Operation of Queensland Railway Stations

Purpose

This forum is to assist modellers of Queensland prototype to run their trains as near as possible to the real thing. As we have only limited time I will try to cover the most used practices by Queensland railways.

Background of Presenter

I was lucky to have joined the Q. R. in 1955 when new steam and diesels were being delivered BB18s, Poms, Yanks, Clydes, Pawpaws new lander cars 1800 and 2000 class Rail Motors. In thirty-two years employment with Q.R. I had worked all the safeworking systems with the exception being train order.

Definitions

If you are modelling a particular area or station, a great source of information can be obtained from working time tables, the general appendix and load tables for the various Divisions. To help you understand some of the rules I have listed some of the Definitions below:

Term	Definitions
Station	Any place where trains stop to set down or pick up passengers or deliver and receive goods or for the purpose of train working.
Station Master	The person in charge of the station, goods shed, Siding or other place for the time being.
Main Line	The running line of any main line or Branch Railway.
Crossing Loop	Crossing Loop, Loop or Loop line is the Loop Line, the points of which at both ends are connected to the Main line or such other Siding as has been notified in the working time table or train notice as taking the place of the loop and used for the crossing of trains.
Train	An engine or engines coupled with or without vehicles.
Engine	A locomotive or other unit used for the movement of vehicles, self propelled by sny form of energy or combination of such units operated from a single control.
Light Engine	An engine or engines coupled without vehicles or an engine with not more than three water vehicles attached.

Term	Definitions Cont'd
Signal Box / Cabin	The place where signal levers are fixed.
Block Telegraph	A system of train signalling (Which does not apply where automatic or semi automatic signals are provided) to prevent more than one train being in the same block section on the same line at the same time, except where specially provided for.
Staff or Train Staff	The ordinary staff or electric staff according to the system in force.
Tail Disc	A white triangle or white folding round disc placed or fixed on rear of train during daylight to indicate train is complete on a main line.
Signalling	One of the most daunting tasks when modelling a prototype station is the signals especially if you choose to model an average double track plan. I have drawn some track diagrams to show the application of these signals on double and single track stations of course you can model a reasonably large single track country station (non inter locked) with only four signals. Some types of fixed signals consist of Distant, Outer Home, Home, Starting, Advance Starting, Automatic (Semaphore & Light), Siding , Calling On Stop, Wrong Road, Independent Disc, Dwarf and Shunting Signals. See attached diagrams of some signal applications.

Station Operation

All state systems worked their trains nearly the same as our source of signalling was from Britain. In Queensland we had a few operational rules which could make the station busy and could also make your layout busy too. I am assuming that you know we run Up trains (even numbers) and Down trains (odd numbers)Up to Toowoomba, and Down to Cairns.

If you model a single line Station and have to cross 2 passenger trains. The first train is brought to the platform, completes station work then sets back into the section (if the train is not protected by signals a staff for the section is required). The second train is then admitted to the platform and the other train proceeds via the loop. The reason for these movements, no train is permitted to pass between the platform and a passenger train stopped in the loop.

The same procedure was required when crossing two mixed goods trains. One of the golden rules was never to stop a passenger train on a bridge. Most stations were worked the same with a couple of local adaptations. At some places wagons were placed at the goods shed at others the wagons were left in the clear it depended on the local carrier.
At Landsborough, Maleny wagons were placed on eastern side clear of the goods shed after the carrier had loaded his goods the wagon would be manhandled to goods shed to finish unloading. Wagons for Caloundra were placed on the western side for the coordinated service contractor. Depending on how many trains were around, the time taken to detach and attach wagons varied from 30 mins to an hour or more . As butter was loaded 2 to 4 times per week an ABG wagon had to be placed first out so it could be loaded and despatched to arrive at the Hamilton cold stores by early afternoon.

All shunt trains had road wagons for the carriage of small consignments of goods parcels. Poisons were usually loaded into separate wagons. Explosives were loaded into one wagon and the detonators were contained in a copper lined wooden box called a magazine and loaded into a separate wagon. As an example of a train which picked up roadside at Landsborough was 6275 the train was marshalled as under from rear:

B/car	Bundaberg parcels
Mbv	Roadside north of Tville.
Cmr	Cairns Rd freezer.
Bcar.	Cairns R d parcels
Bcar	Tville Rd "
Qlx	Mackay "

Then T ville ldg, Cairns ldg, Cairns Tableland ldg. Innisfail ldg Ingham ldg, D.E.L. 16 veh for 550 tonnes. As can be seen from the above an important part of running trains is the loading and marshalling .

Up until the early sixties the maximum load was 650 ton with the maximum length equal to sixty "f" in the mid sixties the load went to 750 ton with the length of 90 units. In the seventies the train length was increased to a 125 units with the load dependant on the motive power for the section. Trains were marshalled from the terminal station in station order from the engine but usually the train also had to attach loading after detaching and these wagons also had to be marshalled in order, so as to cut down the amount of shunting time.

The loads of trains when hauled by a steam engine may be reduced by 20% for passenger and fast running trains. Steam engine loads were governed by grades but also by the size of the Westinghouse brake compressor. Mixed trains will take goods train loads. It is emphasised that the sectional loads given in all instances are governed by the maximum number of vehicles on trains as provided by the general appendix.

Another important factor is the availability of your engines to run on certain sections of lines, as some types of engines were restricted to where they could run. Except where otherwise prohibited and subject to certain conditions. Two engines of any class may run coupled on any section of line upon which both engines are permitted to run singly. If you model the later years of Q. R. you have wider scope as tracks were upgraded to enable a wider field even if on some lines at a lower speed.

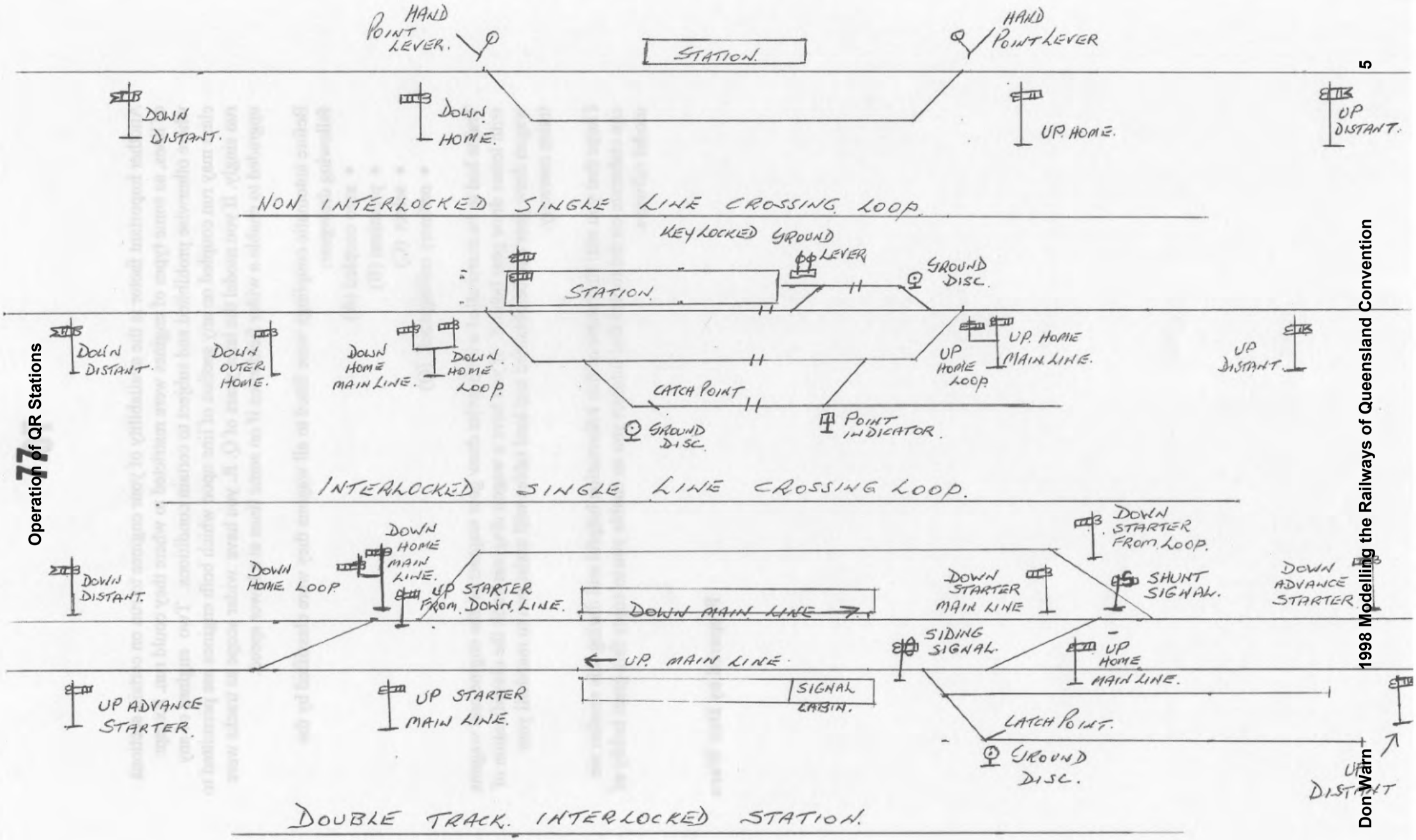
Before automatic couplings were fitted to all wagons they were classified by the following drawgear:

- auto coupled (A)
- premium (B)
- select (C)
- ordinary rollingstock. (O)

Trains had to be marshalled with heavier draw gear wagons on the engine and wagons with lesser draw gear behind. If you have a wagon diagram book the classification of wagon draw gear can be obtained and load tables will assist you to marshall your trains correctly.

I hope that you will find some of this information helpful and during this session we can elaborate on the topics that interest you an enable you to enjoy this great hobby of model railways.

Prepared by Don Warn


HAND POINT LEVER.
STATION.
HAND POINT LEVER
DOWN DISTANT.
DOWN HOME.
UP HOME.
UP DISTANT.
NON INTERLOCKED SINGLE LINE CROSSING LOOP.
KEY LOCKED GROUND LEVER
GROUND DISC.
STATION.
DOWN DISTANT.
DOWN OUTER HOME.
DOWN HOME MAIN LINE.
DOWN HOME LOOP.
UP HOME LOOP
UP HOME MAIN LINE.
UP DISTANT.
CATCH POINT
GROUND DISC.
POINT INDICATOR.
INTERLOCKED SINGLE LINE CROSSING LOOP.
DOWN DISTANT.
DOWN HOME LOOP
DOWN HOME MAIN LINE.
UP STARTER FROM DOWN LINE.
DOWN MAIN LINE
DOWN STARTER FROM LOOP.
DOWN STARTER MAIN LINE
SHUNT SIGNAL.
DOWN ADVANCE STARTER
SIDING SIGNAL.
UP MAIN LINE
UP HOME MAIN LINE.
SIGNAL CABIN.
UP ADVANCE STARTER.
UP STARTER MAIN LINE.
LATCH POINT.
GROUND DISC.
UP DISTANT
DOUBLE TRACK. INTERLOCKED STATION.