin which we were requested not to use.

The ‘dog-box’ side-loading express lavatory cars were commonly attached to the front or rear of car sets to build up the seating capacity of the train. We hated them and tried to avoid them whenever possible. Sometimes there was no choice and we had to travel in the dreaded ‘dog-box’. The main problem was the lack of privacy in very crowded compartments, with passengers sitting shoulder-to-shoulder facing each other and sometimes with additional standing passengers. The design of the carriage compartments was such that if someone wanted to use the W.C., the unfortunate person sitting on the seat in front of the door to the W.C. had to move. I suspect that many a person avoided using the W.C., unless it was absolutely necessary, as doing so was very much a public event.

If we were able to get on a train, sometimes we had to stand in the corridor of the American suburban cars or even stand on the end platform. In those days, ladies were generally given a seat by a man or a child, though I remember several times when my mother had to stand. Almost always I had to give up my seat to an ‘older person’. I quite enjoyed standing out on the end platform but you certainly needed to hold on, particularly on the faster stretches where speeds well in excess of 60 miles per hour were common. I loved such bursts of speed. Of course this was always a good way to get very dirty, particularly as I was usually standing on a platform of the first or second carriage, close to the engine and the smoke. It also made travelling through some of the tunnels more than a little interesting. Sometimes the hot smoke-filled air in the larger tunnels was really oppressive. I can remember seemingly endless journeys through Long Island, Mullet Creek and Woy Woy tunnels which were very unpleasant.
The last in its class, 5620 arrives at Hornsby station with No.251 pick-up goods on Monday, 1 February 1960. It has just completed the steep climb, some of it at 1 in 40, from Normanhurst. The old station master's residence can be seen at right. The water column used for locomotives on up trains can be seen behind the youth at left of picture. Note the luggage and parcels trolley at extreme right of picture. Engine 5620 had an interesting career, being the last Standard Goods locomotive to enter service, in March 1925. It was converted to an oil burner in November 1946 and converted back to coal burning in February 1956. Along with several other members of its class it was allocated to Harden depot in the mid 1950s. It was withdrawn from service in July 1960 and scrapped three months later.

for passengers inside the carriages, let alone those standing on the end platforms. Strictly speaking, we should not have been standing outside the carriage in this way, as signs affixed to the carriage warned that riding on the end platforms was prohibited. It seemed that a blind eye was turned by officialdom in peak holiday times when vast crowds had to be moved.

When I was a young lad, in the late 1940s and early 1950s, Hornsby was at the end of the electrified suburban network and was regarded as the northern end of the Sydney suburban area. Stations Asquith and beyond were regarded as the country. Certainly, north of Hornsby was mainly bushland and this bush was commonly engulfed in fire in the bush-fire season during summer. There were several bad fires in the Hornsby-Asquith area around this time. I remember, one Sunday evening in the early 1950s as we were returning home after a weekend at Saratoga, seeing the night aglow in the distance approaching Mt Colah. The bush to the west of the railway line was well alight and seemed eerie as we raced past in our train hauled by a 32 class engine, the side of the carriages 'lit up' by the
glow of the fire.

On a return journey to Hornsby from Gosford or Woy Woy it was always interesting for me to look out the window of the carriage as we approached Hawkesbury River station to see if we were to receive an assistant engine up Cowan bank. In peak holiday times it was common for trains to be just under a full load for the engine at the front so that some trains, at least, particularly the specials, would not require assistance. Nevertheless, there were many trains which were over the specified load for an unassisted engine, and a bank engine was attached at Hawkesbury River for the ascent of Cowan bank. In my experience, this assistance was invariably provided by a Standard Goods engine though, in earlier days, the 30 class tank locomotives from Hornsby depot were used as assistant engines for passenger trains. I always liked having an assistant engine and, if possible, looking out of the window on curves to see the two engines 'hard at it' on the steep climb. After much leaning out of windows, I invariably ended up with a dirty face and with my hair full of cinders from the smoke. Later on that night, after I had taken a bath to get my face
and hair clean, my parents used to chip me about leaving a dark grey ring around the bath.

At the end of holiday periods, while climbing Cowan bank we always gained some satisfaction from looking across at the Sydney-bound traffic on the Pacific Highway, often bumper-to-bumper. Having experienced many times the agonies of such stop-start motoring as a car passenger, I always felt thankful that we were making forward progress, even though it may have been in a crowded, smoke-filled carriage. It was not hard to endure and it would all be over soon.

Ascending Cowan bank, Boronia No.4 and No.3 tunnels were on a 1 in 40 grade on curved track and were taken slowly, but they were relatively short in length. Boronia No.2 and No.1 tunnels were longer but were on easier grades, 1 in 55 and 1 in 50 respectively, and it seemed that they were not quite as difficult for the engine or engines. They were both straight bores, No.2 tunnel being about half a mile long in the 1 in 55, just after the 1 in 40. It was common to hear the beat of the engine quicken going through No.2 tunnel, but I remember it was generally the most oppressive of the four tunnels, due to its length. Once Cowan was reached, the drama was over and it was generally a fast run along the ridge top to Hornsby. It was as if a sense of relief was experienced by both the engine and its crew, and it was common for some high speeds to be attained between Cowan and Hornsby.

It is interesting to look back on those days in the 1950s and early 1960s and consider the many facets
In the late 1950s, No. 17 down Brisbane Express via Wallan-garra departed Sydney on Mondays and Fridays only. Here, on Monday, 31 August 1959, during school holidays, 3535 arrives at No.4 platform of Hornsby station with No.17 express. The old station buildings can be seen on right of photo.

of life that were then considered normal occurrences. Included in this were the numerous fishermen, nearly always with a cane fishing basket, who caught the early morning northbound passenger trains on Saturdays and Sundays to do a spot of fishing in the Hawkesbury River, Cowan Creek or Berowra Creek. Some travelled as far north as Woy Woy. I remember seeing such fishermen many times, travelling on No.37 Newcastle passenger which departed Sydney at 6.35am on Saturdays.

At Hawkesbury River station there were the oyster sellers, each carrying a large cane basket containing long cylindrical bottles of fresh Hawkesbury River oysters. They would walk along the length of a train standing in the station calling out a message aimed at enticing passengers to purchase one or more of the bottles of oysters. Well I remember one particular gentleman who, with a deep sonorous voice, would call out “Fresh bottled oyster, fresh bottled oyster ...”, giving particular emphasis to the ‘er’ in the word oyster. If it took longer than normal to attach the bank engine to Sydney-bound trains or for the engine to be serviced, so much the better for their sales. These oyster sellers must have been successful because they were regularly there, over many years, particularly for certain trains at weekends and peak holiday times when passenger traffic was heavy. They added character to Hawkesbury River station. The fish and chip shop at Brooklyn, immediately opposite the overhead bridge at Hawkesbury River railway station, provided welcome sustenance for many a traveller and railway enthusiast over the years. Speaking of rail fans, Cowan bank was a mecca for the, then, relatively small number of dedicated photographers and observers, keen to witness and capture on film the often dramatic action that took place in steam days.

Just to the north of Hornsby station, on the eastern side of Hornsby yards was a small locomotive depot. Hornsby was originally depot No.38 in the depot numbering system introduced by the Railways in the early years of this century but, in the 1950s, it became an out-depot of Enfield. It was common to find several 30 class tank engines, one or more 32 class and several Standard Goods engines on a visit to Hornsby depot in those days. My first visit to Hornsby loco was in 1957 with a small group of school friends. I distinctly remember 5151, 5165 and 5333 being present in loco and at least four
The last, through steam-hauled, down Brisbane Express via Wallan-garra (No.17) was, fittingly, worked by an old, low-framed 32 class locomotive between Sydney and Broadmeadow. Here, on Friday, 22 January 1960, Dubbo engine 3235 is seen near Mount Kuring-gai running along the ridge top between Hornsby and Cowan with No.17, having just passed through a shower of rain further south. After a recent sojourn in Eveleigh workshops, 3235 is working its way back to Dubbo via Werris Creek and Binnaway. F. C. Saxon

30 class tank engines also being there. From memory I think they were 3074, 3084, 3094 and 3121. That day was the first time I entered the cab of an engine in steam, namely 5165 which still had a small tender. I held a fond regard for 5165 for many years after that. It was common at Hornsby depot to see one or more 32 class engines which were used on passenger services to Gosford. It was also common for the fitters and other maintenance staff at Hornsby to be conducting minor repairs on engines sent there from Eveleigh or Enfield depots. On several occasions I observed a 19 class engine from Eveleigh placed over the drop pit at the northern end of Hornsby loco undergoing minor repairs. One or more rail motors and trailers, used on passenger services between Hornsby and Cowan, could often be seen at Hornsby, as could the rail pay bus, which was usually placed on one of the roads radiating from the 60ft turntable behind No.1 platform at Hornsby station.

In the 1950s, a feature of the lineside scenery between Asquith and Cowan was the number of tents erected as makeshift homes beside the tracks. These housed the many fettlers and other railway-

On the afternoon of Wednesday, 14 January 1959, Broadmeadow-based 5395 is doing bank engine duty as it assists train engine 3290 on an up passenger service from Gosford. The location is low on Cowan bank, near the 35 mile post. At the time, the overhead electric wiring was not yet complete between Cowan and Hawkesbury River. On 12 April 1959, 46 class electric locomotives replaced the Standard Goods steam locomotives on Cowan bank engine duty.
Engine 3209 was stationed at Eveleigh depot between 1950 and 1956. Here, still sporting its original low frame with curved footplate front, 3209 arrives at Mount Colah station with a down passenger train composed of FL, six-car American suburban set and two side-loading “dog box” cars, circa 1953. Due to its wide island platform, Mount Colah station was an ideal locality to photograph trains on a simulated single-line operation.

Late H.V. Palmer

Goulburn engine 5609 assists Enfield engine 5461 on a north-bound goods train, here photographed near Mount Kuring-gai on Friday, 22 January 1960, just before the end of regular steam haulage between Sydney and Gosford.

F.C. Saxon
At the head of the seven-car air-conditioned HUB set composing the up morning Newcastle Flyer, 3824 in lined green livery with black smokebox and cylinders, races through Mount Colah on its fast run to Sydney. Of interest are the facilities used by fettlers at the time, the primitive equipment shed, the lineside water tank and tent dwelling. Such tents were common between Asquith and Cowan and elsewhere in NSW, up until the 1960s, providing homes for railwaymen and their families. Circa 1954.

Below Right: Taken from No.36 up Newcastle passenger hauled by 3503, this photograph shows 3281 at the head of No.51 Gosford passenger, as both trains pass through Mount Colah. No.51, which departed Sydney at 4.05pm, was typically worked by a Hornsby crew on the roster Sydney-Gosford-Hornsby-Gosford, before they spent the night in barracks at Gosford and returned with the train next morning to Hornsby. No.36 was allowed additional time to stop at Hawkesbury River bridge and between Hawkesbury River and Cowan to pick up Departmental workmen. Of interest at right of photo are the facilities and dwelling used by a railway family. The lineside water tanks were topped up by the regular water train that ran between Hornsby and Cowan. The fruit tree, the garden and the additions to the tent provide some additional home comforts. Wednesday, 20 January 1960.

men of various grades and, commonly, their families. According to Mr Vic Morris, formerly assistant station master at Asquith who, with his wife and two children, lived in such a tent at Asquith, there were between thirty and forty tents between Asquith and Cowan, housing railway employees. The greatest number of these tents was located between Asquith and Mount Colah stations. Many of these tent dwellings had an appearance of permanency, with vegetable and flower gardens, fruit trees and other niceties, along with the standard, lineside water tanks that were regularly filled by the weekly water train which ran from Hornsby to Cowan and return. Most of the tents at this time were, in fact, ‘permanent’, as there was no other affordable housing available for these railway employees. The housing situation was relieved in the late 1950s and early 1960s as many employees and their families moved into houses or flats, some of which were owned by the Railways.

I spoke recently with Mr and Mrs Morris, who told me that they moved into their tent home around 1952. Vic Morris had previously been assistant station master at Quipolly, near Werris Creek, for six months and swapped positions with the, then, ASM at Asquith station, Lou Ridd. Mr and Mrs Morris paid Lou Ridd seventy pounds to take over the sparsely furnished tent. This paid for the lining and
Above: Taken from the overbridge at Mount Colah, this photograph illustrates many features of railway life between Hornsby and Hawkesbury River in the early 1950s. Engine 3391 is seen making good time with No.67 Wyong passenger, conveying an RG car immediately behind the engine. These RG cars were used to convey racing greyhounds and their owners and trainers to race meetings on dog racing days. At left of photo, several tent homes used by railway employees can be seen, along with the many lineside water tanks that were regularly topped up by the water train. No fewer than ten of these tanks are visible.

Late H.V. Palmer
These old photographs, thought to have been taken around 1937 at Banyabba, on the North Coast line between Grafton and Casino, show both the exterior and the interior of a typical tent used by fettlers. These tents were used throughout the state to provide low cost accommodation for railwaymen of all grades. Often entire families lived in such tents. Cooking facilities were commonly provided by means of a lean-to or annexe with a fuel stove and chimney. Water was generally delivered to a lineside water tank by a pick-up goods or a special water train.

Fred Butler collection

The Morris family lived there for eighteen months, prior to moving into a house in Jersey Street, Asquith. They considered the accommodation was “quite comfortable - we even had a piano in there. We had an electric fridge and two radios, as well as a makeshift carport. We were ahead of the times! The tent's contents shook a lot when a train went past. At such times, we had to interrupt conversations and couldn't hear the radio, but it didn’t last for long. There were no problems with rain; the tent had a fly, but this had to be replaced every now and then as falling hot cin
ders from steam engines would burn pinholes in the canvas. The main worry was in strong wind, when the tent and fly flapped around."

Another hazard was that there was the occasional lineside discharge from the W.C.s of passing trains. This could be unpleasant! Not all the tents had as many refinements as the one just described. Some did not have electric power. When asked how they coped with hot summer days and nights, Colin Morris remarked that, on a hot night, he would lift up the flap on the side of the tent for some fresh, cool air. He recalls seeing the lights of the trains flash by while he was lying on his bed.

Vic Morris remembers well the time when a number of MRC refrigerator vans on the 'crack' express perishable freight train from the North Coast, No.300, were derailed near the Bridge Road overbridge between Asquith and Hornsby stations. "There was splintered timber from the MRCs all over the place and both the up and down lines were blocked while the breakdown crews cleared and re-

Above: Engine 5594 is photographed at Cowan from a passing car on the Pacific Highway. In the foreground is one of the many tent dwellings used by railway employees in this vicinity. Near the front buffer beam of 5594 can be seen the lineside water tanks that were topped up regularly by the water train. On this Monday, 4 September 1961, 5594 is working the water train. It is seen running around the train prior to returning, tender-first, with the train to Hornsby. Typically worked by a 30 class tank engine from Hornsby in earlier days, the water train was worked by a Standard Goods engine after the 30 class ceased to operate out of that depot.

Right: After a very rapid ascent of Cowan bank due to the assistance of bank engine 4632, train engine 3621 waits at Cowan station, at the head of No.60 Newcastle passenger, for the starting signal to clear. At left of photo, 4632, just detached, has run ahead into the up refuge. The simple crossovers for returning the bank engine to the down main line can be seen between 4632 and 3621. These crossovers were also used for passenger trains which terminated at Cowan. Saturday, 12 December 1959.
On a dull, drizzly Friday, 22 January 1960, the day before official electrification of the line between Sydney and Gosford, 5601 and 5239 battle with the grade on Cowan bank with an up goods train, photographed between No.1 tunnel and Cowan station. Most unusual is the Wampu tender on 5239.

F.C. Saxon

So displaced from express and other important passenger train workings were the 38 class engines in late 1959, that they could be found working the slow stopping passenger services to Gosford. Here streamlined 3804 drops down Cowan bank and is about to enter Boronia No.4 tunnel leading No.29 Gosford passenger, which departed Sydney at 12.06pm on Saturdays. This train returned from Gosford to Sydney as No.122 passenger on Sundays. Saturday, 21 November 1959.
Around midday on New Year's Eve, Thursday, 31 December 1959, electric locomotive 4620 assists Enfield engine 5270 on up goods train, passing beside the abandoned Boronia No.5 tunnel.

Boronia No.4 is a short tunnel, only 246 ft long on the 1 in 40 grade against up trains. It is also on an eleven chain radius curve. Here 3640, at the head of No.67 Wyong passenger, rushes out of No.4 tunnel on the morning of Saturday, 21 November 1959 as it descends Cowan bank.
At the head of No.112 passenger service, which departed Gosford at 10.05am, 3298 makes easy work of the eight-car LUB set as it passes the abandoned Boronia No.5 tunnel on Cowan bank on Thursday, 31 December 1959, New Year’s Eve. The car-set looks immaculate after a recent repaint.
stored the lines. While the breakdown operations were in progress, we had a 60 class Garratt arrive light-engine at Asquith station from the north. Maybe it was detached from a goods train at Hawkesbury River and they tried to run it through to Hornsby to assist with recovery operations. Whatever, it was held at Asquith station for the whole day and we had to help look after it. We had two long garden hoses from taps on each platform to try to keep up the water supply to the engine. It was touch and go for a while, as we were barely able to maintain the supply. We thought the fire in the engine may have to be dropped there and then.”

Eventually, the line was cleared and the Garratt proceeded to Hornsby to replenish its water tanks.

The working timetable applying from 1 December 1957 provided for No.289 Water Train to depart Hornsby at 10.40am on Mondays only, and to arrive at Cowan at 11.55am. This train then returned to Hornsby as No.298, timed to depart Cowan at 12.30pm and arrive at Hornsby at 1.30pm. The simple instruction ‘to be worked clear of all trains’ was issued for both workings. Mr Dave Love, a driver at Hornsby depot in the period 1950 to 1955, recalls working the water train on numerous occasions. In his experience it was always hauled by a 30 class tank engine, during daylight hours, with a typical load consisting of brake van, two ‘square’ water tanks and brake van. This observation was confirmed by the Morris family. In those days, Hornsby depot had three or more of these 30 class on loan to it for working the local passenger services between Hornsby and Cowan, generally hauling three or four American suburban cars. These services were known locally as the ‘Cowan Squirt’. His son Ray Love, who attended Asquith primary school, remembers that many of his classmates lived in the railway tents. He recalls ‘tribes of kids’

Right: After being held in the up refuge loop at Hawkesbury River to let No.20 Newcastle Flyer run through, No.642 goods climbs Cowan bank on the afternoon of Saturday, 21 November 1959. Bank engine 4634 and train engine 6041 are almost at walking pace as they pass the abandoned Boronia No.5 tunnel on the 1 in 40 grade. The smoke display from 6041 is spectacular but, unfortunately, casts a heavy shadow over engine and train.

Left: When photographing on Cowan bank in steam days, it was a delight to get a good display of smoke from the hard-working locomotive. Here, Beyer-Garratt 6032 has had the mechanical stoker working prior to its entering Boronia No.4 tunnel. With a full load of coal in BCH hoppers behind the coupler, 6032 needs the assistance of bank engine 4626 as both engines struggle to lift the tonnage in the afternoon of Saturday, 21 November 1959.
who lived in railway tents between Asquith and north of Mt Kuring-gai stations and who went to Asquith primary school in the late 1940s to mid 1950s. In his own class, seven or eight families who lived in the tents were represented. Most of the tents were erected very close to the main lines and the occupants would certainly have experienced considerable noise and the rush of wind created by speeding trains. The dangers of raising a young family so close to the main Northern railway line are emphasised in his recollection of a tragic accident which occurred near Mt Colah station. One morning, an announcement was made at the school that a young toddler, little more than a baby, from one of the railway tent families whose children attended Asquith primary school, had crawled out onto the railway line and had been run over and killed by the up morning Newcastle Flyer.

I spent many days photographing on Cowan bank, both in 1958 when the bank engines were Standard Goods locomotives, and in 1959 and early 1960 when the 46 class electrics provided the assistance. In common with most rail photographers, I always liked to photograph steam locomotives which appeared to be working hard, preferably throwing smoke high into the air. In an attempt to secure good smoke effects, my friends and I often wrote the word SMOKE boldly in white chalk on stanchions, water tanks or anything clearly visible to engine crews. Whether crews ever noticed these signs and whether they took the slightest notice of them I will never know. Sometimes we obtained spectacular smoke displays and sometimes there was no smoke at all, giving the appearance that the engine was having no difficulty. I suspect that the good smoke effects, when obtained, had much more to do with the fireman’s normal firing habits than to yielding to our suggestions. Not all smoke effects were beneficial to the photographer. It was common for thick smoke to cast a heavy shadow over the engine or train and even for such smoke to blow across and obscure the train. The 60 class Beyer-Garratts, with their mechanical stokers, were particularly good at throwing a thick plume of dark smoke high into the air, leaving no doubt that they were working hard to lift their heavy goods trains. Their sound effects were equally spectacular, with the exhaust from the two sets of driving wheels sometimes synchronised and sometimes clearly separate.

While photographing on Cowan bank, particularly lower down the bank on the 1 in 40 grades below Boronia No.4 tunnel, it was possible from some vantage points to see Hawkesbury River station, the causeway and, in the distance, parts of the foreshores around Mullet Creek. From such a location, the early morning Sydney-bound trains commonly provided a magnificent spectacle, particularly on cool, crisp mornings when the steam from the locomotives was accentuated. The sight of the up morning Newcastle Flyer and the up Cessnock Express was something to behold. In the distance, a trail of steam could often be seen as the express travelled briskly by the water’s edge, wind-
ing its way around the curves on the many spurs in the drowned river valley of Mullet Creek. The train would then go out of sight before it entered Mullet Creek tunnel. This would be followed by a distant roar as the train crossed the massive structure of Hawkesbury River bridge and then the train would emerge from Long Island tunnel. The sight of a 38 at the head of an air-conditioned HUB set, in the case of the Newcastle Express, or the steel NAB set of the Cessnock Express, as it ran down the grade of the causeway to Hawkesbury River station will linger long in my mind. These trains did not stop at Hawkesbury River and the driver usually had the 38 running at a fair turn of speed through the station. There would often be a whistle for the level crossing at Brooklyn, then both engine and crew really got stuck into it, though the fireman would have been labouring beforehand, preparing his fire for the assault on Cowan bank. Within a short time, the train would be upon you, the 38 working hard as the driver urged it on, the fireman often being hard at work feeding his hungry steed. It was common for the sound to linger for a while, as the 38's exhaust could be heard as it climbed further up the grade.

In my experience of bank engine working between Hawkesbury River and Cowan in the mid to late 1950s, there were usually two or three Standard Goods engines provided at Hawkesbury River for such purposes. Before the advent of the 60 class Beyer-Garratts and the 40 class diesel-electric locomotives in the early 1950s, goods traffic was gener-

Left: In mid-morning on Saturday, 22 November 1958, a down goods train hauled by two 40 class diesel-electric locomotives descends Cowan bank, giving the photographer a hard time as he tries to capture on film Standard Goods engine 5604 as it climbs up the hill with a construction train. During the morning, 5604's train, conveying concrete-mixing facilities, was employed in mixing and pouring concrete for the bases to stanchions, as part of the electrification works.

Above Right: An eight car LUB set and the 1 in 40 grade provide no serious challenge to 3804 as it climbs Cowan bank at the head of No.62 passenger, which departed Newcastle at 8.26am. There must have been a surplus of 38 class engines at Broadmeadow depot on the day, as the timetable and load would have been handled easily by a smaller engine. The track has been freshly ballasted and stanchions for the impending electrification are being erected. Large cable drums and steel stanchions unloaded beside the tracks can be seen at left near the fettlers' lineside water tank. Saturday, 22 November 1958.
Thirroul engine 5173 is one of three Standard Goods engines employed on banking duties between Hawkesbury River and Cowan on Saturday, 22 November 1958. Here 5173 assists train engine 5607 on an up goods train conveying sawn timber, poles and other forest products as well as mixed goods.
ally handled by the less powerful Standard Goods engines, which necessitated many trains due to the load limitations on Cowan bank. At such times, it is reported that up to six bank engines were employed in assisting up trains and that the train storage facilities of Hawkesbury River were severely tested. Between 1957 and 1959 I can remember there were generally two bank engines in periods of normal traffic. During the electrification works between Cowan and Hawkesbury River in late 1958-early 1959, there were commonly three or more engines at the 'River' as more passenger trains required assistance, should they be stopped on the grade. On one visit to Cowan bank on Saturday, 22 November 1958, I really hit the jackpot with a member of each of the 50, 53 and 55 classes employed on bank working. These were 5173 on loan from Thirroul depot as well as Enfield engines 5316 and 5610. The Standard Goods locomotives used as assistant engines on Cowan bank were generally Enfield-based, on loan to Hornsby sub-depot. Typically, these engines were run light engine from Hornsby to Hawkesbury River and spent approximately one week there before returning to Hornsby or Enfield for washout or other attention. There were basic engine-servicing facilities at the small 'loco' at

Left: Conveying a load that, normally, it could handle with ease up Cowan bank, 3634 is here assisted by bank engine 5173 while electrification construction work is progressing further up the bank. The train is No. 188 up passenger, which departed Newcastle at 10.50am. Saturday, 22 November 1958.

Above Right: After problems in the early 1950s, diesel-hauled goods trains requiring assistance up Cowan bank had the bank engine at the rear of the train. Here Enfield engine 5316 gives push-up assistance to relatively-new 4429 on Saturday, 22 November 1958.

Left: With brakes squealing and wheels groaning, 3805 leans into a sharp curve as it descends the 1 in 40 grade on the lower part of Cowan bank on Saturday, 22 November 1958. 3805, at the head of the seven-car HUB set comprising No. 71 down midday Newcastle Flyer, is running 'wrong road' due to electrification works further up the bank.
Hawkesbury River, including a massive timber-trestle coal stage, but no turntable. It is reported that engines fresh from overhaul in the workshops were sent to Hornsby and Hawkesbury River for 'running in' on bank work. This may have been the case, but I never witnessed it. I did observe the occasional Broadmeadow-based engine being used for banking duties.

I witnessed an interesting working early in the afternoon on Saturday, 21 June 1958. Standard Goods engine 5462 worked a pick-up goods train from the north into the up refuge loop at Hawkesbury River station. The engine was obscured from view from our vantage point about one mile up Cowan bank. We expected a Standard Goods bank engine to attach to the front of 5462 and the double-headed goods to proceed to Cowan. On this day engines 5159 and 5214 were at Hawkesbury River on banking duties. To our surprise, after a short time 5462, running light engine, emerged from the cutting and steamed on up the bank. At the same time, Beyer-Garratt 6001 had arrived at Hawkesbury River, light engine from the north. The Garratt coupled onto the goods train brought in by 5462 and hauled it, unassisted, up Cowan bank and, presumably, to Enfield. I understand such working was not uncommon.

The typical bank engine working between Hawkesbury River and Cowan in the mid to late 1950s had evolved over many years. All steam hauled passenger and goods trains which required assistance, with the exception of goods trains hauled by a 60 class Beyer-Garratt, had the bank engine, usually a Standard Goods locomotive, attached to the front of the train engine. Goods trains hauled by a 60 class Garratt or by one or two diesel-electric locomotives, were banked in the rear. It must have been unpleasant for the crew of the bank engine at the rear of a Garratt-hauled goods as the 60 class, with their mechanical stokers, could really pour out the smoke on Cowan bank. Maybe the considerate fireman gave the stoker a rest just before and during the tunnels.

There appeared to be some inconsistency over whether or not a passenger train received assistance at Hawkesbury River for the ascent of Cowan bank. I saw some train engines 'toughing it out', unassisted, with a near full load and I saw the same classes of engines, with lesser loads, assisted. It probably had a lot to do with bank engine availability and whether or not there was work being undertaken on the track which may require the train to slow down or to stop. In late 1958 and early 1959, when electrification works were in progress between Cowan and Hawkesbury River, it was common for many normally unassisted passenger trains to receive assistance in case the train was brought to a stand on the grade. Perhaps the best example of this was the up midday Newcastle Express which, generally, came through unassisted provided a clear road through Hawkesbury River could be arranged and there would be no need to stop on Cowan bank.
Bank engine 5316 is providing push-up assistance to a slow-moving, up goods train hauled by 4422 and 4409 on Saturday, 22 November 1958. The location is near the 35 mile post on the 1 in 40 grade, low down on Cowan bank.

Left: Bank engine 5316 returns tender-first from Cowan to Hawkesbury River, running “wrong road” due to electrification work on the up line. Saturday, 22 November 1958.

Right: Normally allowed a clear run through Hawkesbury River station and a fast unassisted ascent of Cowan bank, the up midday Flyer is here given assistance due to electrification works in progress further up the bank. Enfield engine 5610 assists streamlined 3802 at the head of No.20 Flyer on the afternoon of Saturday, 22 November 1958. Note the fibrolite pipe at right, used to convey water for locomotive purposes from a dam higher up the bank to tanks and columns at Hawkesbury River.
Engine 3811 is here captured making a spirited assault on Cowan bank with the up midday Newcastle Flyer on Saturday, 9 January 1959. The location is on the lower part of Cowan bank, below No.4 tunnel.
Above: Before the introduction of the 40 class diesel-electric locomotives in November 1951 and the 59 and 60 class steam locomotives in 1952, the overwhelming majority of goods services on the Short North were hauled by Standard Goods engines. Here, Enfield engine 5088, at the head of an up goods train, has taken water during its short stay at Hawkesbury River. Standing in the up refuge loop, 5088 is waiting for a 46 class assistant engine to be attached for the climb up Cowan bank on Saturday, 16 January 1960. Note the extensive sand deposits left by engines starting away from Hawkesbury River on the up main line, at left of picture.

Above Right: Bank engine 4636 and train engine 6040 struggle to lift an almost full load of coal and mixed goods away from Hawkesbury River and onto the 1 in 40 grade of Cowan bank on Saturday, 16 January 1960. Beyer-Garratt 6040 was the last steam locomotive introduced into service on the NSWGR, on 2 January 1957. Here the locomotives have just passed over the level crossing at Brooklyn, with the gatehouse at extreme left of picture. The elevated water tank, which held water for locomotive purposes, can be seen above 6040's rear bunker. The water was conveyed by fibrolite pipe, seen at extreme right of picture, from a dam further up the bank.

Right: Broadmeadow engine 3513 is receiving no assistance as it ascends Cowan bank at the head of a ten-car up passenger train on Saturday, 17 October 1959. It would appear that 3513 has no need of assistance, its safety valves lifting as if in contempt of the grade.

F.C. Saxon

However, when track work and electrification works were in progress, it was usual for the Flyer to be stopped at Hawkesbury River near the bank engine siding No.1, termed 'Siberia' by railwaymen, on the causeway between Long Island tunnel and Hawkesbury River railway station, for attachment of a bank engine. After the 46 class electric locomotives took over banking duties on Sunday, 12 April 1959, it was common for more trains than normal to receive assistance as it greatly speeded up the movement of traffic. I remember gaining a cab ride at Hawkesbury River on Saturday, 12 December 1959 in 3621 hauling No.60 passenger service, which had departed Newcastle at 1.56pm. Behind 3621 was an EHO van and an eight car LUB set. During the stop at Hawkesbury River, 4632 was attached to the front of 3621 for the bank ascent. The crew of 3621 found all this highly amusing. The driver remarked that, so powerful were the 46 class engines, all he and his mate had to do was to keep a reasonable amount of steam in 3621 and 'hang on' while the 46 lifted the whole lot up Cowan bank. I must admit it seemed like that too, as I experienced my fastest trip, to that date, up Cowan bank. So fast were we going around some curves, and so rough was the ride in 3621's cab, that I had difficulty taking a photo from the fireman’s side of the engine. By comparison, I can remember returning from
With the historical train to commemorate the official opening of electrification to Gosford standing on the down main line, the down midday Newcastle Flyer, hauled by 3807, passes slowly through Hawkesbury River on the down refuge loop. Immediately behind the last two carriages of the express are two 46 class electric locomotives used for assisting trains up Cowan bank. At extreme right of picture are the elevated water tank and the level crossing gates. Saturday, 23 January 1960.

Gosford on a Friday afternoon in 1959 behind 3602 hauling a ten car train, No.36 passenger from Newcastle. At Hawkesbury River no bank engine was attached and, in the ascent of Cowan bank, 3602 stopped on several occasions to pick up workmen. The crew displayed excellent enginemanship as, at each start on the grade, 3602 lifted the load and proceeded with minimal fuss.

A particularly poignant moment for me was standing beside the down refuge loop near Hawkesbury River station, in failing light, in the early evening of Saturday, 23 January 1960 to await, and then photograph, the last ‘regular’ steam-hauled Newcastle Flyers as they passed through. First to arrive was 3824 on No.83 down evening Flyer and it made a majestic sight which I shall long remember. We then awaited the arrival of No.154 up evening Flyer, timetabled to pass through Hawkesbury River at the rather precise time of 6.47½pm. We didn’t have too long to wait as, shortly, and in very poor light, 3809 came through with the up evening Flyer. I’m sure the driver of 3809 would have liked to build up more speed for the ascent of Cowan bank but, in deference to the crowd of people gathered beside the tracks, eased up a little until 3809 was through the station. Then, with a whistle for the level crossing and perhaps a tribute to the significance of the occasion, he opened the regulator on 3809 and stomped into the 1 in 40 grade with full relish. The slower-than-normal passage of these trains through Hawkesbury River was a blessing for the many photographers who were struggling with the poor light. These were the last timetabled through-worked steam-hauled Flyers and, subsequently, 3824 was one of five 38 class engines to be allotted to Broadmeadow depot for working the Newcastle Express, as well as other express, mail and fast passenger services, between Newcastle (or Broadmeadow) and Gosford. This became the first allocation of 38 class engines away from Eveleigh depot, although, also during January 1960, three 38s, excess to requirements at Eveleigh, were transferred to Lithgow for working mail and express trains. Also as a consequence of the northern electrification, ten dual-control ‘heavy’ 60 class Beyer-Garratt locomotives were transferred to Broadmeadow depot for goods working between Gosford and Broadmeadow. Hornsby locomotive depot was officially closed from Sunday, 24 January 1960.
In failing light the last regular down through steam-hauled Newcastle Flyer (No.83) passes through Hawkesbury River station, with 3824 hauling the seven-car air-conditioned HUB set. At the time, the down evening Flyer on Saturdays departed Sydney at 5.47pm and did not run to the very fast time scheduled for the 5.00pm Flyer on Mondays to Fridays. With one exception, after this day, Saturday, 23 January 1960, a 46 class electric locomotive would haul the train between Sydney and Gosford, there to be replaced by a 38 for the remainder of the journey to Newcastle.

It is almost too dark for photography as 3809 hauls the last regular through steam-hauled up Newcastle Flyer (No.154) through Hawkesbury River on Saturday, 23 January 1960. The right-hand marker light and cab step light on 3809, as well as the step lights on the HUB set and the signal lights glow in the failing light.
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- David Cooke, Railmotors and XPT’s, A.R.H.S., 1984.

Fred Saxon
Working at Sydney Railway Station
Part 2

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Ian Wallace
Hornsby To Hawkesbury River

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References

The publishers of Byways of Steam welcome additional information expanding or correcting details in the various essays.

Units of Measurement
Since the essays in this book deal with a period when the Imperial system of measurement was used in Australia, that system has been retained. As an aid to conversion for those who are so minded, the factors in the accompanying table may be used.

Furthermore:
A mile could be divided into 80 chains (ch) of 22 yards (66 feet) each.

At the date of currency conversion (14 February 1966)
£1 equalled $2. (There were twelve pence to the shilling and 20 shillings to the pound.) However, inflation both before and after this date makes conversion of monetary amounts meaningless unless various economic indicators, including inflation factors, are known.

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