Train Working on Eyre Peninsula in the 'Twenties, 'Sixties and 'Noughties

*The SAR Eyre Peninsula lines have always been isolated from the rest of the network, and as a result the Port Lincoln Division has developed a character all of its own. With the centenary of the first section of the Division coming up in 2007, **Peter Knife** showcases train working on the West Coast in three very different eras, from the early years right up to present day operations.*

The narrow gauge Port Lincoln Division has always been isolated from the rest of the national rail network, and is one of only three ex-Government networks which share this distinction and are still operating today: the others are the short Normanton–Croydon line in Queensland and the present-day Tasrail. It is interesting to note that the total of 700 route kilometres of the Port Lincoln Division still open is double that of Tasmania.

The geography of the coastline of South Australia encouraged settlement in coastal areas, with a thriving ketch and coastal steamer trade developing. Port Lincoln is much closer to Adelaide by sea than by road; this, together with the deplorable state of many of the early roads, meant that the railway network on Eyre Peninsula focussed on Port Lincoln and Thevenard as seaports. From 1907 until 1960 the railway timetable was arranged around the sailing times of the regular Port Adelaide–Port Lincoln ships, in particular the MV *Minnipa*. This dependence on shipping gave rise to the practice on Eyre Peninsula of referring to Adelaide as being on the 'mainland'.

The one traffic that provided the rationale for building the Port Lincoln lines was grain: the lines were constructed specifically to open up the inland areas of the Peninsula for agriculture. Prior to the coming of the railway it was not economical to grow wheat more than about 40 km from the coast. Grain haulage formed the primary traffic on the Division for most of its existence, and continues today with an average of somewhere around a million tonnes per year railed to Port Lincoln. The other major commodity hauled is gypsum, from the Lake MacDonnell deposits near Penong to the port at Thevenard. Gypsum was hauled by rail in the 1920s, and then from the late 1940s to the present day. This traffic now regularly exceeds a million tonnes per year.

In years past all manner of other traffics were handled. Passengers were catered for until 1968. Freight included the usual rural supplies, superphosphate, livestock and petroleum products. Salt was also
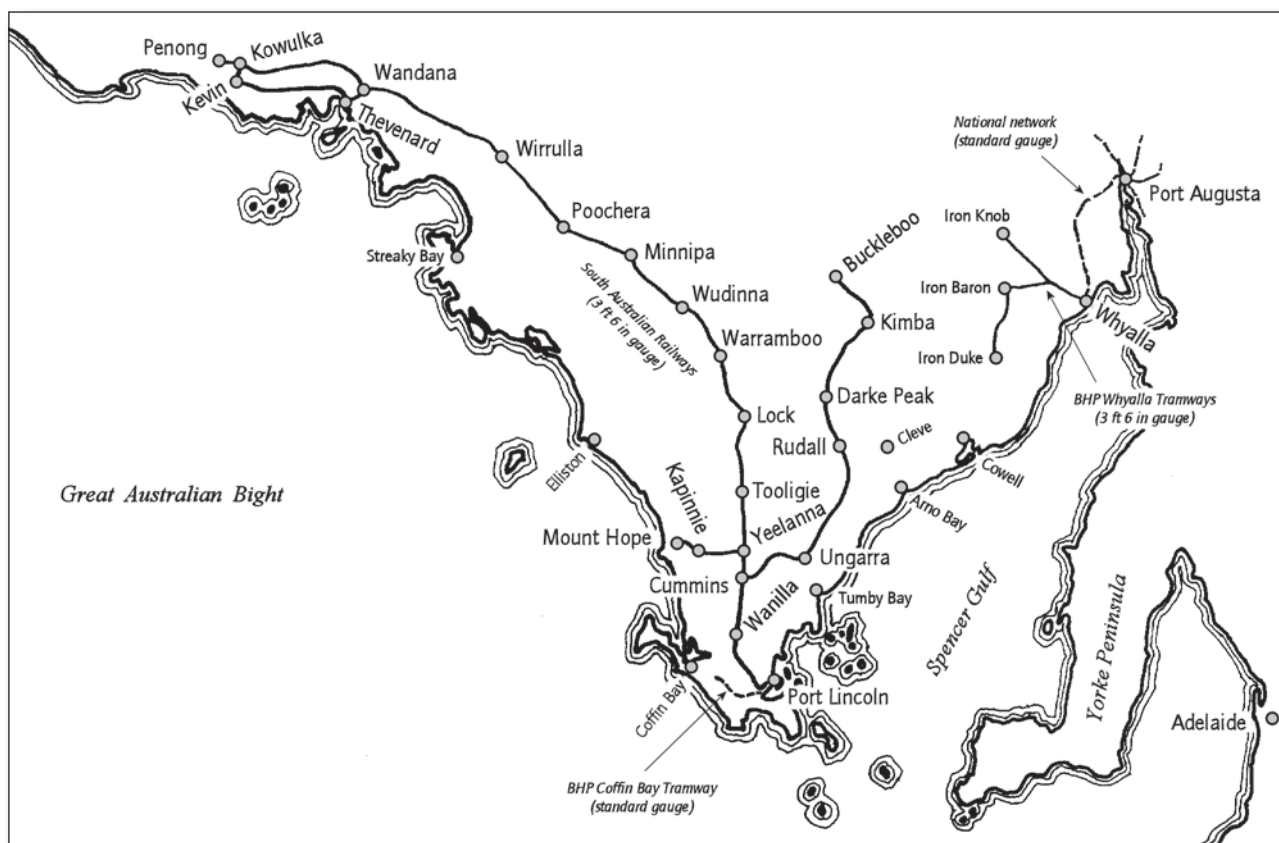
hauled from Lake MacDonnell to Thevenard. In the years before water pipelines stretched across the Peninsula, water trains kept many settlers supplied. The railway also carried the pipes for construction of the pipeline network.

This presentation looks at train working on the Port Lincoln lines in three periods, at forty year intervals. The decades chosen illustrate the three very different eras of train working and traffic mixes which have occurred on the Peninsula:

The 1920s:
- Steam-hauled mixed trains.
- Local communities totally dependent on the railway.
- Bagged grain hauled in four-wheel rollingstock.

The 1960s:
- Railcar-operated passenger services (cancelled during this period).
- Transition from steam to diesel freight services.
- Transition from bagged to bulk grain handling.
- Bogie and four-wheel goods rollingstock.

The 2000s:
- Diesel-hauled block trains hauling only bulk grain and gypsum.
- All-bogie fleet.
- Many locomotives and wagons from other non-SAR lines.

The 1920s

In this decade the Port Lincoln Division reached its maximum extent, with the opening of the Wandana–Penong and Kimba–Buckleboo lines in 1924 and 1926 respectively. All trains were steam hauled (railcars would take over passenger workings in the 1930s).

At the beginning of the decade most regular trains were run as mixed trains, supplemented by the odd regular freight. Many extra freight workings occurred in the grain haulage season which often extended almost to the following season due to the

increasing volume of wheat being shipped. The mixed trains provided an essential but very slow service: the Port Lincoln–Thevenard run took eleven hours to reach Minnipa (254 km), stayed overnight at Minnipa, then took almost nine hours to cover the remaining 180 km. To add insult to injury, the passengers were expected to arrange their own accommodation at Minnipa.

The Webb era on the South Australian Railways began in 1922. Webb was not known for any measure of enthusiasm for the narrow gauge lines, but his concern for the Railways' obligation to provide service to the community was significant. When the Thevenard mixed was brought to his attention, his reaction (reported in the *West Coast Recorder* of 10 Feb

1923) was that he 'ridicules the idea of it being necessary to take two days on the journey from Port Lincoln to Cape Thevenard'. Within months a weekly passenger train (the first such train timetabled on Eyre Peninsula) replaced the mixed. The new service also included a sleeping car (the only one on the Peninsula), and ran straight through to arrive at Thevenard in the small hours of the morning. As a further convenience for passengers, the train was positioned at the foot of the jetty

Below: A very early photo identified as being at Kimba, with a Y class shunting an arriving train. The temporary accommodation is probably for the construction of the Buckleboo extension. Photo: Eyre Peninsula Railway Preservation Society archives.

Regular Trains – 3 May 1920

		Mon Mixed	Wed Mixed	Thu Mixed	Thu Freight*	Thu Mixed
Train number		3	11	13	5	1
Port Lincoln	dep	7:00am	10:00am		8:00am	
Cummins	dep	10:30am	1:21pm		11:26pm	12:00md
Mount Hope	arr					2:38pm
Kimba	arr	7:33pm				
Minnipa	arr		8:59pm		6:45pm	
	dep			9:00am		
Thevenard	arr			5:46pm		

		Mon Freight	Tue Mixed	Fri Mixed	Fri Freight*	Fri Mixed	Sat Mixed
Train number		4	20	2	18	10	12
Thevenard	dep					8:00am	
Minnipa	arr					5:59pm	
	dep				8:00am		7:00am
Kimba	dep		7:00am				
Mount Hope	dep			12:00md			
Cummins	arr		3:52pm	2:45pm	3:30pm		
	dep	11:00am	4:12pm		3:55pm		2:32pm
Port Lincoln	arr	1:54pm	7:07pm		6:49pm		5:25pm

* No.5 Thu conveys passenger carriage, detached at Cummins for No.1 to Mount Hope. No.18 Fri attaches carriage at Cummins ex No.2 from Mount Hope.
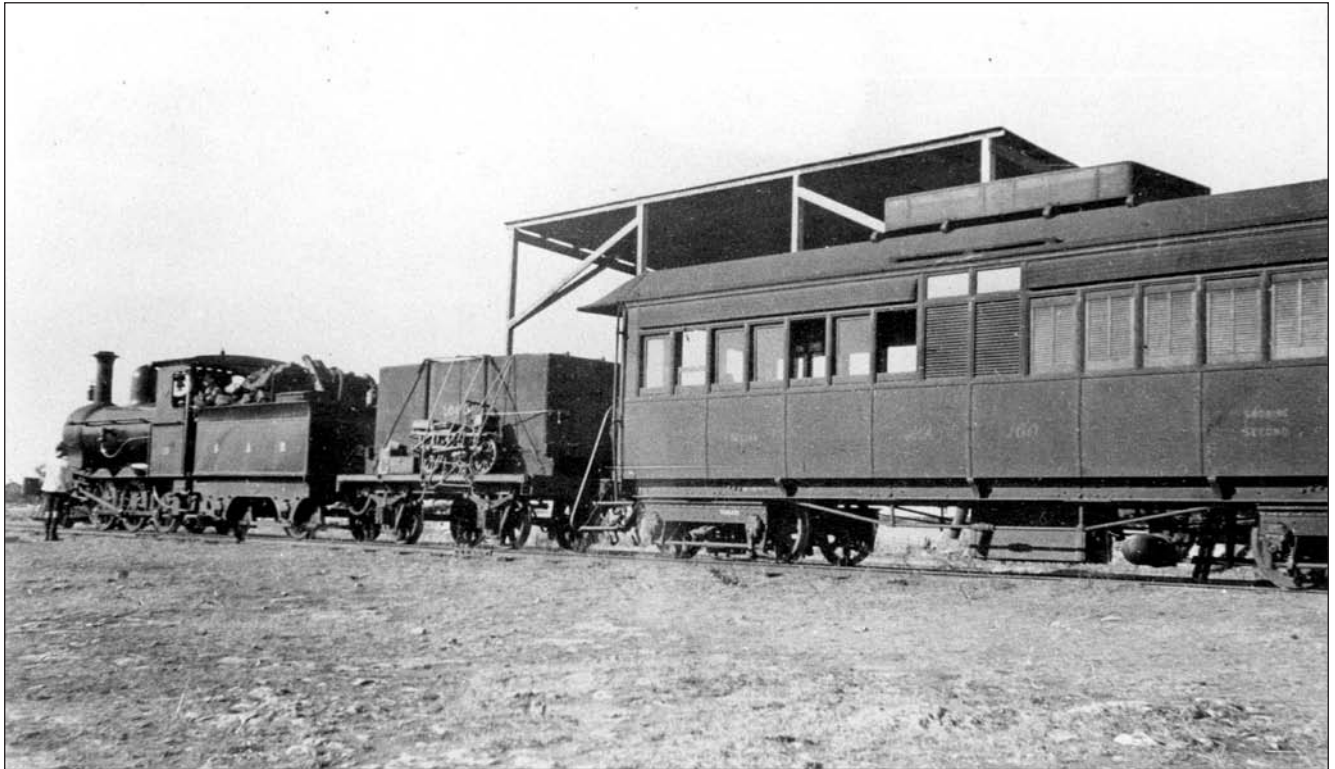
Above: W25 heads a train in the 1914-26 period. This may be the weekly passenger train, or possibly a mixed with no freight offering. Note the ever-present water tank behind the loco, and the ganger's trike strapped to the side of the tank. Photo: Kim Bird Collection, National Railway Museum Archives.

Regular Trains – 19 May 1930

		Mon Freight	Tue Pass	Tue Limited Mixed	Wed* Mixed	Wed Mixed	Thu Freight	Fri Limited Mixed	Fri Freight w/car	Fri Freight w/car
Train number		43	33	33	7	22	9	31	31	57
Port Lincoln	dep	3:15pm	11:00am				4:15am	10:30am		
Cummins	arr	6:46pm	1:09pm				7:43am	1:43pm		
	dep	7:18pm	1:24pm	1:30pm	8:00am		8:14am	2:06pm	2:15pm	
Mount Hope	arr				10:38am					
Minnipa	arr	3:57am	8:08pm				5:01pm	10:00pm		
	dep		8:48pm							11:00pm
Thevenard	arr		3:55am							7:40am
	dep					9:00am				
Penong	arr					1:29pm				
Kimba	arr			10:35pm					12:24am	
Buckleboo	arr			12:48am						

		Tue Freight	Wed* Mixed	Wed Mixed	Wed Limited Mixed	Thu Freight	Thu Mixed	Fri Pass	Sat Freight w/car	Sat Freight
Train number		60	32	34	34	26	55	12	24	42
Buckleboo	dep			4:10am						
Kimba	dep			6:56am					3:17am	
Penong	dep						6:00pm			
Thevenard	arr						10:38pm			
	dep	7:10pm						1:25am		
Minnipa	arr	4:56am						7:31am		
	dep				8:15am	1:00am		8:15am		10:15am
Mount Hope	dep		11:50am							
Cummins	arr		2:30pm	3:20pm	3:31pm	10:16am		2:39pm	1:28pm	7:11pm
	dep				3:58pm	11:00am		2:54pm		8:00pm
Port Lincoln	arr				6:00pm	2:18pm		4:56pm		11:18pm

* Runs fortnightly.

at Port Lincoln – a true 'boat train'. Interestingly, the train connected with was the SS *Wandana*, and the sleeping car was named *Wandana*.

In 1925 two Long Tom coaches with 'reclining seats' were transferred to Eyre Peninsula. In November that year a weekly Limited Mixed service was introduced. A combined train ran express from Port Lincoln to Cummins, then divided with sections going to Minnipa and to Kimba. A maximum of five sidings were shunted between Cummins and each of the terminii. The pattern was reversed for the return to Port Lincoln. The Working Timetable specified that a 'parlour car' was attached to the Kimba Limited Mixed – this would have been one of the Long Tom cars. The Limited Mixed services connected with the SS *Paringa*, providing a second weekly service to and from Adelaide.

The most famous ship on the Port Lincoln run came in 1927. She was the MV *Minnipa*, built specifically for this route. From then until 29 June 1960 (apart from time off for refits and repairs) she made two trips per week between Port Adelaide and Port Lincoln, calling at Tumby Bay on one of them. The SAR timetable was reworked in 1929 to match the *Minnipa's* sailings, and for the next thirty years the two were inextricably linked.

The locomotive and rollingstock fleet on Eyre Peninsula at the beginning of the 1920s was a virtual rolling museum of hand-me-downs, a pattern that has been repeated through the years. At that time the number of items built new for the Port Lincoln Division could be counted on one hand: two Short Tom coaches, one goods brake and an experimental internal combustion locomotive which was a failure and began the decade stored in disgrace in Port Lincoln roundhouse. A modernisation program for the open wagon fleet did occur during this decade, but not because of any sudden rush of concern for Eyre Peninsula. The Webb era saw amongst other things the re-equipping of much of the broad gauge fleet with bogie wagons. At the time a batch of 100 broad gauge Y wagons was under construction; Webb had them re-gauged and delivered to Port Lincoln. Over the next six years

a further 555 broad gauge Y and X wagons were converted to narrow gauge and sent to Port Lincoln where (as the YX, YY, YH and XX classes) they formed the backbone of the fleet until the late 1970s.

Gypsum and salt from Lake MacDonnell formed important new traffics in this decade. Prior to the opening of the Penong line in 1924, all production was carted to Port LeHunte at Point Sinclair. Storm damage to the already-decrepit jetty there encouraged the transfer of both commodities to rail. At first Penong was the transfer point, but in 1926 a five mile long aerial ropeway for the gypsum traffic was constructed from the gypsum fields to Kowulka siding, just east of Penong. This first

Below: T234 is rolling into Cummins on the 'Minnipa main' with an Up goods in 1965. The parallel 'Kimba main' is visible to the right of the loco; the two lines diverge at the north end of town. The train consists of YX wagons and a 31 ft 6 in passenger brake being used as a goods brake. Photo: Noel Potter, Kim Bird Collection, NRM Archives.

Above: Brill railcar 103 is hauling one of the Short Tom cars converted to full parcels trailers in this scene at Wudinna in the 1960s. Photo: V Castle, Kim Bird Collection, NRM Archives.

incarnation of the gypsum traffic however only lasted until 1930, as amalgamations in the industry resulted in the Lake MacDonnell workings being effectively shut down for nearly two decades.

The now-famous 'Dog Fence' stretches across South Australia, with its western end near Fowlers Bay, west of Penong, enclosing much of the developed area of the State. In the 1920s there were many predecessor fences enclosing local 'Vermin Districts', and the railways on Eyre Peninsula crossed these fence lines at ten locations. At each of these crossings gates were provided. Every train had to stop while the fireman opened the gates, then again while the guard closed them. Between Cockaleechie and Butler on the Kimba line there were three gates in twelve miles, hardly conducive to fast train running. Spare gates were provided at each location in case of 'accidents', and these were to be installed by the crew of the train before leaving the scene of a breakage. Eventually new dog fences were erected beyond the railway, and the last of the dog gates was removed in 1928.

The 1960s

This decade saw the final fling of passenger services on Eyre Peninsula. It was also the fourth decade of a very different passenger operation: almost all services were provided by railcars. The four Fageol road buses converted to railcars began their working lives on the Port Lincoln Division, although only one was still in service at the beginning of the 1960s. The majority of services were worked by three Brill Model 75 railcars, two with narrow gauge bodies and one rather wide former broad gauge car. A fourth narrow bodied Brill arrived at the beginning of 1961; the last Fageol made its last run in August that year.

While nominally 'passenger' workings, the railcar services also conveyed large quantities of parcels and fresh produce such as bread, cream and eggs. Almost all runs included a trailer or trailers, with up to three at a time in a wide variety of combinations. Vehicles used as trailers included the four small Fageol bogie trailers, a Brill Model 75 trailer stripped internally and converted for parcels use, several Short Tom cars converted to parcels trailers or composite goods brakes, a Long Tom passenger brake, a 31 ft 6 in passenger brake, and standard goods brakes.

The replacement of steam-hauled mixed and passenger trains with railcars had allowed a considerable speeding up of services. The lengthy Port Lincoln–Thevenard run became a 'same day' trip of around ten hours. The Yeelanna–Mount Hope line never saw scheduled railcar services; any passengers were accommodated in the composite goods brake on the weekly goods train. At the beginning of the 1960s the Wandana–Penong line had a similar service, but in 1961 railcars returned to this line with a weekly return run from Thevenard. There was also a single weekly 'mixed' train: the Friday Port Lincoln – Minnipa railcar connected with a goods train which included passenger accommodation, as well as two parcels trailers transferred from the arriving railcar. This train worked through to Thevenard, providing a second weekly service to that location. At the beginning of the decade the passenger accommodation was simply a composite goods brake, but in 1961 a Short Tom passenger car was added and the train became officially a mixed train. This restored a practice which had been in effect for much of the previous three decades; unfortunately it did not last long, and the carriage was dropped again from early 1964.

A feature of the railcar timetable was the Tuesday morning parade from Port Lincoln, following the arrival of the MV *Minnipa*. Services to Thevenard (express), Minnipa (all stations) and

Buckleboo all departed within an hour and a half. At the beginning of the decade the Buckleboo run was worked by the last Fageol, so one of its trailers was taken to Cummins by the Thevenard service and picked up there by the Buckleboo railcar. This was done so that the ageing Fageol did not have to struggle up the Northside Hill and Pearlah banks with two trailers.

In February 1966 the new Penong Junction (Ceduna)–Kevin 'direct' line opened, and the old line between Wandana and Kowulka closed. The Penong railcar was cancelled, with passenger accommodation on the diverted Penong service being confined to the composite goods brake on the weekly goods. As it arrived at

Above: Wide-bodied Brill railcar 487 is seen leaving Port Lincoln in January 1963, hauling the two ex-Short Tom parcels trailers. On the right can be seen one of the relay vans converted from Long Tom cars. Photo: Peter Bruce.

and departed from Penong in the wee small hours of the morning, it would not have been popular!

Passenger-Related Workings – 28 June 1964

		Tue Railcar	Tue Railcar	Tue Railcar	Wed Railcar	Thu Railcar	Fri Railcar	Fri Goods*	Fri Railcar
Train number		171	179	195	160/161	223	175	301	191
Port Lincoln	dep	10:30am	11:10am	12:00nn		1:45pm	10:45am		11:25am
Cummins	arr	12:09pm	12:44pm	1:32pm		3:24pm	12:24pm		1:08pm
	dep	12:21pm	12:56pm	1:44pm		3:34pm	12:36pm		1:22pm
Minnipa	arr	4:40pm		5:34pm		7:57pm	5:10pm		
	dep			5:40pm				5:30pm	
Thevenard	arr			10:05pm				2:35am	
	dep				10:00am				
Penong	arr				12:53pm				
Kimba	arr		5:29pm						5:54pm
Buckleboo	arr		6:44pm						
		Mon Railcar	Wed Railcar	Wed Railcar	Wed Railcar	Thu Railcar	Fri Railcar		Sat Railcar
Train number		110	136	116	212/213	76	158		94
Buckleboo	dep			7:15am					
Kimba	dep			8:30am					5:50am
Penong	dep				1:15pm				
Thevenard	arr				4:02pm				
	dep					4:25am			
Minnipa	arr					8:24am			
	dep	6:45am	8:15am			8:39am	9:45am		
Cummins	arr	10:47am	12:39pm	1:27pm		12:32pm	2:10pm		10:22pm
	dep	10:58am	12:54pm	1:40pm		12:44pm	2:18pm		10:28pm
Port Lincoln	arr	12:38pm	2:33pm	3:15pm		2:15pm	3:57pm		12:02pm

* Goods train with passenger accommodation in brakevan, conveys parcels trailers ex No.175.

Above: T48 on a grain train in the 1960s. Photo: J.G. Southwell, NRM Archives.

A major rearrangement of the passenger timetable took place in 1966, basically reducing the Minnipa workings and introducing twice-weekly railcar services to Thevenard. However the end was in sight, and all passenger services ceased after 30 August 1968.

The decade of the 1960s also saw the complete transition from steam to diesel motive power on the Port Lincoln Division. The first of nine 830 class diesel-electrics built for the Division arrived in 1962. The last steam locomotive dropped its fire for the last time on 10 April 1970, after two additional 830s were transferred to Port Lincoln following conversion of the Broken Hill line to standard gauge.

Another significant transition occurred in this decade: the changeover from bagged to bulk handling of grain. The first silos on Eyre Peninsula were constructed in 1958, and by 1970 twenty-five sidings had silos. Bulk grain shipping terminals were provided at Port Lincoln and Thevenard. The rollingstock fleet naturally had to adapt to the new requirements, and the 1920s ex-broad gauge YX, YY and XX wagons formed the bulk of the adapted bulk grain fleet (no pun intended). These wagons were cycled through Islington Workshops, overhauled, grainproofed and returned with yellow doors (introducing the first real splash of colour to an otherwise drab fleet). At the same time, the

transition from four-wheel to bogie goods rollingstock was beginning. Eighty-four ex-Commonwealth Land Transport Board wooden bogie open wagons (classes OCN and ODN) had been sent to Port Lincoln in 1956 after the Leigh Creek coal traffic shifted to the new standard gauge line. Many of these wagons were used for bagged grain, releasing the steel four-wheelers for grain-proofing, then from 1962 the OCNs received new grain-proofed

steel open wagon bodies and became the OGN class. Twenty bogie sheep vans were also rebuilt as grain-proofed OSN class open wagons. Towards the end of the 1960s dual-service ballast and grain hoppers joined the fleet (HN and HBN classes), followed soon after by the first of 68 aluminium-bodied HAN class bulk grain wagons.

Final Railcar Timetable – 2 January 1967

		Tue Railcar	Tue Railcar	Thu Railcar	Thu Railcar	Fri Railcar
Train number		171	179	171	179	171
Port Lincoln	dep	10:30am	11:10am	10:30am	11:10am	10:30am
Cummins	arr	12:09pm	12:44pm	12:09pm	12:44pm	12:09pm
	dep	12:24pm	12:56pm	12:24pm	12:56pm	12:21pm
Minnipa	arr	4:40pm		4:40pm		4:40pm
	dep	4:54pm				4:54pm
Thevenard	arr	9:19pm				9:19pm
	dep					
Kimba	arr		5:29pm		5:29pm	
Buckleboo	arr		6:44pm			

		Mon Railcar	Wed Railcar	Thu Railcar	Fri Railcar	Fri Railcar
Train number		92	116	92	92	116
Buckleboo	dep		7:15am			
Kimba	dep		8:30am			8:30am
Thevenard	arr					
	dep	4:25am		4:25am		
Minnipa	arr	8:27am		8:27am		
	dep	8:37am		8:37am	8:37am	
Cummins	arr	12:45pm	1:27pm	12:45pm	12:45pm	1:14pm
	dep	12:50pm	1:40pm	12:50pm	12:50pm	1:24pm
Port Lincoln	arr	2:31pm	3:15pm	2:31pm	2:31pm	2:59pm

Further colour was added to the fleet during the 1960s when red doors (indicating a higher level of grain-proofing) appeared. Port Lincoln adopted its own standard though, and from the late 1960s began painting grain-proofed open wagons in an all-over yellow scheme. These variations, along with the unpainted aluminium hoppers, brakevans painted variously green or red, relay vans and railcars in green and cream, and the 'mustard pot' 830s, resulted in a very colourful scene.

Freight trains in this decade reflected the change in the rollingstock fleet. Double-heading was still not the norm, as all rollingstock was still fitted with 'chopper' couplings (automatics would arrive after the conversion of the Broken Hill line to standard gauge in 1970). Grain and superphosphate still accounted for most of the traffic on the Division, although gypsum was making a significant resurgence after the 1930-1949 shutdown. The short branch line from Kowulka to the gypsum fields had opened in 1950, but by the early 1960s this traffic had grown to the extent that the new direct line from Ceduna to Kevin was justified. Gypsum and salt trains in this period primarily used the YX and YY class four-wheelers, although some of the ODN wooden bogie open wagons were used for a while.

The standard SAR bogie composite goods brake was common across all the

SAR's narrow gauge divisions, but in the 1960s those at Port Lincoln were noticeably different. The van goods space was extended to occupy the passenger compartment at one end, and the doors and windows at that end replaced with panelling. They were also painted green. To add to the variety, six CGN class brakevans were built for Port Lincoln in the late 1960s. These were essentially a narrower version of the broad gauge CGP vans, a variant of the 8300 type with a passenger compartment and end gangway at one end. These vans arrived in the same red colour as their broad gauge cousins. Interestingly, four of

Above: T210 is marshalling its train at Yeelanna for the run to Mount Hope on 27 May 1965. The Mount Hope line is seen diverging to the left. Photo: D. Worth, NRM Archives.

the 8300s did eventually run on Eyre Peninsula, arriving in 1982.

Relay working of trains is an arrangement where two crews travel

Below: 852 is on an Up roadside goods near McLachlan on 31 Aug 1970. The train includes a string of ancient X wagons, GCF, VFN, FRN, TOW and RN vehicles, and an almost-new CGN brakevan. Photo: Peter Knife.

with a train, alternating shifts until the train reaches its destination. A suitable vehicle with kitchen, dining, ablution and sleeping accommodation is included for the off-duty crew. Such working was generally associated with the Commonwealth Railways on the 'Trans' and 'Ghan' lines, but it was also used on Eyre Peninsula and was at its peak in the early 1960s. At this time four relay vans were in use: car 114, a twelve-wheel vehicle which had been built as a sitting car in 1900 and had a long and varied career at Port Lincoln, and three Long Tom cars which were rebuilt as relay vans in

the 1950s. In addition to crew living quarters, these vehicles had a guard's compartment for the on-duty guard. The weekly Buckleboo goods was a regular working, with two crews taking the train all the way from Port Lincoln to Buckleboo and return.

Modernisation was taking place, with the first significant numbers of locomotives and rollingstock built specifically for the Port Lincoln Division, but it was still an outpost of the old South Australian Railways.

Adding variety to the scene in the 1960s was BHP's Coffin Bay Tramway. This standard gauge heavy-

Above: 871 heads an empty gypsum train at Thevenard, ready for departure for Kevin, on 26 March 1980. The consist of YX and YY wagons was typical of these trains from 1950 until replaced by the ex-NAR hoppers in 1984. Photo: John Dennis.

Below: BHP's DE02 and DE01 shunt lime sands hoppers at the Proper Bay terminal at Port Lincoln on 31 August 1970. These two locomotives replaced DE08 in 1968; DE02 remained at Port Lincoln until 1993. Photo: John Dennis.

Above: NJ5 and another NJ shunt the 'new' silo siding at Kyancutta in the 1980s. The concrete silos (built 1965, extended 1969) and steel bins (built 1970) at this location are typical of those found at many Eyre Peninsula sidings.. Photo: Greg O'Brien.

Below: DA6, 872 and 850 accelerate away from a crew change at Lock with a Down empty grain on 19 February 2001. The disused goods shed is prominent in the foreground. To the left is one of the 1960s 'emergency storage' horizontal grain sheds, now connected over the tracks to the silo block hidden behind the goods shed. Photo: Peter Knife.

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haul operation was established in the mid-60s to haul lime sands from Coffin Bay to Port Lincoln. Despite heavy investment in infrastructure, other factors intervened and within a decade the operation was reduced to a care-and-maintenance basis. It did not survive to our next period of interest.

The 2000s

Seventy years of peaceful South Australian Railways existence on Eyre Peninsula came to an end with the ANR takeover in 1978. The closure of the North Australia Railway in 1976 and the Marree–Alice Springs narrow gauge line in 1980 both contributed to a surplus of relatively modern narrow gauge ex-CR bogie freight rollingstock. AN took the opportunity and initiated a mass migration of large numbers of these vehicles to Port Lincoln, finally completing the elimination of four-wheel rollingstock. The six NJ class diesels found a new home on Eyre Peninsula, where they were joined for a short time by three of the NT class.

Then in 1997 the various components of AN were sold off, and the Eyre Peninsula lines became part of the Australia Southern Railroad. ASR in turn was merged into the Australian Railroad Group in 2002. As a national entity with narrow gauge operations in Western Australia (the former WAGR network) and Whyalla (the BHP lines) as well as Port Lincoln, ARG have moved locomotives and rollingstock around between the networks to meet specific needs.

As a result of the changes since the 1970s, what was the Port Lincoln Division bears little resemblance nowadays to the 1960s snapshot described above. Only two commodities are now carried: grain and gypsum. The locomotive fleet consists of ex-SAR 830 class, ex-AN DA class rebuilds of 830s, ex-CR NJ class and ex-WAGR A class diesel-electrics. Two of the NJs have departed, one spending time at Whyalla before going to Western Australia, the other going straight to the West. The grain wagon fleet now includes ex-SAR, ex-CR and ex-WAGR grain and dual-service ballast/grain hoppers, and the gypsum fleet consists of ex-CR iron ore wagons. Some of the grain hoppers (the HCN class) were extensively rebuilt from iron ore wagons, while others (the ENHV class) were originally box vans.

For many years grain on Eyre Peninsula was railed to two ports: generally that from Minnipa westwards went to Thevenard, and grain from south of Minnipa went to Port Lincoln. However as grain ships grew in size, the channel depth at Thevenard severely limited the number of ships that could load there. Port Lincoln was upgraded to the State's first 'super port' in the 1970s and regularly loads ships up to 90,000 tonnes. It is common for vessels to take on partial loads at other South Australian ports, then move to Port Lincoln to 'top up' to full capacity. Most Eyre Peninsula grain now moves through Port Lincoln. The 1999-2000 season was the first in which all rail-hauled grain went to that port, and today grain trains run from Port Lincoln as far as Nunjikompita. Occasional trains still run right through to Thevenard, but the situation is reversed: they load grain at the port of Thevenard and convey it to Port Lincoln!

The last train to Penong ran on 3 March 1997, and the Kevin – Penong section has effectively been closed as it has been surrendered to the State by ARG. The Yeelanna–Kapinnie line is in a 'services suspended' state; it last

Below: DA7, 865 and 873 roll an empty grain train near Yantanabie, bound for Nunjikompita, on 11 June 2004. The train is a typically mixed consist of HAN, HBN, HCN and EHNG hoppers. Note the water pipeline which parallels the railway for hundreds of kilometres. Photo: Greg O'Brien.

saw a train in October 2002 and is unlikely ever to be resurrected.

Grain services now are very seasonal, running from the start of harvest (usually November/ December) until all silos are cleared to Port Lincoln. Depending on the size of the harvest, this may be as early as March, but in recent years operations have continued to September and even right up to the next season.

The general pattern sees trains of 45-60 wagons leave Port Lincoln hauled by three or four locos. A third of the load is dropped at each of two sidings, and the train terminates at a third siding where the locomotives assist with loading. The train then returns, attaching the now-loaded hoppers at the other two sidings (where rubber-tyred tractors are used for shunting). Locomotive consists may be any combination of the 830, DA, NJ and A classes, although more recently the four remaining NJs tend to be assigned to the gypsum workings and the two A class have been commonly working as a pair, replacing three 830s/DAs.

In 2003 Ausbulk (now ABB Grain) introduced the first of their Mobile Fast Rail Loaders, nicknamed 'scud launchers'. These are high-capacity grain loading devices mounted on road wheels, and can be hauled by a conventional prime mover between sites. They connect to docking mechanisms in the side of modified concrete grain silos, and can load rail wagons at 1000 tonnes per hour instead of the usual 200 tonnes per hour of most country silos. With this arrangement, a full Eyre Peninsula train can be loaded in a couple of hours. Operationally, this means that the train runs as a unit train to one location, eliminating the shunting at intermediate sidings. This technique can only be used with concrete silos, as steel bins must be emptied symmetrically to avoid collapse.

Salt traffic from Kevin to Thevenard ceased in the 1980s when AN ran

Above: NJ3, 851 and 1601 approaching Ceduna on 14 May 2005 with the second of three daily loads of gypsum from Kevin. 851 has spent all of its forty-three years on Eyre Peninsula. 1601 (ex NJ1) has been renumbered in line with ARG's nationwide fleet plan. Photo: Greg O'Brien.

Below: One of the new Mobile Fast Rail Loaders in action. This photo is at a broad or standard gauge site, but the loaders are identical and are transferred as needed by road between sites. Interestingly ten of the AHGX hoppers (as seen in this view) ran on the narrow gauge Port Lincoln Division from 1992 to 2001. Photo: Courtesy ABB Grain Ltd.

out of open wagons that were not rusted through. Gypsum traffic has continued as the ideal commodity for rail, with over a million tonnes hauled each year. It is now operated virtually as a pipeline: one set of locomotives and wagons makes three return trips each day, five or six days a week, year round. A balloon loop at Thevenard and a triangle at Kevin mean that there is no shunting involved, just a highly efficient continuous process. The train is made up of ENH and ENHA wagons which were modified from former North Australia Railway iron ore hoppers (NH and NHA classes). Normally three locomotives and around 60 wagons are used, with the locomotives in any combination of 830, DA and NJ classes, although lately the NJs have been predominant.

Something for (almost) everyone

Modellers contemplating building an SAR layout or an Australian narrow gauge layout will find plenty of inspiration in the Port Lincoln Division. Its isolation from the national network has resulted in subtle differences and has engendered a special character to the trains and their operations. Even now, changes are still occurring and more surprises may be around the corner: as this article was being prepared a $30 million track rehabilitation project was about to be undertaken.

It is hoped that these snapshots of the Division at forty-year intervals have illustrated the changing nature of the Division over the years, and that a modeller or two might be encouraged to re-create scenes from a truly unique corner of the SAR and its successors.

Above: Quad working on the West Coast. NJ3, 871, NJ1 and NJ4 depart Port Lincoln on 8 January 2002 with a lengthy empty grain train. Behind the leading mixed rake of HAN, HCN, ENHV and ENHG hoppers are eight ex-WAGR XNW hoppers. HN and HBN hoppers are also visible in the consist, making it representative of every class of grain hopper at Port Lincoln. Photo: John Dennis.

Below: 851, 842 and DA4 lead an Up grain train through Ungarra on 9 April 2003. The consist exhibits a similar mixture to the view above. Photo: Richard Montgomery.

Above: The ARG era is illustrated by this view at Port Lincoln on 26 December 2004. 1203 (ex-WAGR A1513), Peninsula veteran 851 and rebuild 903 (formerly DA4) are all in ARG corporate colours. Photo: Peter Knife

Below: This Train Order from 4 January 1963 authorises T209 at Darke Peak on no. 262 up goods to proceed to Rudall, cross Brill railcar 105 (train no. 191), then proceed to Wharminda, reporting en route at Kiepla and Verran.

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Locomotives by Class and Year

This table shows the total number of locomotives in each class 'on register' on the Port Lincoln Division at 31 December each year in the periods discussed. This includes all locomotives known to be present; not all may have been trafficable.

Year	W	V	Wx	U	Y	Yx	T	830	NJ	DA	A	Total
The 1920s												
1920	3	1	6	3	4	-	-	-	-	-	-	18
1921	3	1	6	3	5	-	-	-	-	-	-	19
1922	3	1	6	3	7	-	-	-	-	-	-	21
1923	3	1	6	3	9	2	-	-	-	-	-	24
1924	3	1	6	2	12	2	1	-	-	-	-	27
1925	3	1	6	2	12	6	4	-	-	-	-	34
1926	3	1	6	2	12	10	4	-	-	-	-	38
1927	3	1	6	2	12	18	4	-	-	-	-	46
1928	3	1	6	2	12	18	5	-	-	-	-	47
1929	-	1	-	-	8	18	6	-	-	-	-	33
1930	-	1	-	-	8	18	6	-	-	-	-	33
The 1960s												
1960	-	-	-	-	-	6	19	-	-	-	-	25
1961	-	-	-	-	-	6	21	-	-	-	-	27
1962	-	-	-	-	-	6	19	2	-	-	-	27
1963	-	-	-	-	-	-	18	6	-	-	-	24
1964	-	-	-	-	-	-	16	6	-	-	-	22
1965	-	-	-	-	-	-	16	6	-	-	-	22
1966	-	-	-	-	-	-	16	9	-	-	-	25
1967	-	-	-	-	-	-	16	9	-	-	-	25
1968	-	-	-	-	-	-	16	9	-	-	-	25
1969	-	-	-	-	-	-	6	9	-	-	-	15
1970	-	-	-	-	-	-	-	11	-	-	-	11
The 2000s												
2000	-	-	-	-	-	-	-	8	6	3	-	17
2001	-	-	-	-	-	-	-	8	6	3	-	17
2002	-	-	-	-	-	-	-	8	6	3	-	17
2003	-	-	-	-	-	-	-	9	4	3	-	16
2004	-	-	-	-	-	-	-	9	4	3	2	18

Brakevan and Passenger Stock

Type	1920	1930	1960	1970	2005
4w goods brake ('blue brake')	4	18	-	-	-
4w passenger brake	4	4	-	-	-
Composite goods brake	2	6	9	10	-
Passenger brake (31 ft 6 in)	1	1	2	2	-
Passenger brake (50 ft)	-	1	1	-	-
Composite goods brake (ex 'Short Tom' car)	-	3	2	1	-
Passenger brake (ex 'Short Tom' car)	-	-	2	-	-
Steel composite goods brake ('Dolly Varden')	-	-	1	1	-
Steel composite goods brake (CGN class)	-	-	-	6	-
Relay vans	-	-	4	2	-
31 ft 6 in passenger car ('Short Tom')	5	4	4	2	-
42 ft passenger car	-	1	-	-	-
50 ft passenger car ('Long Tom')	-	2	-	-	-
31 ft 6 in sleeping/observation car	1	1	-	-	-

Freight Rolling Stock Fleet

This listing shows only 'revenue' classes, and excludes service stock. Some totals are best guesses based on known data. Many vehicles, and some classes, came and went in the intervening years and hence do not appear: only those present in the nominated years are shown.

Type	Capacity (tons)	Classes	1920	1930	1960	1970	2005
4w wooden open wagon, flat and water tank	6-8	C, CC, CF, E, F	342	295	44	–	–
		E	150	76	–	–	–
		CX	–	–	53	–	–
4w wooden open wagon	12	X, Y	45	45	22	82	–
6w wooden open wagon/water tank/flat	10	D	12	12	1	–	–
Bogie wooden open wagon	22	Q	1	1	1	–	–
	23	OCN, ODN	–	–	75	–	–
4w steel open wagon	16	XX, YX, YY	–	605	545	545	–
	16	YH	–	50	34	34	–
Bogie steel open wagon	26-27	OGN, OSN	–	–	–	74	–
4w flat wagon	16	XF	–	–	12	12	–
	8	FM	–	–	34	–	–
	16	YF	–	–	27	25	–
Bogie flat wagon	23	FNC, FRN	–	–	8	37	–
4w wooden box van	6	A	1	1	–	–	–
4w louvre van	6	V	9	9	19	–	–
	10	VFN	–	–	–	8	–
4w insulated van	10	PP	–	10	10	–	–
	13.5	RN	–	–	11	11	–
4w cattle van	7 beasts	K	12	14	–	–	–
	8 beasts	QX	–	–	15	–	–
	9 beasts	CFN	–	–	16	5	–
4w sheep van	100 sheep	M, MM	24	26	–	–	–
	100 sheep	SFN	–	–	59	59	–
Bogie sheep van	200 sheep	SN	–	–	20	–	–
4w horse box	3 horses	OJ	1	1	–	–	–
6w water tank	3000 gal		8	8	8	16	–
Bogie ballast & grain hopper	25-34	HN, HBN	–	–	–	23	17
Bogie grain hopper	32-36	HAN	–	–	–	68	65
		HCN	–	–	–	–	40
		ENHG	–	–	–	–	8
		ENHV	–	–	–	–	30
		XNW	–	–	–	–	40
Bogie gypsum hopper	29	ENH, ENHA	–	–	–	–	68
TOTALS		4 wheel	584	1132	901	781	–
		6 wheel	20	20	9	16	–
		Bogie	1	1	103	202	268
		All types	605	1153	1013	997	268

Right: A loaded gypsum train rolls past Moule siding in May 2005. The train is a solid consist of ENH and ENHA hoppers. The locos and wagons on this train normally make three round trips a day from Thevenard to Kevin, uncoupling only when the locos or an errant wagon require attention. Photo: Greg O'Brien.