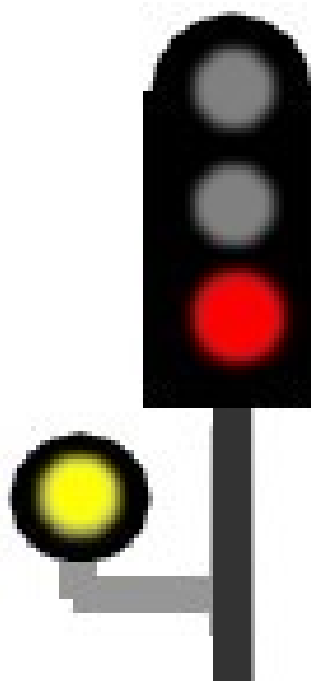


# Remote Controlled Signalling Re-accreditation Work Book



This workbook is derived from extracts from Queensland Rail Standard: Remote Controlled Signalling, MD-110-111



Adapted for CKS / CairnsRail Training Modules for workers seeking re-accreditation as Locomotive Drivers

## Introduction

Much of the knowledge required to safely operate in RCS territory has been explained in the observance of signals module. This topic covers some peculiar procedures specific to RSC working. The main focus of this module is working of sidings and shunting in DTC territory. It may be useful to draw sketches of what is being described in the written text to help you understand the scenarios. You can also request a learning session for this module.

## 1.12 Rail Traffic Moving Backwards after Entering a Signalled Route

The signalling system in Remote Controlled Signalling (RCS) areas is designed to release the locking on points as soon as the rear of the rail traffic has cleared. These points may then be altered for the movement of other rail traffic or may be self-normalising. The following procedure shown in Sections SG 1.12.1 and SG 1.12.2 must be carried out to prevent a possible derailment or collision.

### 1.12.1 Rail traffic moving backwards after entering a signalled route

When rail traffic has entered a signalled route on the authority of a signal and it is necessary to reverse direction

Rail Traffic Crew

- do not reverse until authorised by Network Control Officer
- contact Network Control Officer/officer in charge
- when possible, move the rail traffic forward until a signal may be placed at proceed for the reverse movement

Network Control Officer/Officer in Charge will make sure route for the reverse movement is clear, set and lock points where possible, clear the signal, authorise the rail traffic crew to reverse

### 1.12.2 Rail traffic moving backwards after entering a signalled route and then moving forward

When rail traffic moves forward on the authority of a signal and reverses, and is then required to move forward again

Rail Traffic Crew

- when possible, move the rail traffic in clear of a signal which applies for the forward movement
- when not possible to clear the signal for the forward movement
  - contact the officer in charge to make sure the route for the forward movement is clear and points are locked
  - obtain authority from the Network Control Officer/officer in charge to proceed

## 4.15 Electrically Released Isolated Sidings with Lock in Facilities

When rail traffic is required to enter or exit an isolated siding provided with lock in facilities  
Rail traffic crew

- stop rail traffic clear of points to be released

- contact Network Control Officer and request release
- if necessary, insert points key into the points key switch and turn key to release/unlock mechanism
- when a light on the frame indicates free
- slowly move the black and white release lever to the reverse position
- operate the points by using the applicable lever
- do not return the release lever to normal until shunting is completed or the rail traffic is placed in clear in the siding

when shunting is complete

- do not leave any rail vehicles outside or foul of the catchpoints
- return all levers to the correct position
- remove the points key, if necessary
- tell the Network Control Officer/officer in charge

## 4.16 Electrically Released Shunting Frames

When required to shunt a siding, isolated siding or through a crossover track and the frame is to be released by the Network Control Officer or officer in charge

Qualified Worker

- obtain release from Network Control Officer/officer in charge
- operate key switch, if fitted

when a light on the frame indicates free

- operate push button
- slowly move the black and white release lever to the reverse position
- operate the points and any signals by using the applicable levers

when shunting is complete

- do not leave any rail vehicle foul of the catchpoints
- return all levers to the normal position
- tell the Network Control Officer or officer in charge

Note: Some sidings have electrically detected choke blocks. Before the release can be obtained the choke block must be in the open position.

### 4.20.4 Shunting past a running signal

Rail traffic may only shunt past a running signal on authority of a proceed aspect in the running signal,

or

a proceed aspect in a position light signal attached to the running signal,

or

an Alternative Proceed Authority issued by the Network Control Officer

#### a) **proceed aspect in the running signal**

When rail traffic shunts past a running signal or proceeds onto a signal section on the authority of a proceed aspect in the running signal and returns

Rail traffic crew

- proceed as far as instructed
- do not return without authority from the Network Control Officer (see Module 5, Section RC 5.9.2 of the RCS manual)

**b) proceed aspect in position light signal attached to a running signal**

When rail traffic shunts past a running signal on the authority of a proceed aspect in a position light signal attached to the running signal

Rail traffic crew

- proceed at restricted speed to the limit of shunt board obeying all intervening stop signals
- if the limit of shunt board is outside the opposing stop signal
  - do not return past the stop signal without a proceed aspect in the stop signal or
  - position light signal, or
  - authority from Network Control Officer on an Alternative Proceed Authority
- if the limit of shunt board is inside the opposing stop signal
  - do not return without authority from the Network Control Officer

**c) shunting past a running signal at stop on authority of an Alternative Proceed Authority**

When rail traffic shunts past a running signal at stop on authority of an Alternative Proceed Authority

Rail traffic crew

- proceed as far as instructed
- do not return unless instructed on an Alternative Proceed Authority by the Network Control Officer or signal aspect at proceed

#### 4.20.5 Proceeding through a signal section after shunting

**a) shunting on authority of position light signal**

When rail traffic has passed a running signal at stop on authority of the position light signal for shunting purposes, and is then required to proceed through the signal section

Rail traffic crew

- if possible, set rail traffic back clear of the running signal
- proceed into section when the running signal is cleared to a proceed aspect
- if rail traffic cannot set back clear of the running signal
- obtain authority to proceed from Network Control Officer on an Alternative Proceed Authority

#### b) shunting on authority of an Alternative Proceed Authority

When rail traffic has passed a running signal at stop on the authority of an Alternative Proceed Authority for shunting purposes, and is then required to proceed through the signal section

#### Rail traffic crew

- if possible, set rail traffic back clear of the running signal
- fulfil the Alternative Proceed Authority
- proceed into signal section on the authority of the running signal or new Alternative Proceed Authority
- if rail traffic cannot set back clear of the running signal
- cancel Alternative Proceed Authority
- proceed into the signal section on the authority of new Alternative Proceed Authority

## 5.4 Securing Disabled Rail Traffic

When rail traffic becomes disabled on a signal section but is able to be moved by relief rail traffic

#### Rail traffic crew of disabled rail traffic

- make sure the rail traffic is intact
- secure the rail traffic by
- applying all handbrakes, or
- applying the required number of handbrakes as required in instructions validated by
- the Manager Rollingstock Engineering
- using chocks where necessary
- identify the location of the rail traffic

## 5.5 Protection of Obstruction

### 5.5.1 Obstruction to be protected

Rail traffic or a portion of a rail traffic causing an obstruction, must be protected unless a structure such as a tunnel or bridge prevents protection being placed

### 5.5.2 Protection equipment

Protection of an obstruction will be provided by using Railway Track Signals together with either reflective triangles, or red flags during the day or red lights during the night or when visibility is reduced.

### 5.5.3 Protection not required

No protection is required where the relief rail traffic will enter the section past a signal capable of showing a stop aspect that is within 2 kilometres of the disabled rail traffic. The relief rail traffic will travel at a speed not exceeding 15 km/h regulate the speed to be able to stop within one-half the distance of line-of-sight

## 5.9 Rail Traffic Setting Back

### 5.9.1 Rail traffic setting back

#### a) definition

Setting back is when rail traffic authorised to travel in one direction has to reverse (or set back) in the opposite direction.

#### b) permission to set back

Permission to set back must be obtained from the Network Control Officer or Officer in Charge of the Local Control Panel for all rail traffic except passenger trains where the rail traffic crew or Guard controls the locking of the doors. These trains may set back one coach length without permission at scheduled stopping places and at platforms provided the doors have not been released.

#### c) protection

When it is necessary to set back

Rail traffic crew must

drive from the leading driving cab in the direction of travel of a train unit and regulate the speed of the rail traffic to be able to stop within one-half of the distance of line of sight

OR

have a second rail traffic crew, or other qualified worker (with radio communication),

- proceed ahead of the reversing rail traffic
- warn others travelling or working on the track
- make sure level crossings are protected

Second Rail traffic crew/Qualified Worker at rear of rail traffic

- tell the rail traffic crew the required speed
- stop the rail traffic if required

Note: Before setting back, obtain authorisation from Network Control Officer.

#### d) speed of rail traffic setting back

Rail traffic may only set back at a maximum speed of 10 km/h, and regulate the speed of the rail traffic to be able to stop within one-half the distance of the line-of-sight.