



क्षेत्रीय रेल प्रशिक्षण संस्थान, भूली
ZONAL RAILWAY TRAINING INSTITUTE, BHULI



TOTAL FAILURE OF COMMUNICATION ON SINGLE LINE IN ABSOLUTE BLOCK SYSTEM

Dhananjay kumar singh

Transportation Instructor ZRTI/Bhuli

TOTAL FAILURE OF COMMUNICATION IN SINGLE LINE

When line clear for a train cannot be obtained from adjacent station by any of the means of communication available at the station, such a situation is termed as total failure of communication

MEANS OF COMMUNICATION

- **Block Instrument, Track Circuit & Axle Counter**
- **Block Telephone**
- **Control Phone**
- **VHF Set**
- **Station to Station fixed telephone or BSNL Phone**

TOTAL FAILURE OF COMMUNICATION **IN SINGLE LINE**

In the above circumstances trains work in the following manner:

- **The SM who has train to dispatch through the effected section, first of all he has to open communication by sending any of the following sources available in order of preference:**
 - **Light Engine**
 - **Train Engine**
 - **Motor Trolley or Tower Wagon**
 - **Trolley/Cycle Trolley/Mopade Trolley**
 - **Diesel Car/ Rail Motor Car**
 - **EMU rake – after ensuring that all passengers has derailed.**

TOTAL FAILURE OF COMMUNICATION **IN SINGLE LINE**

THE DRIVER WILL BE GIVEN FOLLOWING FORMS : -

PHASE I

- **WHILE GOING TO OPEN COMMUNICATION OR WHILE GOING TO BRING LINE CLEAR FOR AN AWAITING TRAIN:**
- **T/B 602 - IT INCLUDES FOLLOWING ITEMS :**
 - a) **AUTHORITY TO PROCEED WITHOUT LINE CLEAR.**
 - b) **AUTHORITY TO PASS THE LSS AT 'ON' CONDITION.**
 - c) **CAUTION ORDER.**

SPEED

- **15 KMPH – DURING DAY OR VIEW AHEAD IS CLEAR.**
- **10 KMPH – DURING NIGHT OR WHEN VIEW AHEAD IS NOT CLEAR.**
- **WP – DURING THICK FOGGY WEATHER, THE TRAIN WILL BE PILOTED BY TWO MEN WITH RED HAND SIGNAL AND DETONATOR.**
- d) **Line clear enquiry message for the waiting train**
- e) **Conditional line clear message with private no. for the engine to return as light engine or with load as the situation demands.**

TOTAL FAILURE OF COMMUNICATION **IN SINGLE LINE**

AFTER HANDING OVER THE ABOVE FORM THE SM WILL DESPATCH THE LIGHT ENGINE/VEHICLES ETC.

AFTER THE LIGHT ENGINE/ VEHICLE ETC HAVE DESPATCHED, NO OTHER TRAIN/ENGINE/SELF PROPELLED VEHICLE/ OTHER VEHICLE SHALL BE ALLOWED TO PROCEED IN THE SAME DIRECTION AND NO OBSTRUCTION SHALL BE ALLOWED BEYOND THE OUTERMOST FACING POINT UNTIL THE LIGHT ENGINE/ VEHICLE RETURNS

NOTE:

However, it doesn't prevent an engineering official to go into the back section on his push trolley, where push trolley do not run on line clear.

TOTAL FAILURE OF COMMUNICATION **IN SINGLE LINE**

DUTIES OF CREW WHILE ON RUN TOWARDS OTHER END STATION: -

- a) **IN THICK AND FOGGY WEATHER IMPAIRING VISIBILITY, TWO MEN WILL BE DEPUTED TO PILOT THE TRAIN. ONE WILL SHOW HAND SIGNAL FROM AN ADEQUATE DISTANCE IN AHEAD OF ENGINE AND 2ND WILL MOVE IN ADVANCE POSITION BEING VIGILANT ENOUGH AND KEEP READY TO PLACE DETONATORS IF REQUIRED.**
- b) **A TUNNEL MUST NOT BE ENTERED UNTIL ITS CLEARANCE HAS BEEN ENSURED BOTH IN DAY AND NIGHT. IF ITS CLEARANCE IS DOUBTFUL, THE ENGINE/VEHICLES SHALL BE PILOTED BY RAILWAY EMPLOYEE EQUIPPED WITH HAND SIGNAL AND DETONATORS. WHILE ENTERING INTO THE TUNNEL, THE HEADLIGHTS, SIDELIGHTS AND TAIL LIGHTS SHALL ALSO BE SWITCHED ON.**

TOTAL FAILURE OF COMMUNICATION **IN SINGLE LINE**

DUTIES OF CREW WHILE ON RUN TOWARDS OTHER END STATION: -

- c) IF AN ENGINE/VEHICLE MEETS IN THE BLOCK SECTION COMING FROM THE OPPOSITE DIRECTION, THE DRIVER/ MOTORMAN/ GUARD/ SM SHALL DECIDE AS TO WHICH STATION. THEY SHOULD PROCEED TAKING INTO CONSIDERATION THE FOLLOWING FACTS: -**
- I. AVAILABILITY OF ROOM AT THE STATION.**
 - II. THE IMPORTANCE OF THE TRAIN.**
 - III. THE DISTANCE OF NEAREST STATION.**
 - IV. GRADIENT.**
 - V. THE PRESENCE OF CATCH/SLIP SIDING ETC.**

TOTAL FAILURE OF COMMUNICATION **IN SINGLE LINE**

- d) BEFORE PROCEEDING, THE ENGINE OR SELF PROPELLED VEHICLE SHALL BE COUPLED (IF POSSIBLE) OTHERWISE THEY SHOULD PROCEED MAINTAINING AN ADEQUATE DISTANCE BETWEEN THEM. IN CASE OF PUSH TROLLEY/ MOTOR TROLLEY/ CYCLE TROLLEY/ MOPED TROLLEY. IT SHALL BE LOADED INTO ENGINE/ DIESEL CAR/ RAIL MOTOR CAR/ EMU RAKE (IF POSSIBLE)**

TOTAL FAILURE OF COMMUNICATION **IN SINGLE LINE**

RECEPTION OF TRAIN : -

ON REACHING NEAR THE NEXT STATION ENGINE/VEHICLE SHALL STOP AT THE FSS AND SHOULD SOUND LONG WHICSTLE TO APPRISE THE STATION STAFF WHO WILL ARRANGE TO RECEIVE IT BY TAKING 'OFF' SIGNAL/ SIGNALS OR OTHERWISE

AFTER THE TRAIN HAS BEEN RECEIVED AT THE STATION T/B 602 WILL BE HANDED OVER TO SM ON DUTY.

ON RECEIVING THE ABOVE MENTIONED PAPER THE SM WILL ARRANGE TO RETURN THE ENGINE/VEHICLE WITH OR WITHOUT TRAIN (IF ANY) AS INSTRUCTED IN FORM.

TOTAL FAILURE OF COMMUNICATION **IN SINGLE LINE**

PHASE II

RETURNING OF LIGHT ENGINE WITH LINE CLEAR (WITH OR WITHOUT LOAD) :

THE SM WILL ISSUE THE FOLLOWING FORMS: -

- **T/G 602 (FOR UP) OR T/H 602 (FOR DN) – CLCT**
- **T/369 (3b) – TO PASS LSS AT ‘ON’**
- **T/409 – CAUTION ORDER, OR
T/A 409 – NIL CAUTION ORDER**
- **T/E 602 - LINE CLEAR ENQUIRY MESSAGE (IF REQUIRED)**
- **T/F 602 – CONDITIONAL LINE CLEAR REPLY MESSAGE.**

TOTAL FAILURE OF COMMUNICATION **IN SINGLE LINE**

- **The SM will hand over the mentioned form to the Driver and dispatch the Engine/Train**
- **On reaching the next Station the Driver of the Train Light Engine or Train will hand over the following forms to SM:**
 - a) T/G 602(UP) or T/H 602(DN)**
 - b) T/E 602 (if required)**
 - c) T/F 602**

TOTAL FAILURE OF COMMUNICATION **IN SINGLE LINE**

IIIrd Phase

- **On getting the relevant paper, the SM will arrange to dispatch the train (or trains) for which line clear is received, by issuing the following papers:-**
 - a) T/G 602(up) or T/H 602(DN)**
 - b) T/369(3b) to pass the LSS at 'ON'**
 - c) T/409 or T/A 409**
 - d) T/E 602 (if required)**
 - e) T/F 602 (if required)**

TOTAL FAILURE OF COMMUNICATION **IN SINGLE LINE**

- **After handling over the above mentioned form the Train shall finally be dispatched. If line clear for more trains has been obtained the 2nd & subsequent train will be dispatched after interval of 30 minutes. In this case the particulars of last train along with its departure time will be endorsed on line clear and also particulars of train would follow it.**

While adopting this procedure, the Guard & Driver should be instructed through T/409 to keep a sharp look out and be prepared to stop the train short of any obstruction

TOTAL FAILURE OF COMMUNICATION IN **SINGLE LINE**

- **Trains will continue to work on this system until any one of the means of communications mentioned earlier is restored by the Competent Authority and when anyone of the means of communication is established the form T/I 602 is duly filled up**

TOTAL FAILURE OF COMMUNICATION IN SINGLE LINE

- **Line clear shall not be obtained or given by means of communication restored until both the SM are satisfied that all trains or engines etc. dispatched from their station had arrived at the other end station. This will be confirmed under exchange of private number. The resumption of normal working will be intimated to the section controller & all particulars of the train operation shall be recorded in TSR & station diary.**



*Thank
you*