GGMRC – DOW Freight Yard Development 2009

Overview

The new yard consists of three new through tracks F1, F2 and F3 laid on the spare 'land adjacent to the SIA yard which itself required some rearrangement – see drg DFS – Track Power Routing.

These tracks are accessible from the mainline at each end via a new switch inserted in the old SIA curve on the 'west' side from Stockton Yard and Roundhouse and another inserted in the Branchline/SIA lead on the 'east'.

All new tracks are normally isolated from the layout until the appropriate routing switch(s) is thrown and the 'SEIZE' pushbutton on either Mountain or Stockton Yard panels are pressed. This engages relays that provide power from the appropriate end and are locked in until any of three RELEASE buttons are pressed. The SIA yard panel additionally has an AUTO/LOCAL power select toggle switch allowing that yard access to be treated as though it is a 4th freight track when AUTO is selected. As for station access, power is not available unless the mainline/branchline block from or to which trains approach is selected on the appropriate panel.

Track power switching is automatic and is provided through relays slaved to auxiliary contacts on the Tortoise switch machines.These relays are mounted on the central switching panel under the SIA yard tracks (see drg DFS – Track Power routing). Therefore power for a train to enter or exit the yard comes from the connected Mainline or Branchline block which must therefore be selected on the Mountain, Valley, Stockton Yard or Roundhouse panels as appropriate.

A. For example for a train to enter or exit the DOW freight track F1 from Mountain Block 321, the following must be selected:-

A1. Mountain Block 321

A2. Rogers Junction crossover switches RJ3 and RJ6 must be opened.

A3. The freight yard switches ES, E1, E2 on the Mountain panel must be set appropriately and allowed to finish setting the route.

A4. The SEIZE pushbutton on the Mountain panel must be pressed, illuminating the adjacent RED LED.

A5. If RJ3/RJ6 access switches are not opened freight yard power would come from the Branchline.

A6. Rogers Junction crossover switches RJ7/RJ8 must be closed (otherwise through power from block 321 is disconnected by way of interlock)

A7. If Mountain mainline crossover switches RJ1/RJ2 are opened then power is provided from block 320 instead which must be selected on the Mountain panel)

A8. Any of the three RELEASE buttons must be pressed to isolate the train subsequently. Train movements must be completed.

B. Similar automatic power routing takes place in the 'west' side of the yard. For example for a train to enter or exit yard track F1 to Roundhouse/Stockton, the following must be selected:-

B1. The appropriate Stockton Yd switches and block to be used

B2. The Freight yard access switches WS, W1 and W2 on the Stockton Yard panel must be set appropriately and allowed to finish setting the route.

B3. The SEIZE pushbutton on the Stockton Yard panel must be pressed, illuminating the adjacent RED LED.

B4. Roundhouse/Station crossover switches Y12/Y13 must be closed (otherwise through power from Stockton/Roundhouse is disconnected by way of interlock)

B5. Any of the three RELEASE buttons must be pressed to isolate the train subsequently. Train movements must be completed.

Signal bridges spanning the Freight tracks and guarding the leads to SIA have been provided which are controlled by the routing set up and these display the appropriate aspect when the SEIZE button is pressed. The signal bridges are controlled through separate controllers also slaved to the freight yard switches.

Martin Perry
msperry50@blueyonder.co.uk