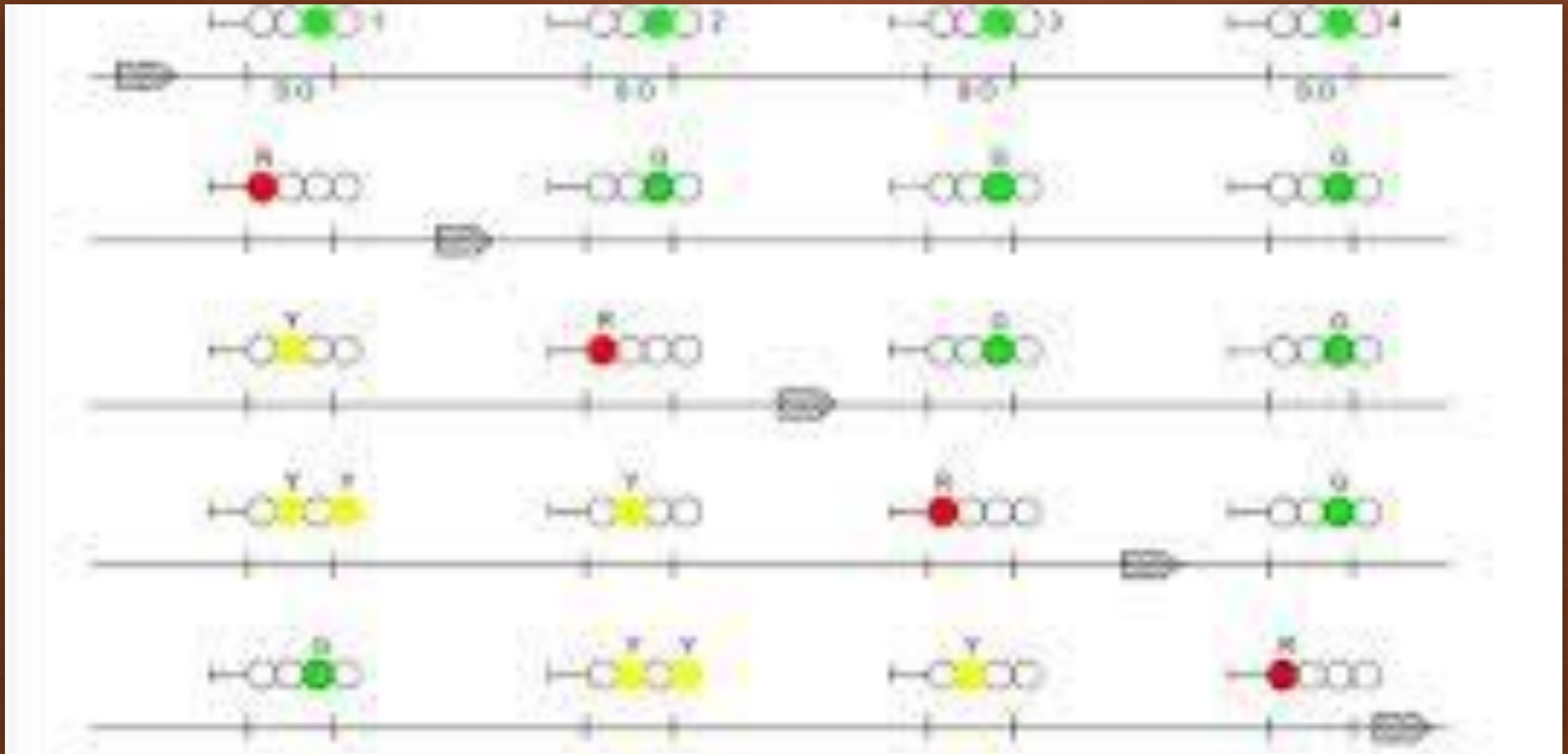


NEHA DESAI, IRTS(P)-2018

AUTOMATIC BLOCK SYSTEM AND WORKING OF TRAIN DURING FAILURE OF AUTOMATIC BLOCK SYSTEM



AUTOMATIC BLOCK SYSTEM

ESSENTIALS ON THE DOUBLE LINE 9.01

- Track circuiting and Axle counters
- Line between two adjacent block stations may be divided into series of automatic sections.
- Entry into the sections governed by Stop Signals.
- The signals can be taken OFF after the entire train has reached beyond not only the stop signal but adequate distance (120m) beyond it.
- Mid Section Modified Semi Automatic Signal: Duties of Loco Pilot when the signal is ON with A marker extinguished.

AUTOMATIC BLOCK SYSTEM

WHEN STOP SIGNAL IS ON 9.2

- Wait for 1 minute during the day and 2 minutes during the night.
- Loco Pilot to give whistle code signal to the guard.
- Guard to show stop hand signal to the rear train.
- Proceeding with great caution, and at the maximum speed of 10 Km per hour if the view is obstructed.

AUTOMATIC BLOCK SECTION

ESSENTIALS ON THE SINGLE LINE 9.3

- Track circuit and axle counter.
- Establishing the direction of the traffic.
- Line clear to be given not only after the train has reached the first stop signal but adequate distance (180 Mt) beyond it.
- Stop Signals against the set direction are in the ON position.
- Mid Section Modified Semi Automatic Signal.
- Minimum Signal Requirements: Manual Stop Signal, Home, Starter, Automatic Stop Signal in rear of Home. (9.4)

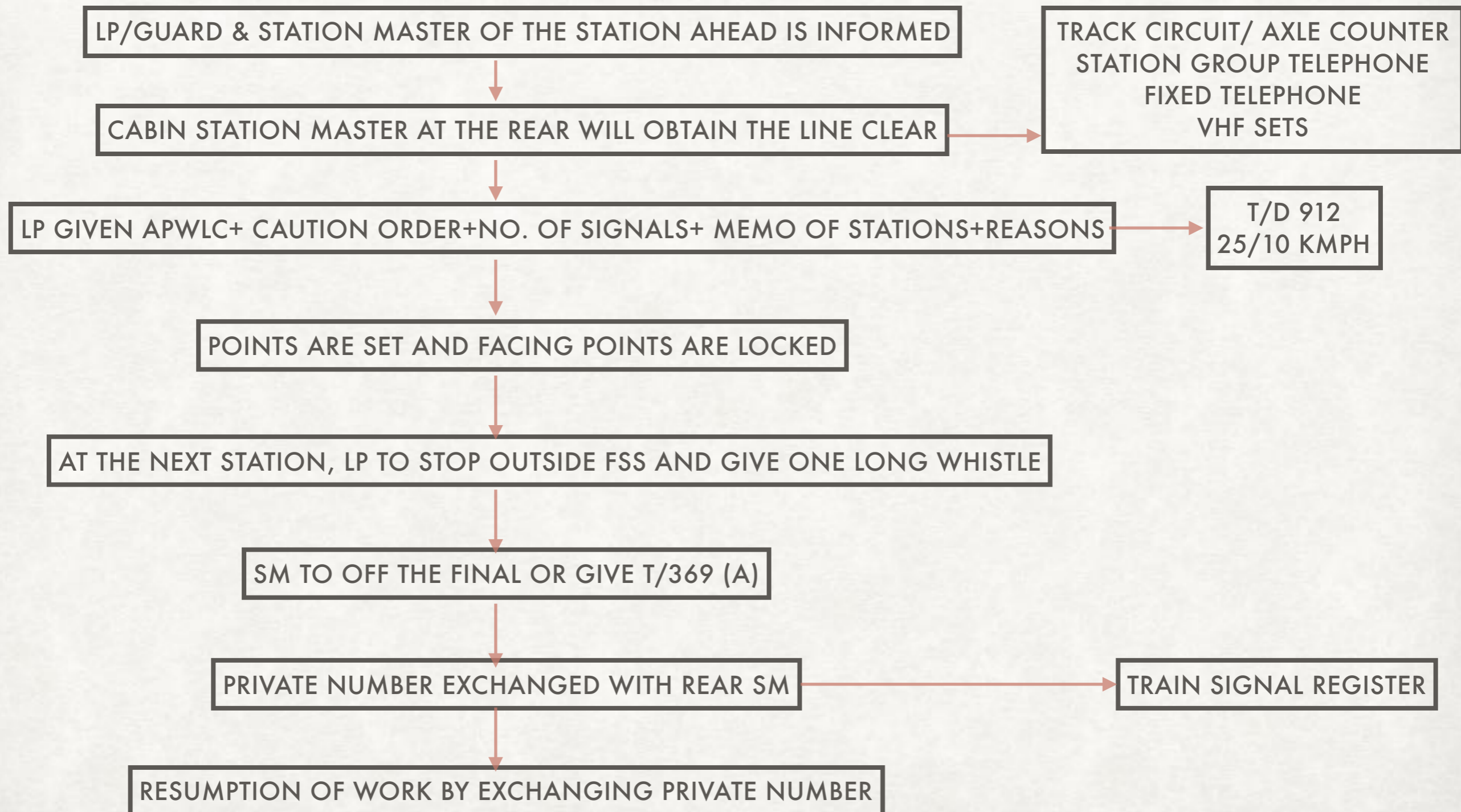
AUTOMATIC BLOCK SECTION

INSTRUMENTS OF WORKING 9.12(7)

- Track Circuit
- Single Stroke Bell
- Route Indicator
- Visual Indicator
- Starter Indicator
- Normal Aspect of the Signal in single line automatic section

FAILURE IN AUTOMATIC SECTION

FAILURE OF SIGNALLING 9.12(1)



FAILURE IN AUTOMATIC SIGNAL

SIGNAL & COMMUNICATION FAILURE 9.12(2)

- Movement is controlled by special instructions
- T/B 912: Authority to Proceed without Line clear
- Caution order is given to the Loco Pilot (25/8/15 KMPH)
- T/A 912: For intervening signals in ON position.
- Signalling by a competent railway servant.
- T/I 602: When means of communication are restored.

FAILURE IN AUTOMATIC BLOCK SECTION

TEMPORARY SINGLE LINE WORKING 9.12(3)

- Stations to be nominated by DRM.
- Nearest stations provided with cross over between up and down lines.
- Line clear to be given after the train has reached beyond FSS of right line or LSS of wrong line or Shunt signal of outermost cross over.
- T/E 912: To pass the LSS at ON position for the Right direction, for wrong direction, PLCT is given.
- For First train: Endorsement on caution order to inform all gatemen
- T/369(A): When the train reaches the crossover
- T/B 912: Obstruction with failure of communication

FAILURE IN AUTOMATIC BLOCK SECTION

OTHER FAILURES 9.12(5)

- Vehicles running away in wrong line.
- Vehicles running away in right line.
- Failure of signal/emergency bell in EMU.
- Overshooting at platform.
- Overshooting the stop mark.
- Alarm chain pull.

THANK YOU