Prototype Operations for a Small Layout | Westgate

From an early age I was fascinated by trains shunting. Living in western Queensland during the 50's and 60's, the train was the only way in and out of town for most people.

As a kid sitting on the fence watching I had no idea what was going on, the engine was pulling and pushing wagons, wagons were rolling down the track with a Shunter chasing it to apply the hand brake, or they would just slammed into the next wagon in the siding. At times, there would be three sets of wagons all rolling at the same time. So it is no surprise then I got a model train set, shunting was high on the "to do" list. My current layout is small by some standards, a circle of track with two stations with room to add a third one day. Having been to a number of operations sessions on larger layouts with a dozen or so blokes in attendance, the question was how was I going to put operations on my layout? I was looking for something that didn't put guys off with heaps of paper work, yet it was the real thing. I was looking for something I could do myself or with a couple of mates. Plus, it could give non rail guys an insight into how things were done. It was to be something that did not take all day, I wanted something to do if you had an hour or so.

How did the Railways Operate. A few years back, most railways were a common carrier, they were expected to carry most things to most locations on the network. Movement of goods and freight was managed in two ways. Wagon loads and less than wagon loads, the less than wagon loads on some systems was refer to as "less than car loads", (LCL) traffic. LCL traffic is mainly handled through the goods shed or common loading area in the station yard. Each day some stations would allocated wagons for traffic. As much as possible box wagons were used, cranky/ruff or long and bully loading was loaded into open wagons. Many stations have customers who loaded full wagon loads. Generally, wagons going to and coming from private sidings were full wagon loads.

How did that Work? Customers with freight to send would make contact their local station and order a wagon. The station (Station Master/Goods Clerk) would evaluate the freight and select a suitable wagon. As much as possible, wagons on hand were used. This may have be a wagon that had arrived loaded and was unloaded the previous day. Each day all stations completed an 8 am wagon report. All wagons in the yard at 8 am were summaries. This was generally completed by the Lad Porter/Number Taker who would ride the station bike and record the status of all wagons in all sidings. Telegraph Codes were used to summarise the wagons

Code	Phrase	Code	Phrase
DEMO	Tarpaulins on hand	**ELMO**	Required for tomorrow
EBER	Empty gods trucks required	**EDIX**	Livestock in transit
EBON	Loaded goods truck inwards	**DYAK**	Empty stock trucks on hand.
ECCE	Loaded goods trucks outwards	**eden**	Expect released today
edep	Goods truck Departmental Load	**EDOX**	Goods trucks in transit.

His report was sent to Head Office which included wagons required to fill orders. From reports from other stations, head office would fill the orders. A suitable shunt would then convey the wagons to the stations. The wagons were placed so the customers could load their freight.

Paper Work. Back in the good old days before computer, there was a paper trail and documents that travelled with the freight. The customer would complete at consignment note. This showed who was sending the freight, what it was, how heavy, who was receiving the goods at the other end and who was paying the freight charges. At small stations this document was handed to the Station Master, larger yards to the Goods Shed Clerk. Freight charges were worked out and the details entered onto an invoice. The invoice travelled with the goods to it destination with the Guard. The invoice details were shown in the "Rollingstock Book" to show the wagon was booked out with a reference. Auditor would check to ensure everything was in order (no freebies). From the invoice, wagon labels were written up and place on each end of the wagon. Number Takers and Shunter referred to the label to get the wagon on the correct train to its destination. Once a train was made up, a "Train Wire" or "Train List" is written up and handed to the Guard with the invoices.

Wagon Orders.

QUEENSLAND RAILWAYS

TUESDAY 13TH MARCH 1984. MAYNE YARD ORDERS. GENERAL MANAGERS OFFICE.

YELLOW BANDED WR/SR/QR TO BANYO. ORDINARY WR/SR FOR GENERAL LOADING. CO/CLO FOR MOOLABIN & ACACIA RIDGE CLEAR FIRST TRAIN. EMPTY HWO TO ACACIA RGE EMPTY VJMG TO MURGON AFTER ORDERS. OTHER GRAIN WAGONS TO TOOWOOMBA AFTER ORDERS. WH CLASS WITHOUT TARP SUPPORTS USE FOR GENERAL LOADING. WH CLASS WITH TARP SUPPORTS TO TOOWOOMBA AFTER ORDERS, ALL EMPTY BOX & RED SPOT FLATS TO ROMA ST AFTER ORDERS. ALL EMPTY GC CONTAINERS TO CLAPHAM. ALL EMPTY VC CONTAINERS TO ROMA ST FOR LOADING. S WAGONS TO LOWMEAD AFTER ORDERS. ARRANGE CLEARANCE FIRST TRAIN OF ALL PB/FJB LOADED OR EMPTY IN SUNSHINE/MONKLAND TRAFFIC. EMPTY WAGONS MUST NOT BE USED AS COVER FOR EMPTY HOPPERS NORTH WITHOUT AUTHORITY.

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7483 Tues	Attach Woombye QLX ety Nambour Nambour 1M (must be M)
7491 Tues	Gympie BRM41652 QRC2039 ety ex CMR Shed Pomona 1MS OB1 Monkland ex P'ba 7026 OB9, OB98 Monkland ex P'ba 7026 OPA031, OHE3 Gympie ex P'ba 7026 OV14 Monkland ex Cannon Hill 7F08 (2nd trip)
7495 Wed	Caboolture 1M class Attach Narangba 8FJS, 1QFC ety return South
8F03 Wed	Beaudesert 1ALY ety ex Newstead 7F16 Salt for B'desert remain Mayne Yd for 8F06 Wed
7F02 Wed	Rocklea 1M(must be M), 2QLX, 5FJS Coorparoo 1QLX G.M.H. All M class after orders.
7506 Wed	Wacol 5FJS, HJS, MS, 2QLX
7103 Wed	Albion 1QLX
7101 Wed	Massey Ferg 2FJS Woodlands PB31067, 31065 ex Monkland 7462 Tues.
6313 Wed	Rockhampton 20K, 9K Benaraby, 12K Berajondo. Lifts Oakhurst 1K R'ton, Rockhampton 1K ex Oakey (ex 6667)
7105 Wed	Strathpine 1M Sunshine Timber Ind. 7S ex 7396 (to go on lead of train) Zillmere 1H Red Spot, 1H class ,2QLX
7107 Wed	Northgate Cement Shpp 2FJS
7510 Wed	Toogoolawah 1MTW
7243 Wed	Cairns PB30977 ex Sunshine 7934 Mt Isa ALY33757 ex Landsborough (arr. 7468)(plants)
8F06 Wed	Beaudesert salt

CONVEYANCE OF LIVESTOCK

Consignee	Order	Station From	Station To	Transit
TODAY FRIDAY, 30 APRIL 1993				
Shep & Boyd	4K	Euri	Churchill	C086/8F67
CCT	1/2K	Emerald	do.	do.
ON SATURDAY, 1 MAY 1993				
AMH	1K 10KWA	Moura	Beaudesert	C096/8U98
CCT	4K 1KWA	do.	Cannon Hill	C096/8F66
Elders	10K	do.	Maryborough West	C096
Dalgety	2KWA	Biloela	do.	do.
Robertson	1/2K	Capella	Beaudesert	C082/8U82
AMH	15KWA	Clermont	do.	do.
Teys	3K	Bohle	Holmview	C082/8F67
Teys	2K 1KWA	Blackwater	do.	do.
Teys	2K 1KWA	Capella	do.	do.
Teys	3K 1KWA	Clermont	do.	do.
Teys	4K	Comet	do.	do.
Teys	3K 1KL	Emerald	do.	do.
AMH	7 1/2K	Winton	Beaudesert	C082/8U82
CCT	1 1/2K 7KWA	Cramsie	Cannon Hill	C084/8F69
CCT	1/2K 1/2PSC	Jericho	do.	do.
CCT	1/2K	Cramsie	Churchill	C084/8F68
Shep & Boyd	2K	Capella	do.	do.
Clermont	2KWA	do.	do.	do.
Clermont	3K	Clermont	do.	do.
Dalgety	2K	Emerald	do.	do.
Bertec	1/2K	Intaburra	do.	do.
Morex	2KWA	Zamia	Maryborough West	C084
Meramist	1/2K	Dulbydilla	Wacol	6041

Working Time Tables. The back pagers of the Working Time Tables details the work each train will do district by district. In some cases, how trains are to be marshalled. Train Notices were also issued for trains with special loading or for loading that did not fit on Time Tabled trains, for example Ballast/Livestock/Seasonal Fruit, Cane, Sugar, Wheat etc. Or restriction on travel for loading outside the loading gauge.

Types of

MARSHALLING OF 6678

This train must as far as practicable be restricted to a maximum of 75 units and will convey loading for stations Toowoomba and beyond to and including Roma, and non-perishable loading for stations beyond Roma, and also loading for stations south of Toowoomba. It will also convey contract wagons account Hile Transport for Toowoomba, Dalby and Warwick. Any Dalby Contract Wagons will go forward from Toowoomba not later than 7D78 Tuesdays to Fridays and 6R12 Saturdays. Any Warwick contract wagons will go forward from Toowoomba 7E44 the next morning.

The Dalby contract and/or parcel wagons will be marshalled at the rear of the train. The Warwick contract wagons will be marshalled immediately behind the locomotive followed immediately by the Toowoomba contract wagon. Loading for station west of Toowoomba is to be marshalled in reverse station order as the train is admitted "head on" to the Toowoomba Station Yard.

Shunts:- Shunt Engines (Yard, Loco, Carriage, Station, Harbour). Local Shunt Trains (Suburban. Main Line)

Shunt Trains working on the main line were generally marshalled in "station order" with all loading for one station marshalled together.

Station Order is how stations fall on a given section of the network. Brisbane to Cairns, or Sydney to Melbourne. Sydney to Broken Hill etc.

In these sections stations will be different in various ways. Some could be a Crossing Stations with one small siding. Small towns will also have a crossing loop, plus a Goods Shed siding, a siding for loading cattle etc. The larger stations cold have engine shed, coal stage, goods shed, fuel depots and various private sidings. These stations were known as depots and have traincrews which work trains to the next depot station. Using the alphabet as section of track, the bold underline letters are depots. In the steam era, this could also mean a change of hauling locomotives is required.

A B C D E F G **H** I J K L M N O **P** Q R S T **U** V W X Y Z.
City Downs Bush Outback

Most networks have a stating location, Brisbane, Sydney, Melbourne etc, Thus for us its **"A"**

Using the same letters we can make up Time Tables or a marshalling order for our trains on the layout.

MAIN LINE — BRISBANE TO TOOWOOMBA—MONDAYS to FRIDAYS

Kilometres from Roma Street	Capacity of Crossing Loop (Includ. Loco.) In Metric Units	UP Stations		6602 Express Freight As req'd Tu. Wed. Th. Fri.	S602 Oil Siding Shunt Light Engine	9582 Empty Hoppers Mon. only	9562 Empty Hoppers Tues Wed. Thurs. Fri.	M614 Empty Rail Car As req'd	
				a.m.	a.m.	a.m.	a.m.	a.m.	. .
3.880		**Mayne Yard**	dep	**#1 06**	. .	. .	**From**	. .	. .
0.750		**Central—AS**	dep	**Via Exh**	. .	**Redbank**	**Fish.**	. .	. .
0.000		**Roma Street**	arr	. .	. .	**depart**	**Is.**	. .	. .
		Ditto—AS	dep	1 16	. .	**1 30p.m.**	. .	. .	. .
10.830		Corinda	arr	**1 29**	. .	. .	. .	. .	. .
		Ditto—AS	dep	**2 00**	. .	. .	12.16	. .	. .
37.890		Ipswich	arr	. .	. .	. .	. .	. .	. .
		Ditto—SA	dep	2 28	. .	1 47	1.47	**4 41**	. .
39.340		Thomas Street	..	. .	. .	. .	. .	. .	. .
40.570		Wulkuraka	arr	. .	. .	. .	. .	. .	. .
		Ditto—SA§	dep	2 33	. .	1 53	1.53	4 45	. .
43.140		Karrabin	..	. .	. .	. .	. .	. .	. .
47.750		Walloon—SA§	dep	. .	. .	2 00	2.00	. .	. .
51.960		Thagoona	..	. .	. .	. .	. .	. .	. .
54.387		Yarrowlea	arr	. .	. .	. .	. .	. .	. .
		Ditto—CTC††	dep	. .	. .	2 08	2 08	. .	. .
56.200		Rosewood	arr	. .	. .			. .	. .
		Ditto—SA	dep	2 48	. .	. .	. .	. .	. .
59.700		Lanefield	..	. .	. .	. .	. .	. .	. .
64.130		Calvert	..	. .	. .	. .	. .	. .	. .
69.220	135	Grandchester§	arr	**3 00**	. .	. .	. .	. .	. .
		Ditto—CTC	dep	**3 26**	. .	. .	. .	5 08	. .
76.390		Yarongmulu	arr	. .	. .	**Cont.**	**Cont.**	. .	. .
		Ditto—SA§§	dep	3 41	. .	**to**	**to**	5 20	. .
81.680		Laidley	arr	. .	. .	**Ebenezer**	**Ebenezer**	. .	. .
		Ditto—BS§	dep	3 48	. .	. .	. .	5 27	. .
87.660		Forest Hill	arr	. .	. .	. .	. .	. .	. .
		Ditto—BS§	dep	. .	. .	. .	. .	. .	. .
91.190		Lawes	..	. .	. .	. .	. .	. .	. .
96.410		Gatton	arr	. .	. .	. .	. .	. .	. .
		Ditto—BS§	dep	4.00	. .	. .	. .	5 40	. .
105.890		Grantham	arr	. .	. .	. .	. .	. .	. .
		Ditto—BS§	dep	. .	. .	. .	. .	. .	. .
114.520		**Helidon**	arr	. .	. .	. .	. .	**5 54**	. .
		Ditto—ES	dep	4 18	. .	. .	. .		. .
117.290		Q'ld Mines Dept	Sdg	. .	. .	. .	. .	. .	. .
117.660		Russell's Siding	..	. .	. .	. .	. .	. .	. .
121.990	135 T.P.	Lockyer	arr	**4 30**	. .	. .	. .	. .	. .
		Ditto—ES§§	dep	**4 40**	. .	. .	. .	. .	. .
131.460	140	Murphy's Ck.	arr	**4 57**	. .	. .	. .	. .	. .
		Ditto—ES§	dep	**M5 25**	. .	. .	. .	. .	. .

From Pinkenba

The letters can be replaced by towns/locations on your layout. Below is an example how the timetable works on a section of railway.

A B C D E F G **H** I J K L M N O **P** Q R S T **U** V W X Y Z.

8 UP Loading for stations **H** to **O** and pick up for stations to **P**

10 UP Loading for stations **P** to **Z**

12 UP Shunts stations **B** to **H**, detaches loading from "**A**" and picks up for stations to Z.

14 UP Loading from **H** and 8 & 12 UP. Shunts stations **I** to **P** **(**Diesel Era, 8 & 14 UP could be the same train)

16 UP Loading from **P** and Trains 10 & 14 UP. Shunts stations **Q** to **Z**

Trains 8 & 10 UP are not marshalled in any order. Whereas Trains 10, 12, & 14 UP will be marshalled in station order.

Up trains run in one direction while **Down** trains run in the other direction.

One of the hardest things for someone coming in to operate your layout is remembering station order. If station order is required, I add to the bottom of my instruction cards.

Prototype Operations for a Small Layout | Westgate

There are times when I enjoy just watching a train run through the scenery. Then there are times I like to shunt, it keep the old brain ticking. Having 45 years of railway operations under my belt, I came up with two different operational systems that could be used on a small layout. One was referring to the Working Time Table were a train is made up in station order. The second was working a shunt train to a station, detaching and placing wagons, and attached wagons as per orders.

Both system can very in the length of time required to complete. It what you feel like doing at the time. There is not right or wrong way to do a shunt. And that goes for the prototype also, as long as the train finishes up to what's require by the instructions. With the prototype if you didn't use your brain you used your feet and it took longer to do...

Both sessions can be done with one, two or three operators. It is something you can do on you own, or with mates. If there is two of you, one can drive the engine and the other works out the moves and shunts. If you have three, one drives the engine, *(Driver)*, one works out the moves and couple/uncouple wagons *(Guard)* and the other can sent the points *(Station Master).*

One thing you learn quickly is a Station Master don't tell a Guard how to shunt his train.

Operators like to know how well they did during a session. They often ask was that the lowest number of moves etc. To gauge performance I use a fast clock and a timetable, my answer is how did you go with the allocated time on the clock? Did you depart on time or late, how late were you getting back? The prototype worked to a Time Table with a set time to be at each station. Sometimes you didn't use all the allocated time, other times the shunt it took longer.

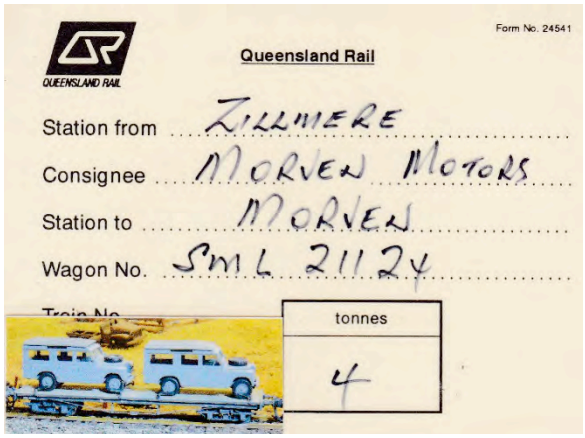
System #1.
The first session requires you to make up a train using wagons in various sidings within the yard, the train is required to leave in station order, plus there is marshalling restrictions on a couple of wagons due to their loads. Due to locomotive size, not all wagons can go on the train. All up there is 18 wagons in the plan, the train is restricted to 17. One needs to be left behind, thus someone must decide what's get left behind.

The instruction card was made up from a train in the South Westren Division Working Time Table. Going back to our example of station order, the station is **"H"**, we have loading off two trains for stations I J K L M N O **P** Q. My **"H"** is Toowoomba and the train is to convey loading for Roma, Amby, Mitchell, Morven, Charleville (**"P"**. The next depot station were the trains is timed to terminate) and Cunnamulla.

Roma **Amby** **Mitchell** **Morven** **Charleville** **Cunnamulla**

Roadside (Out Of's) is small consignment unloaded in route by Guard or Station Staff.

A card is made up for each wagon required for the train, the card is the wagon label which shows destination and other details. The other thing new operators find hard is to identify wagons, often instructions give wagon class and number. The instructions could show wagon XYZ 3234, what's that and where is it on the layout. I model QR and the wagon class and number is 3 inches on the prototype, less than 1 mm in H0. To assist with identification I add a photo to the card. Later I was able to obtain some QR wagon labels, these were filled out, photo added and laminated. A small shelf is located near the control panel which allows the operator to sort out the wagons into station order. From here you locate the wagons on the layout, and plan your moves for the shunt engine. To reduce the number of moves look for wagons that fall together (Mitchell/Morven). I generally start at the rear of the train and work towards the front.



After the train is made up, go for a run around the layout. After a few laps you can stated detaching from the train. The rear of the instruction card gives instructions on where wagons for each destination is to be placed. This could be achieved in various ways.

1. Admit train to loop and detach loading for Roma into 3 Road, Amby loading into 4 Road etc. Or you have more time.

2. Detach the loading into the allowed siding in station order after 4 or 5 laps of the layout. First detach Roma loading to 3 Road, after a few more laps. Second detach Amby loading to 4 Road etc. or

3. Using sample 2, add some attaches (pick- ups) could be added to the instructions. I.e. Morven detach to 4 Road, attach P 2345 for Charleville.

TRAIN NOTICE 2867

TRANSIT OF WAGON QFCA 34481 FROM ACACIA RIDGE TO CAIRNS.

The wagon above contains Wide Plate Steel which exceeds the maximum dimensions for loads as prescribed in Clause 67B of By-Law 1223. It is approved for this 'Out-of-Gauge" loading to go forward from Acacia Ridge to Bundaberg by C277 today Thursday 10 December, 1992 , and all concerned must closely watch the passing of this train.

The following Restrictions must be applied to ensure safe transit :-

1. Must not be loose shunted.
2. Load to be marshalled at least 20 units back from locomotives on through train ex Brisbane.
3. Loading must not pass other trains carrying wide out-of-gauge loads, similarly restricted, on close adjacent tracks.
4. Must not travel between Brunswick Street and Roma Street via Central.
5. Must not travel between Roma Street and Yeerongpilly via South Brisbane.
6. Loading must travel via Western Main Line between Chelmer and Indooroopilly.

Train Wires/List.

TRAIN MARSHALLING ORDER FROM REAR (CONFIRMED) ON DEPARTURE ACACIA RIDGE

TRAIN: S82P/6S82 EX ORIGIN: ACACIA RID DATE: MON 01/03/2010 17:30

METRES : 150.40 TONNES : 245.000 VEHICLES : 10

HAULING LOCOS:
1764D A

CLASS	NUMBER	FROM	DESTINATION	GROSS	LOADING	ST
QLCP	38516 (Q-LINK	ACACIA RG	CUNNAMULLA	30.000	CONSIGNMENTS	L
QLX	37080 (Q-LINK	ACACIA RG	CUNNAMULLA	29.000	DG	L
QLXM	38525 (Q-LINK	ACACIA RG	CUNNAMULLA	22.000	HCDG	L
QLDP	38524 (Q-LINK	ACACIA RG	CHARLEVILLE	27.000	CONSIGNMENTS	L
QLDP	39091	ACACIA RG	ROMA	19.000	EMPTY	E
QLCP	38461 (Q-LINK	ACACIA RG	ROMA	30.000	CONSIGNMENTS	L
QLDP	39115 (Q-LINK	ACACIA RG	ROMA	29.000	CONSIGNMENTS	L
QLDP	38467 (Q-LINK	ACACIA RG	ROMA	19.000	CONSIGNMENTS	L
QSCW	35274 (	ACACIA RG	ROMA	18.000	EMPTY ORDERED >FOR CARDBOARD	EO
QLCP	39262 (Q-LINK	ACACIA RG	MITCHELL	22.000	CONSIGNMENTS	L

DANGEROUS GOODS LOADING (CONFIRMED) ON DEPARTURE ACACIA RIDGE

VEHICLE CLASS	NUMBER	UN NO	DG CLASS	SUB RISK	DG MASS(T)	--- PKG --- GRP	TYP	NO	SHIPPING NAME
QLX	37080	1950	2	#	0.004	NA	CTN	2	AEROSOLS
		1866	3		0.002	III	CTN	1	RESIN SOLUTION,FLAMMABLE
		1300	3		0.016	III	CTN	1	TURPENTINE SUBSTITUTE
		1133	3		0.009	III	CTN	2	ADHESIVES CONTAINING FLA
QLXM	38525	1075	2.1		0.774	NA	CYL	53	PETROLEUM GASES, LIQUEFI
		1017	2.3	8	0.256	NA	CYL	4	CHLORINE

TONNAGE PROFILE GRAPH (CONFIRMED) ON DEPARTURE ACACIA RIDGE

Max Train Speed: 80 km/h

Class	Number	St	Gross	Dcel	Mass Profile
QLCP	38516	L	30.00	0.66	----------
QLX	37080	L	29.00	0.68@	----------
QLXM	38525	L	22.00	0.90	----------
QLDP	38524	L	27.00	0.73	----------

System #2.

The shunt train session is just one A5 card, the print is a size so us older blokes don't need our glasses. The card is in 4 parts. The operation session can be made easy or harder by wagons in sidings called "Hold Backs", in other words, wagons on hand not listed to be picked up. There is various reasons for this, they could be wagons loaded in but not unloaded, empties required for orders the following day, could be employee camp and material wagons, wagons with defects waiting repair etc. to name a few.

Shunt Card; to make it easy, and similar to the prototype operations, the card is divided into sections. Top of the card shows train number and day.

Part "1" Is the Train Wire or List, it shows the marshalling of the train from it starting point, station "A". All trains have a list showing all wagons on the train is order of marshalling. The list also shows destination and load. The incoming crews need to check the list to ensure the train they are taking is correct, plus it help to know what's on the train. Train Wires/List can be written one of two ways, in order from the engine to the rear or from the rear to the engine.

Part "2" is the Working Time Table. Departure time, time allocated to run the section, time allocated to shunt and arrive at your destination. The Time Table is used to gauge how the operators went. Often other trains passing through the station during the shunting operations will add extra moves.

Part "3" is the where the wagons needed to be placed at the station so the goods/freight can be unloaded or loaded. Sometimes due to what's in the siding and where the wagon needs to be placed, "Hold Backs" will be putted out and replaced to get the detaching wagon into its correct position.

Part "4" is the wagons ready to be picked up or attached to the train. This could be wagons loaded for another destination or empties not required.

Westgate

Train 100 Up **Wednesday**

Loco	1723			
2 WH	Westage	Wyandra	Ety	Grainco
HSAT	Westage	Wyandra	Grain Bins	Grainco
HJ	Westage	Wyandra	Timber	Miter 10
HJS	Westage	Wyandra	Pipes	Main Roads
A	Westage	Wyandra	General	
ABG	Westage	Wyandra	General	
C	Westage	Wyandra	General	
BLV	Westage	Wyandra		

Station	Arr.	Dep.	Remarks
Westgate		12:00	East
Wyandra	12:15	4:45	Detach/Attach
Westgate	5:00		West

Detach

2 WH	Grain Siding	
HSAT	Grain Siding	
HJ	Saw Mill	Place on Blocks
HJS	Ramp Road	Place on Ramp
A	Goods Shed Road	
ABG	Goods Shed Road	
C	Goods Shed Road	

Attach

CC / A	Camp	Mashalled on Van
2 QGX	Grain	
2 FJS, F, DF	Sleepers	
C / A	General	

8 Up Rail Car 13:10 - 13:15
Main Line to be clear at 13:00 Hrs

Keep Level Crossing clear.

Instructions could be about other train to passing through the station, this could say 8 Up Rail Car 13:10 – 13:15 requires the platform. Thus the Main Line need to be left clear for the passage of the Rail Car 10 minutes before the expected arrival.

Westgate. Train 100 UP. Wednesday. The Train Wire shows the following. Engine, 2 grain wagons, one open wagon loaded with grain bins, one open wagon of timber, one open wagon loaded with pipes, three box wagons of general goods/freight and a Guard's Van.

The train has be made up by the station shunt engine, the engine working the train is attached, and crew have checked their train and are ready to go. The fast clock is set and the crew waits departure time. 12:00 comes and the train departs Westgate for Wyandra (Station "B"). 15 minutes sectional running has been allocated. Arrival at Wyandra is 12:15. The Station Master admits the train to the loop and the fun starts.

All wagons on the train need to be placed as per the instructions. Two grain wagons and the open wagon with the grain bins are to be placed at the Grain Terminal (GT). The open wagon of timber needs to be placed on the stop blocks in the saw mill siding. A wagon of logs has not been unload *("Hold Back")* at the log ramp. The open wagon with the pipes needs to be placed at the Side Loading Bank (SLB). Three box wagons of general goods is to be placed at the Goods Shed (GS). But, a camp wagon and material wagon located in the station dead end (SDE) is foul of (blocking) No. 4 crossover coming from the Main Line. *(By the way, this is a bad practice and is not be allowed in the rules).* But at times it happens to allow loading.

In the siding there is a number of wagons listed to go out on the shunt. The camp and material wagons in the station dead end (SDE), has the employee travelling in his camp wagon, these two wagons are to be marshalled near the Guard's Van. Four wagons of sleepers from the saw mill, two box wagons of general goods from the Goods Shed, and two grain wagon empty.

I model QGR railways and have used QR wagon classifications in the instructions, but that is not necessary, the type of wagon or load type could be used. All up it a lot of fun and it replicates the real thing. The load type has been shown to assist in identifying the wagon.

Plus if you want to mix things up a bit, change the location of wagons in station “B”, this would change your shunt moves. Also, there are times when wagons need to be moved within the yard. An open wagon can come in on a train loaded with general goods and is placed at the Goods Shed, after being unloaded the Station Master receives an order to send a car. The wagon needs to be moved from the Goods Shed to the Side Loading Ramp for loading. Another small job for the shunt train when in town.

At first keep it simple, most locations have shunt trains going both ways *(one going north, an “Up” train and one going south a “Down” train).* The “Up” trains comes from the city in the early hours of the morning detaching loading and continues on to other stations. This train may also pick up one or two wagons for destinations to the north. The “Down” train arrives late afternoon picking up loaded and empty wagons for the city. Each day the loading can be different changing the shunt moves required. Local “Working Time Tables” can assist in this area.

The same set of wagons can be used for various shunt trains.

“A” (S) **Westgate** “A” (N) **Winbin**

“B” **(Wyandra)**

Shunt

“A” (S) Westgate “B” Shut “B” “A” (N) Winbin.

Start at station “A”, shunt Station “B”, and continue to the other end of Station “A”.

“A” (S) **Westgate** “A” (N) **Winbin**

“B” **(Wyandra)**

Shunt

The same train can then return from Station “A” from the reverse direction to shunt Station “B” and continue back to the original starting location.

“A” (N) Winbin “B” Shut “B” “A” (S) Westgate.

Or you can continue from Station “A” (S), shunt Station “B” and return to Station “A” (S). The train goes back over the same track section. Station “B” comes a station at the end of a Branch line.

“A” (S) **Westgate** “A” (N) **Winbin**

“B” **(Wyandra)**

Shunt

This move can be used to reset Station “B” for the next session.

“A” (N) “B” Shut “B” “A” (N)

The layout is a basic circle of track with two station, Station “A” (N) is the other end of Station “A” (S).

All up a lot of fun can be had preforming prototype operation on a small layout with a minimum amount of rollingstock. From time to time I swap the wagons around and write up a new card.

Camp Wagon and Material Wagon in the Station Dead End is foul *(blocking access)* of No. 4 Crossover. Shunt engine needs to pick up using No. 3 Crossover.

The wagon of logs is a “Hold Back”, to be unloaded it needs to beside the log ramp, plus the wagon of timber needs to be placed behind it.

100 Up is ready to depart after waiting in the Loop for the Rail Motor Pass to arrive.

I have a second sets of four cards, the same train, two (2) different day. By end of 4th card the wagons are back where they started.

Westgate

Train 568 **Thursday AM**

Loco	1723			
2 WH	Westgate	Wyandra	Empty	Grainco
HSAT	Westgate	Wyandra	Grain Bins	Grainco
HJSF	Westgate	Wyandra	Pipes	Main Roads
HJ	Westgate	Wyandra	Timber	Mitre 10
CLF	Westgate	Wyandra	General	
HJSF	Westgate	Winbin	General	
A	Westgate	Winbin	General	
ABG	Westgate	Winbin	General	
C	Westgate	Winbin	General	
BLV	Westgate	Winbin		

Station	Arr.	Dep.	Remarks
Westgate		12:00	
Wyandra	12:15	3:45	Detach/Attach
Winbin	4:00		

Detach

Wagon	Load	Place	Instructions
2 WH	Ety	Grain Siding	
HSAT	Bins	Grain Siding	
HJSF	Pipes	Ramp Road	Clear of Ramp
HJ	Timber	Saw Mill	On Blocks
CLF	General	Goods Shed	On Platform

Attach

Wagon	Load	Destination	Instructions
CC	Camp	Winbin	SDE
ALG/C	Ety	Winbin	Goods Shed
2 FJS,	Sleepers	Winbin	Saw Mill
F, DF	Sleepers	Winbin	Saw Mill

8 Up Rail Car 13:10 - 13:15
Main Line to be clear at 13:00 Hrs

On Arrival at Winbin, reverse train to form Train 569. (PTO Card)

Westgate

Train 569 **Thursday PM**

Loco	1723			
DF, F	Winbin	Wyandra	Sleepers	KEW Timbers
2 FJS	Winbin	Wyandra	Sleepers	KEW Timbers
CC	Winbin	Wyandra	Camp	Plant Operator
ALG/C	Winbin	Westgate	Ety	
C	Winbin	Westgate	General	
ABG	Winbin	Westgate	General	
A	Winbin	Westgate	General	
HJSF	Winbin	Westgate	General	
BLV	Winbin	Westgate		

Station	Arr.	Dep.	Remarks
Winbin		18:00	
Wyandra	18:15	20:45	Detach/Attach
Westgate	21:00		

Detach

Wagon	Load	Place	Instructions
DF, F	Sleepers	Saw Mill	Place on Blocks
2 FJS	Sleepers	Saw Mill	Place on Blocks
CC	Camp	Goods Shed	SD end on Platform

Attach

Wagon	Load	Destination	Instructions
2 QGX	Grain	Westgate	Grain Road
CLF	General	Westgate	Goods Shed
HJ	Timber	Westgate	Saw Mill
ALY	Ety	Westgate	Ramp Road
FGM	Tractor	Westgate	Ramp Road

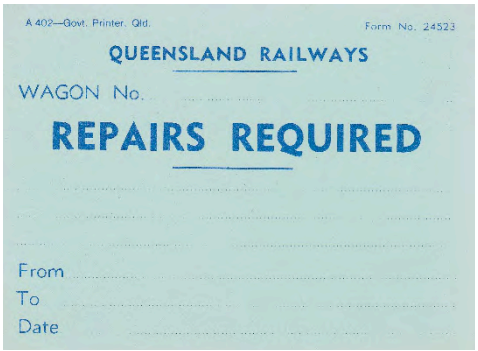
B17 Coal Train 19:00
Loop Line to be clear at 18:45 Hrs

Only part of the train is detached, the rear section stays on the train and continues to the next station. This give three sets of wagons that can be dropped off and picked up with each passing. The train has two sets and the station being shunted have wagons in the sidings. “Hold-back” wagons on the first run can be added on the second or third run. The final shunt resets both the yard and the train for next time.

If you have a level crossing in the station yard, instructions could include the crossing must not be block for excessive periods. In other words, the shunt can run out and back over the crossing, but you don't leave wagons parked on the crossings. The locals will get upset.

When setting up a session make sure you have room to move. Will the siding hold the wagons being dropped off?


(Form No. 24607
QUEENSLAND RAILWAYS
DATE ..... TRAIN .....
No. OF WAGON ..... GUARD .....
STATION FROM .....
CONSIGNEE .....
AT .....
NET WEIGHT (Mass)
Tonnes | kg
TO WEIGH AT .....
WEIGHED AT ..... BY .....
A 356—Govt. Printer, Qld.
Signature of Weighman.


A 402—Govt. Printer, Qld.
Form No. 24523
QUEENSLAND RAILWAYS
WAGON No. .....
REPAIRS REQUIRED
From .....
To .....
Date .....

Another activity that can be added is "TO WEIGH" wagons. Sometimes the weight of the freight consigned is not known. Logs, Coal, Grain to name a few. Special labels are added to the wagon and at the suitable location the wagon is placed on a weight bridge.

Defects can be added changing the operations session.

A wagon may need to be left behind or change the marshalling requirements

Brakes cut out, a wagon cannot be near the rear of the train.

Hints;

Read the instructions and develop an understanding of what's required. What goes where.

Take a minute to think about the shunt, this could save you moves, thus time.

Check points/crossings before moving. Running into the wrong road reduces your time.

Do one thing at a time, but look for things that will fall together.

When cutting wagons out, just leave them just clear, push them together at the end.

Prototype Operations for a Small Layout | Westgate

Don’t rush, slow and easy will give better results in the end.

If developing a shunt layout consider the following.

8 wheeled wagons behave better that 4 wheeled wagons.

Large radius curves give less trouble than smaller radius curves.

Don’t mix coupling types. Think about how you going uncouple the rollingstock.

Heavier wagons perform better than lighter wagons.

Make sure you have room to move.

One siding can have more than one industry / activity. Goods Shed with a Loading Bank.

Start small and add other activates at a later date.

All track need to be in comfortable reach for the operator.

Manual point operations puts the operator on the ground in the yard and are easy to use. Panels with switches and electric points can make it harder to understand and put operators off.

Think of your feet, something soft to walk on will make it more comfortable and enjoyable.

Less is more, keep it simple.

Prototype Operations for a Small Layout | Westgate

Small Trains can provided a lot of prototype operations on a small layout and fun.

Think out of the box, sometimes you save moves by going to the back of the train.