

Cairns Rail: Direct Traffic Control

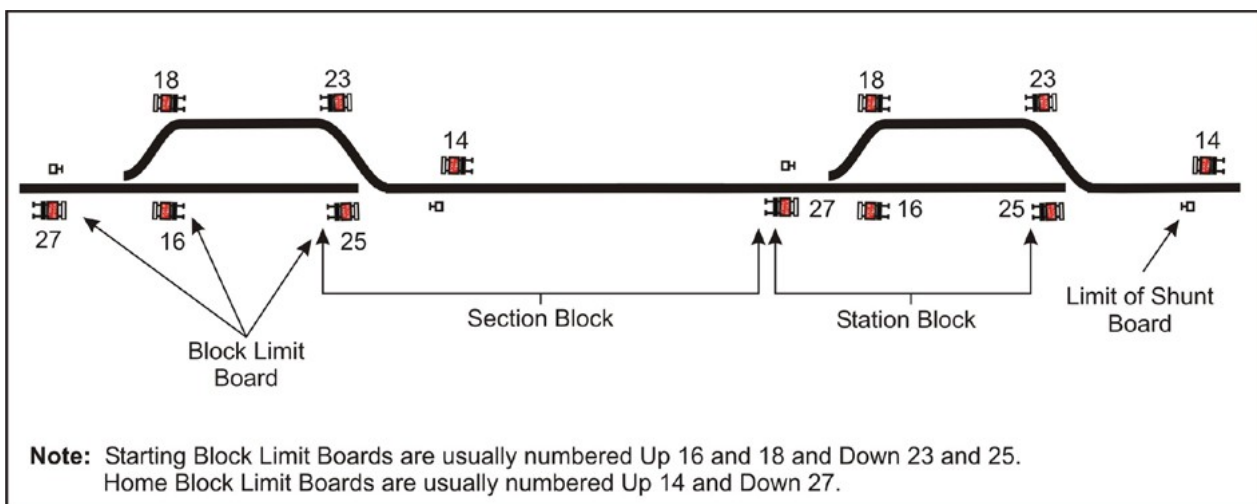
Revision Notes

The re-accreditation written assessment has a large focus on written authorities. Cairns Rail train crews have sufficient exposure to standard day to day operating procedures and are therefore unlikely to suffer loss of competence for normal operations.

The majority of the revision material is referenced from MD-10-113 and can be used a further resource. A copy of the standard is available upon request from the Operations Manager.

1.3 Principle

In Direct Traffic Control (DTC) Territory the route is divided into sections known as DTC blocks, which are identified by Block Limit Boards



A DTC Authority gives rail traffic possession of the block/s up to a nominated Block Limit Board.

Ownership of the block/s will be passed from the Network Control Officer to the Rail traffic crew when the Network Control Officer issues a DTC Authority.

Ownership of the blocks will be transferred back to the Network Control Officer when the Rail Traffic Crew releases the blocks.

Direct Traffic Control operates on the principle of absolute block working which provides that only one rail traffic movement will be authorised on any one block, at any one time. Track vehicles will be treated as rail traffic when travelling on a DTC Authority.

The only exceptions to this are when

- rail traffic has failed or becomes disabled on a block and relief rail traffic is required to enter the block

- an accident or obstruction requires the division of a block to allow traffic to be worked from either side
- rail traffic has divided on a block and relief rail traffic is required to haul the rear portion off the block.

2.2.6 Releasing blocks to the Network Control Officer

When rail traffic has cleared a block/s, or when requested by the Network Control Officer to release blocks

Rail Traffic Crew

- confirm the location of the rail traffic
- make sure the rail traffic is in clear within the block being occupied, for example, facing a starting block limit board at a station , or that the rear of the train has cleared the opposing home block limit board
- have the second Rail Traffic Crew confirm the
 - location of the rail traffic
 - particulars of blocks to be released

3.3 Failure of Computers

3.3.1 Cab computer failed or unavailable

If the cab computer on a locomotive/train unit fails, or is not available while the rail traffic is enroute, the rail traffic must not proceed past the next facing BLB until either an Alternative Proceed Authority or a DTC in cab authority is held to pass the BLB.

Extension of Authority

Note: This is not covered in the QR standard, but after making enquiries, is how network control manage this issue

An authority is written on an SW50 (Alternative proceed authority). If an extension is required, it is written on a new SW50. When the limit of Authority on the original SW50 is reached, the rail traffic may continue to the new Limit of Authority on the second form. The original SW50 is FULFILLED once passed the original limit of authority.

3.4 Release of Unoccupied Blocks

3.4.1 Release of Unoccupied block to the Network Control Officer

When rail traffic is travelling on an Alternative Proceed Authority and the rail traffic driver is required to release blocks

Rail Traffic Driver

- partially fulfil the Alternative Proceed Authority

4.5 Rail Traffic Running Ahead of Scheduled Time or Without Notice

A Proceed Authority issued by the Network Control Officer is the authority to run ahead of schedule without restriction unless otherwise instructed.

4.9 Main Line and Loop Stations - Crossing Procedures

4.9.1 Normal entry line at crossing stations - main line and loop

MD-10-113 states that:

When rail traffic is to cross at stations equipped for Main Line and Loop Working, the normal entry lines are as shown in Figure DT 4.9

It will be necessary to issue a Wrong Road Authority to the rail traffic entering the loop for a crossing or passing movement at a Main Line and Loop crossing station.

The normal entry of rail traffic will be

- up rail traffic enter the main line
- down rail traffic enter the loop

However, in practice, it is more usual in the field for the first arriving train to take the mainline, while the second train to arrive will be placed in the loop. This is because the train crew of the first arriving train can unlock the points and signal the opposing traffic into the loop. Therefore, crossing procedures are more likely to be as for the scenario described below.

Up rail traffic approaches - Down rail traffic has not arrived (for down traffic, read 'opposing train')

Rail Traffic Crew

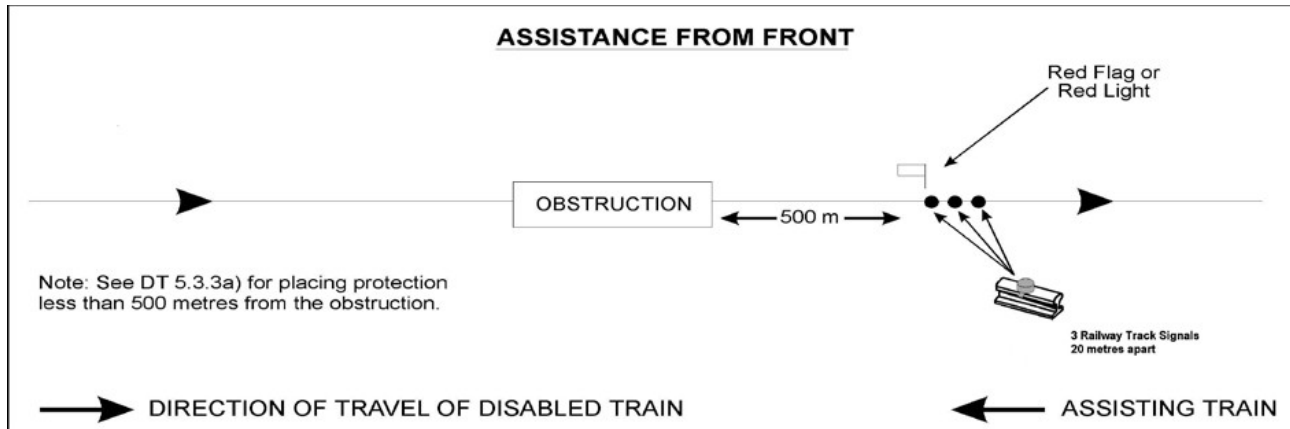
- contact the crew of the other rail traffic, if possible
- enter the station on the road shown on the DTC Authority
- stop within the block limit boards
- report to Network Control Officer
- unlock and set the loop points for the down rail traffic
- signal the down rail traffic into the loop

After the down rail traffic has arrived

- check and tell the Rail Traffic Crew of the down rail traffic their rail traffic is in clear and intact
- reset and lock the loop points
- obtain another Authority, if necessary

5.3 Protection of Obstruction

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



5.4 Clearance of Obstruction

5.4.1 Clearance of section when protection IS provided for an obstruction

When rail traffic has become disabled on a section and the obstruction has been protected Rail Traffic Crew of disabled rail traffic

- make sure the rail traffic is not fouling any adjacent track
- check that the rail traffic is intact
- make sure the rail traffic is secured against movement
- tell the Network Control Officer
 - the location of the obstruction, including the kilometre point of the front and rear of the rail traffic
 - whether the rail traffic is intact
 - the rail traffic is secured against movement
- do not move any portion of the rail traffic until assistance arrives

Rail Traffic Crew of Relief Rail traffic

- receive a Recover Failed Authority (or any other necessary authority) from the Network Control Officer
- confirm the location of the disabled rail traffic
- maintain communication with the disabled rail traffic

- proceed to the location of the obstruction
 - do not exceed 60 km/h on the obstructed section
 - do not exceed 15 km/h from a point two kms from the obstruction
 - stop the rail traffic at the protection
 - remove the protection, if necessary
 - proceed to the obstruction, at controlled speed (capable of stopping half distance of line of sight)

5.7 Temporarily Divided Section

5.7.1 Working rail traffic on each side of an obstruction

When an obstruction exists on a section of track and traffic is likely to be delayed for some time, and it is necessary to work rail traffic on each side of the obstruction

Note: If rail traffic is required to work on each side of the obstruction at the same time one rail traffic will be issued with an Alternative Proceed Authority

5.7.2 Proceed to obstruction authority

Purpose

To send relief rail traffic onto a section to clear an obstruction when the section is temporarily divided.