

1965
Regulations For Working Single-Line Railways By The Electric Train Tablet System

This document is based on an original that had been updated to 1979. I have formatted the pdf version of the *Regulations* so that it is a close match to the original. However, it is not identical – for example, I have made no attempt to match the pagination of the original.

In the original document the Mis. Forms are included in the body of the document. To simplify formatting I have included them at the start.

Version c

Created March 2003

Minor typos corrected December 2006

Forms Used In Tablet Working

<p style="text-align: right;">Mis. 46</p> <p style="text-align: center;">N.Z.R.</p> <p>..... 19..... <i>Signalman.</i></p> <p>Received Certificate stating that Station is <i>switched in</i> for my train, which is <i>switched out</i> authorised to travel to Station only, as per tablet received.</p> <p>..... <i>Enginedriver.</i></p> <p>Train No. 19.....</p>	<p style="text-align: center;">NEW ZEALAND GOVERNMENT RAILWAYS Mis. 46</p> <p style="text-align: center;">ELECTRIC TRAIN TABLET SYSTEM</p> <p style="text-align: center;">Alteration of Tablet Arrangements—Switch-out Stations</p> <p>..... 19.....</p> <p>To Enginedriver of Train No. Date:.....</p> <p>..... Station is <i>*switched in</i> <i>switched out</i> for your train, which <i>*will</i> <i>will not</i> be signalled there. Your attention is drawn to the tablet now handed to you, which authorises Train No. to run to Station.</p> <p>....., <i>Signalman.</i></p> <p style="text-align: center;"><small>*Delete words not required.</small></p>
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Specimen of Mis. 46 form (see Tablet Regulation 22).

Mis 46

<p style="text-align: right;">Mis. 29</p> <p style="text-align: center;">N.Z.R.</p> <p style="text-align: center;">Pilotman's Ticket</p> <p>No. 19..... Train No. From To Preceding Train No. *has arrived at *left at a.m. p.m. <i>Pilotman.</i></p> <p style="text-align: center;"><small>*Delete words not required.</small></p>	<p style="text-align: center;">NEW ZEALAND GOVERNMENT RAILWAYS Mis. 29</p> <p style="text-align: center;">Pilot Working - Pilotman's Ticket</p> <p style="text-align: right;"><small>(For use in double-line automatic signalling areas and in tablet areas)</small></p> <p>No. 19.....</p> <p>To Enginedriver of Train No. Date:..... 19.....</p> <p>Train No. is hereby authorised to proceed from to, Pilotman following.</p> <p>The preceding train (No.) *has arrived at *left at a.m. p.m. <i>Pilotman.</i></p> <p style="text-align: center;"><small>*Delete words not required.</small></p> <p style="text-align: center;">NOTE: This does not authorise the passing of fixed signals at "Stop".</p>
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Specimen of Mis. 29 form (see Tablet Regulation 33).

Mis 29

Mis 21A

NEW ZEALAND GOVERNMENT RAILWAYS		Mis. 21A
TABLET INSTRUMENT OUT OF ORDER		
LINE CLEAR WORKING		
		Station _____
		/ / 19__
<p>(1) (Telegram) (Station) _____</p> <p style="text-align: right;">a.m. p.m.</p> <p>To _____</p> <p>Tablet failed. Is line clear for No. _____</p> <p style="text-align: center;"><i>Signalman.</i></p> <p>Sent _____ a.m. (Received) _____ p.m.</p>	<p>(3) (Telegram) (Station) _____</p> <p style="text-align: right;">a.m. p.m.</p> <p>To _____</p> <p>No. _____ left.</p> <p style="text-align: center;"><i>Signalman.</i></p> <p>Sent _____ a.m. (Received) _____ p.m.</p>	
<p>(2) (Telegram) (Station) _____</p> <p style="text-align: right;">a.m. p.m.</p> <p>To _____ / / 19__</p> <p>Tablet failed. Yes, line is clear for No. _____</p> <p style="text-align: center;"><i>Signalman.</i></p> <p>Sent _____ a.m. (Received) _____ p.m.</p>	<p>(4) (Telegram) (Station) _____</p> <p style="text-align: right;">a.m. p.m.</p> <p>To _____</p> <p>No. _____ arrived.</p> <p style="text-align: center;"><i>Signalman.</i></p> <p>Sent _____ a.m. (Received) _____ p.m.</p>	
Mis. 21		
New Zealand Government Railways		
ELECTRIC TRAIN TABLET SYSTEM		
TABLET INSTRUMENT OUT OF ORDER		
No. _____		
To Enginedriver of Train No. _____		
Date: _____		
Tablet working not being in operation between _____ (Block letters)		
and _____ I have ob- (Block letters)		
tained "Line Clear" as shown in the attached telegram for Train No. _____ which is hereby authorised to proceed from _____		
_____ to _____ (Block letters) (Block letters)		
<i>Signalman.</i>		
NOTE: This does not authorise the passing of fixed signals at "Stop".		
		<p>(5) (Telegram) (Station) _____</p> <p style="text-align: right;">a.m. p.m.</p> <p>To _____</p> <p>Understand No. _____ arrived.</p> <p style="text-align: center;"><i>Signalman.</i></p> <p>Sent _____ a.m. (Received) _____ p.m.</p> <p>Mis. 21 No. _____ issued to Train No. _____ from _____ to _____</p> <p style="text-align: center;"><i>Signalman.</i></p> <p style="text-align: right;">/ / 19__</p>

Specimen of Mis. 21A (and Mis. 21) form (see Tablet Regulation 32).

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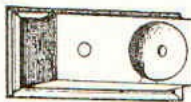

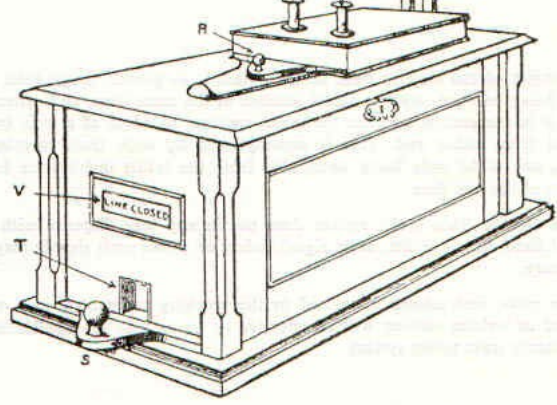
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REGULATIONS FOR WORKING SINGLE-LINE RAILWAYS BY THE ELECTRIC TRAIN TABLE SYSTEM

The object of the electric train tablet system is to prevent more than one train being between any two tablet stations at the same time, and, when no train is in the section between the tablet stations, to admit of a train being started from either end. This is accomplished by each train carrying a tablet, one tablet only being obtainable from the tablet instruments for a section at the one time.

The electric train tablet system does not in any way dispense with the use of fixed, hand, or detonator signals when or where such signals may be necessary.

The rules, instructions contained in the working timetables, and other printed or written notices, will be effective so far as they are applicable to the electric train tablet system.

DESCRIPTION OF APPARATUS	
<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Visual Indications Screen Enlarged</p>  </div> <div style="text-align: center;"> <p>Bell and Relay</p>  </div> </div> <div style="text-align: center; margin-top: 20px;"> <p>Needle Indicator</p>  </div> <div style="text-align: center; margin-top: 20px;">  </div> <p style="text-align: center; margin-top: 10px;">TYER'S AUTOMATIC TABLET APPARATUS WITH VISUAL INDICATORS</p>	<p>The apparatus consists principally of - Top slide, R; Bell-plunger, B; Switch-plunger, C; Bottom slide, S; Slot, T; Needle indicator, I; Visual screen, V, showing three positions - "Line closed," or "Down train approaching" or "Up train approaching," or "Up train on line" or "Down train on line."</p> <p>Top slide R is for the purpose of inserting tablets into the apparatus, and can be withdrawn at will.</p> <p>Bell-plunger B is for the purpose of transmitting all signals on the bells, in accordance with the code contained in Regulation 2.</p> <p>Switch-plunger C is for the purpose of switching the current into the electro-magnets to unlock bottom slide S.</p> <p>Bottom slide S is electrically locked, and cannot be withdrawn without the consent and cooperation of the operator at the other end of the tablet section.</p> <p>Slot T shows the tablets in the cylinder of the apparatus.</p> <p>Needle indicator I displays all outgoing and incoming signals sent on the bell-plunger from either end.</p> <p>When the tablet instruments are not in use the words "Line closed" are shown on the screens, and the indicator-needles are in the vertical position.</p>

1. OPERATION OF TABLET INSTRUMENTS

Method of Signalling

- (a) Let x and y represent the Signalmen at stations X and Y at the ends of a tablet section.
Train is to proceed from X to Y.
 x gives y the *Is Line Clear?* signal.

y replies by repeating the signal.

x holds down bell-plunger B, which moves the indicator-needle on the instrument at Y and rings the bell at that station; y then holds down switch-plunger C with his left hand and withdraws bottom slide S to the half-way position with his right hand, thereby bringing the "Up Train Approaching" or "Down Train Approaching" indication in view on screen V; y will then hold down bell-plunger B for a few seconds, during which period x , holding down on switch-plunger C with his left hand, will withdraw bottom slide S to its full extent with his right hand, thereby obtaining a tablet and bringing the "Up Train on Line" or "Down Train on Line" indication in view on screen V.

x will remove the tablet from the recess in the slide for delivery to the Enginedriver.
When the train leaves, x will give the *Train Departure* signal to y .

As soon as the train arrives at Y, y will withdraw top slide R, insert the tablet, and push the slide home; the tablet falling into the instrument unlocks it, and y can then push in bottom slide S, restoring screen V to "Line Closed" indication; y will then give x the *Train Arrival* signal on bell-plunger B, holding down on the last beat, which permits x , who, on receipt of the signal, has depressed switch-plunger C, to push home bottom slide S, restoring screen V to "Line Closed" indication.

If a tablet is taken out for shunting or for the purpose of entering an intermediate siding, and is returned to the station whence it was issued, the tablet is to be restored to the instrument in like manner.

All signals must be given in accordance with the code.

The normal indication on the screens of the instruments at X and Y is "Line Closed".

Tablet and Telephone Switch

{b) When a telephone is operated over the same wires as are the tablet instruments, a switch is provided. When a Signalman wishes to speak on the telephone he must give one beat on the tablet bell-plunger and, when this signal is acknowledged, move the switch to the Up or Down telephone position, as required. The Signalman receiving the signal, after acknowledging it, must immediately do likewise.

When speaking is finished the switches must be at once restored to their normal position.

Repetition and Acknowledgment of Signals

(c) Except where instructions are issued to the contrary, all signals must be acknowledged by repeating them, and a signal must not be considered as complete and understood until it has been correctly repeated to the tablet station from which it was received.

When a signal is not acknowledged it must be given again at short intervals and, if necessary, the telephone must be used.

Method of Operating Instruments

(d) (i) The tablet instruments must be operated by the Signalman.
Cadets, Junior Porters, or casual employees must not operate tablet instruments without the written

authority of the District Traffic Manager.

(ii) Private signals of any kind must not be sent by the use of the bell-plunger.

(iii) All signals must be given slowly and distinctly, the bell-plunger being allowed to work the full length of its stroke between each beat; the instrument must not be subjected to violent usage, and all movements must be steady, and distinct one from the other. Except as provided in Tablet Regulation 22(b), a Signaller must not work with two stations at the same time.

(iv) As it is essential that tablets be free from dirt and grit a Signaller must wipe the tablets on both sides before placing them in the slide.

(v) The time at which signals are given and received and the numbers on the tablets must be immediately entered in, the train register in ink, *Speak on Telephone* signals excepted.

(vi) If a Signaller receives a signal which he does not understand he must immediately stop any train from entering the section and reply by giving the *Repeat* signal.

(vii) After inserting a tablet into the top slide of an instrument the Signaller, before attempting to push home the lower slide, must listen and be sure that the tablet has dropped properly into the instrument. If, when a tablet is inserted in the top slide and the slide pushed home, the tablet is not heard to drop into the instrument, the slide must be moved sharply backward and forward until the tablet drops.

If, when the lower slide is pushed in, a signal cannot be given, the slide must on no account be pulled out again but must be pushed hard home, which may result in the electric current being restored.

The lower slide must always be pushed home, or pulled fully out to the required position, as the case may be.

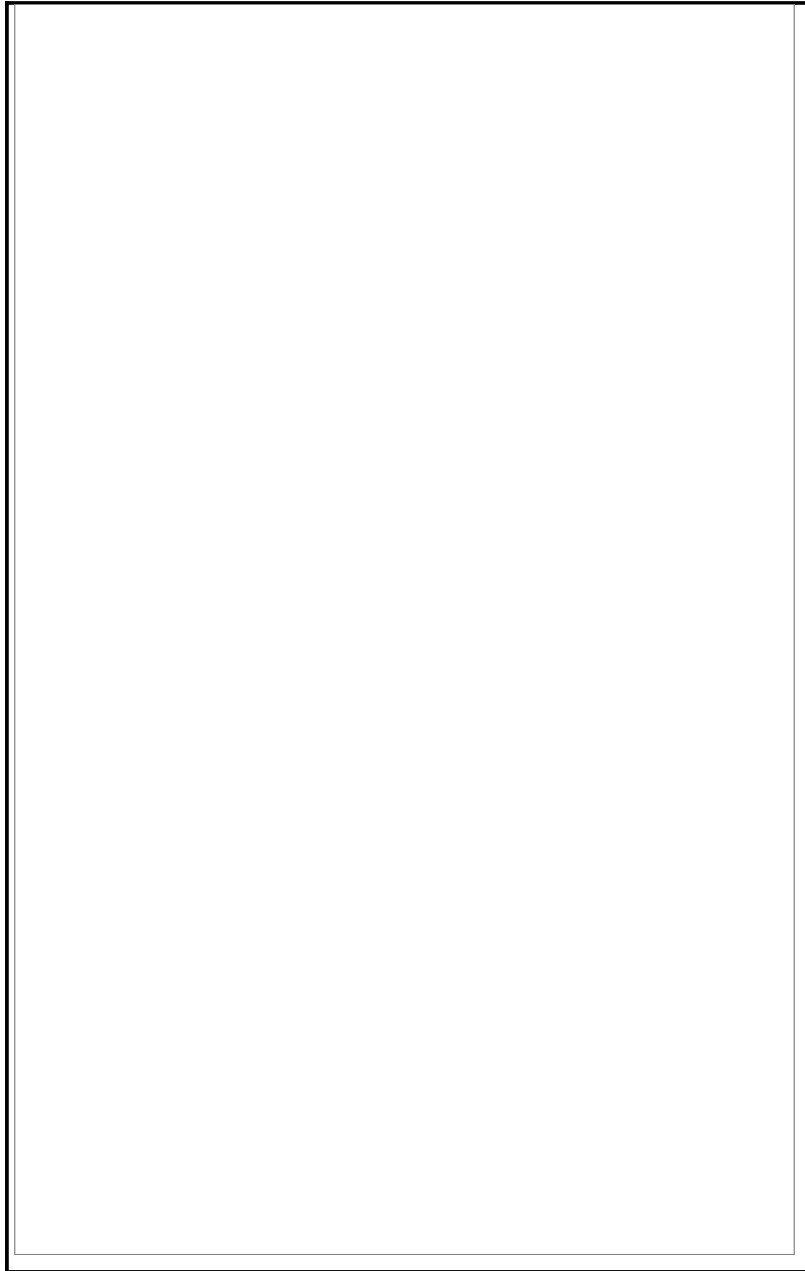
(viii) Failures of tablet instruments have occurred owing to the lower slides of the instruments at both ends of the section becoming locked in the half-way position, this being brought about in the following manner:

After *x*'s slide is withdrawn to the half-way position *x* holds down bell-plunger B to allow *y* to get bottom slide S out the whole way to obtain a tablet, but just as *y* is in the act of withdrawing the slide, *x* releases the bell-plunger, or *y* releases switch-plunger C, which causes *y*'s slide to be locked in the half-way position, preventing his obtaining a tablet and locking up both instruments.

Operators must be particularly careful when holding down the bell-plunger to allow sufficient time for the operator at the other end of the section to properly withdraw the slide (bell-plunger should be held down while counting 10); also, operators, when holding down the switch-plunger to withdraw slide, must be careful to hold it tightly down until the slide is properly drawn out and the indicator-needle assumes a vertical position.

(ix) Except when authorised to do so by working timetable or train advice, a Signaller must not go off duty at the close of business for the day until all tablet instruments at the station are closed.

2. CODE OF BELL SIGNALS FOR TABLET WORKING



3. USE OF TABLETS AND FIXED SIGNALS

Custody and Transference of Tablet

- (a) (i) Except in accordance with Tablet Regulation 23, the Signaller is the sole member authorised to take a tablet from or place it in an instrument, or to receive a tablet from or deliver it to an Enginedriver: Provided, however, that the Signaller may appoint a member of the station staff, duly qualified to act, to deliver the tablet to or receive it from an Enginedriver. The member so appointed shall be held responsible for the safe custody of the

tablet given to him, and for the prompt and proper discharge of the duty assigned to him.

- (b) (ii) Each tablet has engraved on it the names of the tablet stations at both ends of the section to which it applies, and the Signalman must ensure that the correct tablet for the section is delivered to the Enginedriver.
- (c) When a tablet is received on a locomotive the names of the stations marked on the tablet must be called and repeated between the Enginedriver and the Locomotive Assistant. The Enginedriver must satisfy himself that the correct tablet has been received.
- (d) Enginedrivers must be particularly careful not to take the tablet beyond the station to which it should be delivered.
- (e) (iii) The tablet must be delivered in the correct sling to the Enginedriver or Locomotive Assistant, and while in the charge of the Enginedriver must be carried in a sling and kept in the place provided for the purpose.
- (f) (iv) When two or more locomotives are attached to a train the tablet must be carried on the leading locomotive. When two locomotives are attached in the front of a train the Enginedriver or Locomotive Assistant of the second locomotive must observe the exchange of tablets, and be prepared for any action that may be necessary.
- (g) (v) When locomotives on trains are to change over at a crossing station and one Enginedriver leaves his train outside the station limits and proceeds to the station with his locomotive, he must deliver the tablet to the member of the station staff deputed to receive it, who must hand it to the Enginedriver who is to bring the train into the station, authorising his locomotive to proceed outside the station limits for that purpose.
- (h) Except in accordance with Tablet Regulations 27 and 28, a tablet must not be transferred from one train to another without being passed through the instrument and dealt with in accordance with these regulations.
- (i) (vi) Damaged tablet slings must be immediately sent to the Lineman or Signal Maintainer.

Train Not to Start Without Tablet, and Until Correct Signals are Exhibited

(b) (i) Except in accordance with the tablet regulations (see indexed references on pages 279, 279a and 280), a train must not leave a tablet station without the tablet for that section of the line over which it is about to run.

(ii) After receiving the tablet the Enginedriver must not start the train until all the necessary fixed signals have been exhibited. Except where provided otherwise in Tablet Regulations 3 (a).(v), 27, 28, 29, 30, and 36, he must keep the tablet under his own charge until the train reaches the end of the section, when he must give up to the Signalman or other employee authorised to receive it.

The tablet is an indication that the line is clear only to the Home signal (or Outer Home signal where provided) applicable to the train at the station in advance, and Engmedrivers must regulate the speed of their trains accordingly.

Working Fixed Signals

(c) **Where a Starting signal or Advanced Starting signal is provided** it must not be set at "Proceed" for a train until a tablet has been obtained for the train, and, where an automatic tablet exchanger is to be used, until the tablet is set on the exchanger.

Where a Starting signal or Advanced Starting signal is not provided the Home Signal must not be set at "Proceed" for a train not required to stop until a tablet has been obtained for the

train, and, where an automatic tablet exchanger is to be used, until the tablet is set on the exchanger.

Reducing Speed to Exchange Tablets

(d) (i) Except where automatic tablet exchangers are in use, Engine-drivers must reduce the speed of their trains to not more than 25 kilometres per hour when passing tablet stations at which they are scheduled not to stop, to admit of their safely delivering and receiving the tablets. The proper manner of holding the tablet sling for exchanging by hand is between the fingers and thumb and not by gripping it in the hand. Tablets must be exchanged a safe distance beyond the station verandah, so that the locomotive member making the exchange will not be endangered.

(ii) Where automatic tablet exchangers are in use the speed of trains or railcars must not exceed 70 kilometres per hour while tablets are being exchanged.

4. LINE CLEAR, OR GIVING PERMISSION FOR A TRAIN TO APPROACH

(a) Unless he knows or has reason to believe otherwise, a Signaller will consider the line clear and may give permission for trains to approach from either or both directions to the Home signals or Outer Home signals where provided.

(b) A Signaller who cannot give permission for a train to approach when the Signaller in the rear gives the *Is Line Clear?* signal must not acknowledge the signal but must give the *Obstruction Danger* signal.

When the Signaller to whom the *Is Line Clear?* signal has been given is prepared to receive the train, he must give the *Obstruction Removed* signal, and trains must then be bell-signalled in accordance with these regulations.

5. "TRAIN DEPARTURE" SIGNAL

The *Train Departure* signal must be given on the departure of a train from a station. (For exception, see Tablet Regulation 18(d) .)

6. "TRAIN ARRIVAL" SIGNAL

The *Train Arrival* signal must be given when a train arrives at a station and the Signaller has seen that the whole of the train is complete and is under the protection of the Home signal or Outer Home signal where provided.

7. "CANCELLING" SIGNAL

The *Cancelling* signal must be used only in instances where a train has been signalled to the tablet station in advance and it is found that the train will not proceed and the tablet is not required. It must not be used unless the *Is Line Clear?* or *Train Departure* signal has been accepted or acknowledged.

When it is necessary to cancel the *Is Line Clear?* or *Train Departure* signal the Signaller must replace the tablet in the instrument, close the lower slide, and send the *Cancelling* signal to the tablet station in advance, holding down on the last beat to enable the Signaller there to close his instrument. An entry must be made in the train registers recording the cancellation of the signal.

8. "OBSTRUCTION DANGER" SIGNAL

(a) If it should be necessary to stop an approaching train at the tablet station in the rear the *Obstruction Danger* signal must be given to that station. The Signaller must immediately exhibit a *Danger* signal, and not allow the train to proceed until he has received, from the tablet station in advance, the *Obstruction Removed* signal, and until the necessary signals have been given and acknowledged.

(b) If necessary the *Obstruction Danger* signal must be given in both directions.

(c) The Signaller giving the *Obstruction Danger* signal must also have signals placed and maintained at "Stop" to protect the obstruction.

(d) If the Signaller receives the *Obstruction Danger* signal before the departure of the train for which the *Is Line Clear?* signal has been accepted by the Signaller at the tablet station in advance, he must at once replace the tablet and close up the instrument, and then advise the Signaller at that station by giving the *Cancelling* signal.

(e) If the Signaller receives the *Obstruction Danger* signal after the train has left he must not repeat the signal, but must advise the Signaller at the tablet station in advance accordingly.

9. "RELEASE TABLET FOR SHUNTING" SIGNAL, AND SHUNTING OUTSIDE STATION LIMITS WITHOUT TABLET

(a) To obtain a tablet when required for shunting outside station limits the Signaller must give the *Release Tablet for Shunting* signal to the next tablet station, and the Signaller there, provided he is in a position to accept such signal, must give permission for a tablet to be withdrawn. The tablet must be delivered to the Enginedriver.

(b) When the shunting is completed, and the shunt has returned to within station limits, and the line is again clear, the tablet must be replaced in the instrument, the *Shunting Completed-Tablet Replaced* signal given to the next tablet station, and the instruments closed.

(c) If, owing to his requiring to send a train into the section, a Signaller cannot give permission for a tablet to be withdrawn, he must reply to the *Release Tablet for Shunting* signal by giving the *Obstruction Danger* signal, and, as soon as that signal has been acknowledged, give the *Is Line Clear?* signal.

(d) Permission must not be given for a train to approach from the opposite end of the section when there is any obstruction on the single line outside the station limits at that end of the station.

(e) Except as shown below, a train must not foul the single line outside the station limits unless the Enginedriver is in possession of the tablet for that section.

Whenever possible a tablet must be used when shunting outside station limits. When a tablet cannot be obtained an Enginedriver may proceed with his train or engine for a distance of not more than 400m outside the station limits, at either end of a tablet station, when the Signaller instructs him to do so; but the Signaller must not give such instructions-

- (i) When permission has been given for a train or engine to enter the other end of the section; or
- (ii) When a tablet or bank-engine key has been issued by the Signaller to a train or engine which is to return to the station;

or

- (iii) When pilot working is in operation.

The instruction to proceed outside the station limits for shunting without a tablet must be given to the Enginedriver by the Signaller personally, failing which it must be issued in writing, timed, dated, and signed by the Signaller.

(r) At stations where Shunting limit Boards are provided on the main line, these mark the station limits for shunting purposes.

10. "TRAIN PASSED WITHOUT TAIL LAMP" SIGNAL

(a) If a train should pass with its tail lamp missing the Signaller must give the *Train Passed Without Tail Lamp* signal to the tablet station on each side of him, but must not place the tablet in the instrument.

The Signaller at the tablet station in advance must stop the approaching train and ascertain from the Guard whether his train is complete.

If the train is complete the Signaller must give the *Train Arrival* signal to the Signaller at the tablet station from which the *Train Passed Without Tail Lamp* signal was given, who must then place the tablet in the instrument and give the *Train Arrival* signal to the station in the rear.

If the train is not complete the provisions of Tablet Regulation 29 must be complied with.

(b) If a train should pass with its tail light out when it should be burning but the Signaller can plainly see the lamp and is satisfied that the train is complete, he must give the *Train Arrival* signal to the tablet station in the rear and the *Train Passed Without Tail Lamp* signal to the tablet station in advance, and telephone the Signaller at the tablet station in advance stating that the lamp is not missing, but is out. In such instances the Signaller who gave the signal should not stop trains going in the opposite direction, but the Signaller at the station in advance must stop the train on which the tail light is out and inform the Guard of the circumstances.

11. "STOP AND EXAMINE TRAIN" SIGNAL

(a) If, during the passage of a train, a Signaller should observe signals of alarm by a passenger, goods falling off a vehicle, a vehicle on fire, a hot axle-box, or other mishap, he must try to stop the train. If unable to do so he must give the *Stop and Examine Train* signal to the tablet station in advance and telephone the Signaller there stating the reason for giving the signal.

The Signaller at the station in advance must stop and examine the train and take such action

as may be necessary.

12. "TRAIN DIVIDED" SIGNAL

(a) If, during the passage of a train a Signaller should observe that the train has become divided and is in two or more parts, he must give the *Train Divided* signal to the Signaller at the tablet station in advance.

(b) If a train should become divided when starting, and the Enginedriver takes forward the first portion leaving the rear portion stationary, the *Stop and Examine Train* signal and NOT the *Train Divided* signal must be given to the Signaller at the tablet station in advance.

13. "VEHICLES RUNNING AWAY" SIGNAL

(a) If a Signaller becomes aware that an engine or vehicle is running away on the main line he must immediately advise the Signaller at the tablet station toward which the engine or vehicle is travelling, either by using the telephone or by giving the *Obstruction Danger* signal and immediately this is acknowledged, the *Vehicles Running Away* signal.

The Signaller receiving the message or signals must stop any train about to proceed on the same line and take any other protective measures that may be practicable, such as turning the runaway vehicles on to another line or into a siding. If he is unable to take suitable protective measures he must pass the information on in the same way to the next tablet station. He must also place detonators on the rail.

(b) A Signaller receiving these signals must not allow a train, other than a relief train, to enter the section until he is satisfied that the line on which the runaway train or vehicles have passed is not obstructed. Unless it is apparent that immediate pursuit of the vehicles will avert danger, a relief train must not be allowed to enter the section until it has been ascertained that the runaway train or vehicles have been stopped and secured. A relief train going to render assistance must be dealt with in accordance with Tablet Regulation 27.

15. "ENGINE ASSISTING" SIGNAL

This signal must be given when a train is assisted by an engine which is to run through the section. The train must be signalled in the usual manner by the *Train Departure* signal; immediately after the train has entered the section the *Engine Assisting In Front* or *Engine Assisting In Rear* signal must be given.

The *Train Arrival* signal must not be given until the whole of the train, including the assisting engine, has arrived and is under the protection of the Home signal or Outer Home signal, where provided.

The Signaller at the tablet station in advance must, if necessary be informed of the position of the assisting engine.

16. "REPEAT" SIGNAL

This signal must be given when a signal is not understood and it is necessary to have the signal repeated.

17. "ERROR" SIGNAL

This signal is to countermand a signal previously given.

18. USE OF BANK-ENGINE KEY ON ELECTRIC TRAIN TABLET SECTIONS

(a) **Bank-engine Key** -To facilitate the working of trains over steep gradients where it is necessary for an engine to assist a train in the rear but not to run the entire length of the tablet section, the engine in the rear must carry a bank-engine key (as described below) as authority to return to the station from which the key was received.

(b) **Description of Bank-engine Key** -Except when installed for other specific purposes the bank-engine key must be used only for an engine assisting a train in the rear to an authorised metrage and in accordance with these instructions.

At the stations concerned, the tablet instrument is controlled by a bank-engine key which, when turned and withdrawn, disconnects the electric circuit of the tablet instruments so that bell signals cannot be exchanged nor a tablet obtained until the key has been replaced in position. A plate on the key is engraved with: "Bank-engine Key"; the name of the station from which the bank engine starts; and the metrage to which the bank engine is authorised to run before returning.

(c) **Engine Assisting Right Through the Section** -If an engine assisting a train in the rear is to run the entire length of the tablet section the bank-engine key must not be withdrawn from the instrument.

(d) **Departure of Bank Engine** -If an engine assisting a train in the rear is not to travel the entire length of the tablet section, the train must be signalled in the usual manner and a tablet obtained. When the train is ready to start, the Signaller at the tablet station in advance must be advised of the probable time of departure of the train and the *Return Bank Engine* signal given. After the signal has been acknowledged the bank-engine key must be withdrawn and taken, together with the tablet, to the Enginedriver of the leading engine, to whom the tablet will be delivered and the bank-engine key shown; he must be verbally informed that the key will be handed to the Enginedriver of the bank engine.

The bank-engine key must then be handed to the Enginedriver of the bank engine.

The Enginedriver of the bank engine must signal to the Enginedriver of the leading engine that the bank-engine key is in his possession by sounding three whistles -viz. one long, one short, one long; until such signal is received the Enginedriver of the leading engine must not start the train. When the train starts the Signaller at the tablet station in advance must be promptly advised by telephone.

(e) **Bank Engine to Return at Once From Authorised Metrage**-On arrival of the bank engine at the metrage to which it is authorised to run it must return at once to the station from which it started, the bank-engine key being handed to the Signaller who must at once replace it in the proper instrument and give the *Bank Engine Has Returned* signal.

(f) **Train to be Divided When Bank Engine Fails-** If a bank engine should fail when assisting a train, and the train engine is unable to take the whole of the train forward, the Enginedriver of the bank engine must send his Locomotive Assistant to the Enginedriver of the train engine with a completed Mis 39 form.

The necessary protection must be maintained until the engine returns for the remainder of the train.

The bank engine and key must be taken to the station from which the bank engine started.

(g) **Failure of Bank Engine-**If a bank engine should fail after it has been detached from a train the Enginedriver must arrange for protection in both front and rear. The Locomotive Assistant must take the bank-engine key and the Mis 39 undertaking to the tablet station from which assistance can more readily be obtained, and inform the Signalman, who will advise the Officer in Charge, who will arrange for a relief engine.

Before proceeding into the obstructed section the Enginedriver of the relief engine must be handed the Mis. 39 and be in possession of the bank-engine key, which must be shown to the Officer in Charge and the Signalman before leaving. The Locomotive Assistant must accompany the relief engine to the disabled engine.

The Locomotive Assistant of the disabled engine must not allow the key to pass out of his possession until he hands it to the Enginedriver of the relief engine, and the Enginedriver of the relief engine must not allow it to pass out of his possession until the disabled engine has been removed from the section and the line is clear.

A disabled bank engine must be taken to the station from which it started.

(h) **Lost or Damaged Bank-engine Key-**If a bank-engine key should be lost or damaged and the bank engine has returned, the Lineman or Signal Maintainer, if available, may cut out the bank-engine-key contacts in the presence of the Officer in Charge and the Signalman and tablet working without the use of the bank-engine key may then be arranged.

If the Lineman or Signal Maintainer is not available pilot working must be instituted and continued until the Lineman or Signal Maintainer, in the presence of the Officer in Charge, the Signalman, and the Pilotman, replaces the bank-engine key or cuts out the bank-engine-key contacts. Pilot working must be cancelled before the key is replaced or the contacts cut out.

Bank-engine-key working must remain suspended until the bank-engine key has been placed in the instrument by the Lineman or Signal Maintainer in the presence of the Officer in Charge, the Signalman, and, if appointed, the Pilotman.

A substitute key can be provided only after arrangements have been made between the District Traffic Manager and the District Engineer.

If the Lineman or Signal Maintainer takes the key away for repairs he must give the Signalman a receipt for it in the train register.

A record of all circumstances in connection with the loss of or damage to a bank-engine key must be made in the train register and signed by the Signalman and the Lineman or Signal Maintainer.

19 "TESTING" SIGNAL

This signal must be used by the Signal and Electrical Inspector's staff, with the permission of the Signalman, when testing the instruments; also by the Signalman in accordance with Tablet Regulation 22.

This signal must not be used unless the section is clear.

20. SUSPENSION OF TABLET WORKING FOR CERTAIN TRAINS

(a) **Authority to Run Train Without Tablet and Without Being Signalled** -To meet special conditions trains may be run over certain sections of the line with tablet working suspended, under the authority of the Officer Controlling Train-running.

When tablet working is suspended at a station in accordance with this regulation the use of fixed signals in connection with the train or trains concerned is also suspended at that station unless otherwise provided in the working timetable or train advice.

(b) **Officer in Charge to Certify Line Secure**-The Officer in Charge at each station where tablet working is suspended for any train must certify by T.R. telegram to the Officer Controlling Train-running, after the departure of the last train for which tablet working was in operation that-

- (i) The main line points have been examined personally and are locked in their normal position;
- (ii) The keys are secured in their appointed place;
- (iii) Everything is safe for the passage of trains through the station.

Certificate to this effect must be given by the code word "Security" followed by the number of the train or trains to be run without tablet (e.g., "Security No.161" or "Security No.161, W3 and No.163" as the case may be).

After having dispatched a "Security" telegram in respect of any train or trains authorised to run without tablet the Officer in Charge shall not again operate the tablet instruments, the main line points or permit any fouling of, or obstruction on, the main line within the fixed signals, without first obtaining telegraphic advice from the Officer Controlling Train- running, that the train or trains authorised to run without tablet have arrived at their destination or at such intermediate station as shall be decided upon, or unless the obstruction is protected.

(c) **Authority to Dispatch Trains**-A train authorised to run without tablet over a specified portion of its run must not be permitted to enter the area in which tablet working is suspended until the Officer in Charge at the station at the entrance to such area has been authorised by the Officer Controlling Train-running to dispatch the train. Authority to dispatch the train will be conveyed by telegraphic train advice employing the code word "Safeall" followed by the number of the train, the section over which the authority is available and the names of the stations at which the train will not be signalled (e.g., "Safeall No.161 Helensville to Wellsford. No. 161 will not be signalled at Kaukapakapa, Tahekeroa, and Kaipara Flats").

Where a train is authorised to run without tablet over a specified portion of its run but is to be signalled at one or more intermediate stations, each such intermediate station is to be treated as the beginning of another section and a separate "Safeall" train advice must be issued for each such section, thus if No.161 is authorised to run from Helensville to Whangarei without tablet but is to be signalled at Wellsford and Maungaturoto, separate "Safeall" authorities must be issued for the Helensville-Wellsford section at Helensville, the Wellsford-Maungaturoto section at Wellsford, and the Maungaturoto-Whangarei section at Maungaturoto.

The Enginedriver of each such train must be supplied with a copy of each "Safeall" train advice which, in each case, will be his authority to run without tablet and without being signalled between the stations specified. NOTE: **This does not authorise enginedrivers to pass the fixed signals in the "Stop" position at the first and last stations covered by the "Safeall" train advice.**

The "Safeall" authority must not be given unless the appropriate certificate or "Security" telegrams have been duly received by the Officer Controlling Train-running. Provided, however,

that if the Officer Controlling Train-running does not receive the required messages he may authorise the train to proceed, after the Enginedriver has been instructed to examine the points before passing over them at the station in respect of which the "Security" telegram was not received, and to take such other measures as may be necessary in the circumstances.

(d) **Fixed Signals** -When it is provided in the working timetable or train advice that any specified train will run without tablet on certain portions or the whole of its journey, the fixed-signal lights at the stations at which the train will not be signalled must be extinguished for the passage of the train, and the Enginedriver may pass the fixed signals at these stations at "Stop" unless there is a fixed-signal light or a Danger hand signal against him.

At switch-out stations where such trains are run after sunset, the fixed- signal lights must not be extinguished, and Enginedrivers must act according to the indications of the signals.

(e) **Speed Over Facing Points**-Enginedrivers of trains scheduled to run without tablet must reduce the speed of their trains to 15 kilometres per hour while passing over facing points at stations at which the trains are authorised to pass fixed signals at "Stop" and must be alert for signals when approaching stations and signal boxes.

(f) **Stopping a Non-signalled Train**-If it should become necessary to stop a train scheduled to run without tablet, hand signals must be exhibited in addition to the fixed signals, where provided; in addition, two detonators 10 metres apart, must be placed on each rail at a sufficient distance from the signal to warn the Enginedriver to be on the alert for a signal indication. At night, the fixed-signal lamps must be lighted.

(g) **Guard to Certify Line Secure**-The Officer Controlling Train- running must obtain from the crew of each train run without tablet, a T .R. telegram signed by the Guard, or in the case of a light locomotive by the Enginedriver, certifying that either;

(A) The train has not shunted en route at stations at which tablet working

was not in operation (e.g. "No 58 did not shunt at stations at which tablet working was not in operation between Whangarei and Maungaturoto ...Guard No.58") or

(B) At each station at which signals were suspended and where shunting movements involving the operation of the main line points were carried out:

(i) The points have been examined personally and are locked in their normal position;

(ii) The keys are secured in their appointed place;

(iii) Everything is safe for the passage of trains through the stations concerned.

Certificate in respect of "A", must be given from the station at which each "Safeall" section terminates or from such other station as may be arranged by the Officer Controlling Train-running.

Certificate in respect of "B" must be given by telephone from the station at which the shunting was carried out or from such other place as may be arranged by the Officer Controlling Train-running, using the code word "Security" followed by the name of the station at which the train shunted, together with the number of the train (e.g., "Security WaiotiraG. Guard No. 58")

(h) **Altering of Arrangements** -Any train advices or instructions altering the arrangement under which trains are being run without tablet must be acknowledged by all staff concerned before the altered arrangement becomes operative.

(i) **Safeguarding Movements of Other Trains** -When tablet working is suspended for certain trains. it must not be resumed, and a train running under tablet must not be dispatched on any portion of the line over which a train is authorised to run without tablet until the last train so authorised has arrived at the end of the section for which tablet working is suspended or at a point fixed under special conditions by the Officer Controlling Train-running.

The Signaller at the starting station of the next train running under tablet, or at the station from

which the next train commences to run under tablet, as the case may be, is responsible for ensuring, before the next train is dispatched, that the train running without tablet has arrived at the end of the section for which tablet working was suspended, or at the point fixed by the Officer Controlling Train-running. He must not operate the tablet instruments until he has received telegraphic advice of the arrival of the train from the Train Control Operator (or the Officer Controlling Train-running, where train control is not in operation).

(j) When a train running under tablet is delayed and encroaches on the time of a train which is authorised to run without tablet, tablet working must remain in operation for both trains until the train running under tablet has reached its destination or has crossed the train which has authority to run without tablet. From the crossing station onward the last-mentioned train must run without tablet, as originally instructed.

(k) If pilot working is in operation over any portion of the line over which trains are to run without tablet, all such trains, when traversing the section concerned, must be accompanied by the Pilotman or a pilot ticket issued in accordance with Regulation 33, unless otherwise instructed by the Officer Controlling Train-running.

(l) **Trains Setting Back** If necessary, a train running under the provisions of this regulation may, with the concurrence of the Guard, be set back within the section covered by the "Safeall " train advice, provided the leading vehicle in the direction of travel when setting back does not encroach within 600 metres of the Home signal (or Outer Home signal where provided) at the station at the commencement of the section covered by the "Safeall " train advice.

21. SIGNALMAN NOT IN ATTENDANCE TO RELEASE TABLET: FAILURE OF BOTH TABLET AND COMMUNICATION

(a) When a Signaller is unable to get into communication with another Signaller whose permission is required for the withdrawal of a tablet, the Signaller requiring the tablet must immediately apply to the Officer Controlling Train-running for instructions.

The Officer Controlling Train-running, after taking such safeguards as he considers necessary, and provided no opposing train is at or approaching the station concerned, may authorise the train to run without tablet to the station for which the tablet was required, and, if necessary, he may further direct that an employee be sent on the train to open and take charge of the station, or to act as may be otherwise instructed. The authority for a train to run Without tablet must be given by train advice, a copy being supplied to the Enginedriver and the Guard.

In such circumstances, when the train has cleared the section covered by the train advice, the tablet operator brought on duty at the station in advance must telegraph the Officer Controlling Train-running and also the Signaller at the station in the rear as follows: "No... arrived".

(b) If difficulty or delay is experienced in communicating with the Officer Controlling Train-running, or if he should decide not to authorise the train to run without tablet, the following procedure must be adopted :

(i) If the inability to obtain a tablet is apparently due to a failure of communication the Officers in Charge at both ends of the section must independently arrange for pilot working, and the employees selected at both ends must proceed along the line until they meet, when they must go together to the nearer or more convenient end of the section. The employee who returns to the station from which he started must return all pilot- working forms to the Officer in Charge who issued them, and the latter must at once cancel them by writing the word "Cancelled" across them. The other employee must hand one form to the Officer in Charge and one to the Signaller, and

act as Pilotman in accordance with Tablet Regulation 33.

(ii) If the inability to obtain a tablet is apparently due to the failure of the Signaller to come on duty, the Officer in Charge at the station requiring the tablet must dispatch a Tablet Operator along the line to the tablet station in advance without appointing him as Pilotman.

If he goes through the section without meeting a Tablet Operator from the station in advance he must, if no one is on duty there and the Officer in Charge or Signaller cannot quickly be found, enter the office (breaking in if necessary) and commence tablet working, continuing in charge until relieved.

If communication is established before the Tablet Operator reaches the station in advance tablet working may be commenced as soon as the safety of this Operator has been secured.

If the Tablet Operator, whilst travelling through the section, meets an employee holding pilot-working forms from the station in advance and is advised that communication has failed, both men must return to the station at which the tablet is required and the institution of pilot working must be completed in accordance with Tablet Regulation 33.

If the Tablet Operator, upon arrival at the station in advance, finds that communication has failed and tablet working cannot be commenced, immediate arrangements must be made to institute pilot working.

22. OPENING, CLOSING, AND TESTING SWITCH-OUT STATIONS

Signalmen must see that all slides are properly home before commencing to switch In or Out; they must also use the telephone as directed, so that they may be satisfied that one part of an operation has been completed before commencing another part.

The following procedure must be adopted when a station is switching In or Out:

Let y be a switch-out tablet station situated between two tablet stations X and Z (X being the station toward which "UP" trains run from Y), and let x , y , and z be the Signalmen at these stations.

(a) **Switching In** - Before attempting to switch In y must ascertain by telephone from x and z whether there are any trains in the section or tablets out of the instruments. He must also advise the Train Control Operator that he is about to switch In.

When the section is clear and all tablets have been restored to the instruments y must replace the signals to "Stop", obtain the switch key from the signal levers, and insert it in the intermediate switch, turning the key as far as it will go; y must then advise x and z by telephone that he is ready to switch In; x and z must each insert the switch key in the terminal switch, depress the small plunger on the right-hand side of the switch, and turn the key, when the indicator will change from "Out" to "In"; x and z must each then hold down the bell-plunger of the intermediate instrument for several seconds, during which period y must fully turn the key in the intermediate switch, when the indicator will change from "Out" to "In"; y must then inform x and z by telephone that he has switched In; y must then give the *Opening* signal in turn to x and z and must receive the acknowledgment from each- (x and z must ensure that the *Opening* signal is received and acknowledged on the correct instrument); x and z must each then remove the switch key from the terminal switch.

(b) **Switching Out** - Before attempting to switch Out y must inform the Train Control Operator that he is about to switch Out. To switch Out y must give the *Closing* signal in turn to x and z . If they are prepared to allow y to Switch Out x and z must advise y accordingly by repeating the

Closing signal, but, if they are not so prepared, they must acknowledge the signal by giving one beat.

Until *x* and *z* have repeated the *Closing* signal, *y* must not attempt to switch Out, but after permission has been received *y* must give one beat simultaneously to *x* and *z*, who will each immediately acknowledge by holding down the bell-plunger of the intermediate instrument for several seconds, during which period *y* must turn the switch key in the intermediate switch, when the indicator will change from "In" to "Out"; *y* must then inform *x* and *Z* by telephone that he has switched Out. After placing the key in the terminal switch *x* and *z* must each depress the small plunger on the right-hand side of the switch and turn the key, when the indicator will change from "In" to "Out"; *x* must then give the *Testing* signal to *z*, which must be acknowledged; *x* and *z* must then remove the keys from the terminal switches.

When the through connection (X-Z) is completed, *x* and *z* *must* each inform *y* accordingly by telephone. *y* must then take the switch key from the intermediate switch, switch Out the signal box in accordance with Tablet Regulation 39, and advise the Train Control Operator that the station is switched Out.

(c) **Switch Keys**- Switch keys at X and Z must be hung in the appointed place after the operation of switching In or Out has been completed-

(d) **Times of Opening and Closing Stations** -Directions as to the time of switching tablet stations In or Out are shown in the working timetable or train advices and may be varied by the Officer Controlling Train-running.

(e) **Station Unable to Switch Out** - If, owing to a failure of the instrument or other cause, trains are being worked on one or both sides of the intermediate station by Line Clear or Pilotman, or if the tablet instruments cannot be switched Out owing to a failure of the instruments, the intermediate station must remain open for all trains for which the station on each side is open.

(f) **Station Opened or Closed at an Unusual Time: Mis. 46 Advice** - When a station is to be switched In or Out before, or to remain switched In after, the time or train specified in the working timetable or train advice. the necessary instructions will be issued by the Officer Controlling Train-running. Before leaving the station on either side of the switch-out station the Enginedriver of a train which is to proceed through the section must be supplied with a Mis 46 advice notifying him that the tablet handed to him is for the station specified in the advice.

An Enginedriver receiving a Mis. 46 advice must acknowledge receipt thereof by signing in the place provided on the butt.

Trains which are scheduled not to stop must be stopped for this purpose.

(g) **Station Switching Out When Trains are Running Late** -When it is provided that a station will switch Out after a certain specified train has been cleared, and the train is running late, the station may be switched Out at the usual time, provided it is not required for crossing purposes and that trains are not following each other closely. When this is done the Signaller at the station on each side of the switch-out station must issue a Mis 46 advice to the Enginedrivers of all trains concerned, stopping trains which are scheduled not to stop for this purpose, when necessary. This will not apply to holiday switch-out stations, which must remain open during the times shown in train advices, unless otherwise instructed by the Officer Controlling Train-running.

The Signaller at a switch-out station must not switch Out under this regulation without the authority of his controlling Stationmaster.

Stationmasters, before switching Out under this regulation or authorising staff to switch Out, must make careful inquiries regarding the running of trains likely to be affected and satisfy themselves that inconvenience or delay will not result; if in doubt they *must* obtain the instructions of the Officer Controlling Train-running.

When it is provided that a station will switch Out after a certain specified train has been cleared

but, owing to the late running or running out of order of the train the station remains switched In, a Mis 46 advice must be given to the Enginedriver of any train for which the station would normally be switched Out.

(h) Station Unable to Switch In When Staff on Duty -If the inability of a tablet station to switch In at the prescribed time is apparently due to a mechanical fault, tablet working must be regarded as having failed, and Line Clear working must be instituted between the intermediate station and the terminal points of the through section. Before making the arrangement the Officers in Charge and Signalmen at the three tablet stations must come to a complete understanding as to what is about to be done.

(i) Intermediate Station Opening when Line Clear or Pilot Working in Operation -When the stations on a through section are working Line Clear, and it is necessary for the intermediate station to be opened, Line Clear working must be instituted between the intermediate station to be opened the terminal points of the through section. Before making the arrangement the Officers in Charge and signalmen at the three tablet stations must come to a complete understanding as to what is to be done.

When trains on a through section are being worked by a Pilotman, and it is necessary for the intermediate station to be opened, pilot working on the through section must be cancelled and reinstated between the intermediate station and the terminal points of the through section. Unless otherwise authorised by the Officer Controlling Train-Running pilot working must be cancelled and reinstated in accordance with Tablet Regulation 33.

(j) Station Unable to Switch In Owing to signalman at Intermediate Station Not Being on Duty -When the Signalman at an intermediate station is not in attendance to switch In at the proper time the Signalmen at the terminal points of the through section must continue tablet working on the through section until the Signalman at the intermediate station comes on duty, or other arrangements have been made to open the station. Enginedrivers concerned must be supplied with a Mis 46 advice when the tablet is being delivered to them. The Officer Controlling Train- running must be immediately advised of the circumstances.

(k) Incorrectly or Imperfectly Displayed Signals Exhibited at Switch- out Station when Staff Not on Duty - If an Enginedriver approaching a switch-out station at which staff is not on duty finds incorrect or imperfectly displayed signals exhibited by either semaphore or colour-light signals, the train must be stopped at the Home signal and the Guard (or Locomotive Assistant in the case of a light engine), after satisfying himself that the main line points at **both** ends of the station are correctly set and so secured that the train may pass safely over them, must pilot the train into the station and advise the Train Control Operator of the position. The Train Control Operator, after receiving an assurance that the Enginedriver is in possession of the tablet or train advice authorising the train to occupy the through section and that the main line points are correctly set and secured, may authorise the train to proceed.

If train control is not in operation the Guard (or Locomotive Assistant in the case of a light engine), after satisfying himself that the Enginedriver is in possession of a tablet or train advice authorising the train to occupy the through section. also that the main line points at both ends of the station are correctly set and secured, must pilot the train through the station and it may then proceed. If facilities for telephoning the next attended station are provided at the switch-out station the concurrence of the Signalman there must be obtained before the train proceeds; he must otherwise be advised of the position upon arrival of the train at the station.

(l) Switching In Tablet Instruments at Intermediate Station when Line Clear or Pilot Working in Operation -When Line Clear working is in operation between an intermediate station and the terminal points of a through section the tablet instruments at the intermediate station must not be switched In while there is a train on either of the sections.

NOTE-The tablet instruments at the intermediate station may be switched In when a train is standing within the station limits.

In the case of pilot working, unless otherwise authorised by the Officer Controlling Train-running, pilot working must first be cancelled in accordance with Tablet Regulation 33(i).

(m) **Testing of Switch-out Stations** -Signal Maintainers or Linemen should attend to the instruments at switch-out stations when the stations are ordinarily switched In. When this is not possible, and a station must be switched In for testing purposes, the employee concerned must apply to the Officer in Charge at a convenient station for a points key, presenting a dated statement showing the names of the stations to which he intends to proceed and particulars of the work he intends to perform. If in order the Officer in Charge will provide the points key, obtaining a timed and dated receipt for it.

Before switching In a station for testing purposes the employee concerned must ascertain whether a tablet is out of the instrument at either end of the section, and must obtain the permission of the Signaller at the station on each side of the switch-out station; he must also advise both Signallers when the test is completed.

The Signal Maintainer or Lineman must not allow the points key out of his possession until he returns it to the Officer in Charge at the station from which he obtained it, obtaining a timed and dated receipt for it.

23. BALANCING OF TABLETS BY LINEMEN

(a) On tablet sections where a greater number of trains is run in one direction than in the other and tablets accumulate at one end of the section excess tablets must, when necessary, be transferred by the Lineman to the instrument at the other end of the section.

Before removing the tablets from the instrument the Lineman must, by telephone, advise the Signaller at the other end of the section that he is about to do so. The numbers of the tablets removed by the Lineman must be recorded by him in the Lineman's register provided for that purpose, and the Signaller must sign the entry and insert the time at which the tablets were removed. The Signaller must endorse the train register "Tablets removed for balancing". The Lineman must retain in his possession the whole of the tablets he has withdrawn until he has placed them in the instrument at the other end of the section.

(b) The Signaller at the tablet station to which the tablets are transferred, after having obtained the tablet from the Enginedriver of the train on which the Lineman has travelled, must place it in and close the instrument. He must then immediately compare the numbers recorded in the Lineman's register with the numbers on the tablets held by the Lineman, and when he has satisfied himself that the numbers are correct and all the tablets have been deposited in the proper instrument, he must sign the Lineman's register and insert the time at which the transfer was completed; he must also endorse the train register "Tablets balanced".

(c) When a Signaller becomes aware that balancing of tablets will shortly become necessary or when a tablet instrument contains less than five tablets (unless the Signaller knows that they will be balanced by return traffic), the Lineman must be advised so that the necessary transfer may be made.

24. INSTRUCTIONS FOR INSPECTORS AND LINEMEN ATTENDING TO INSTRUMENTS IN USE

Signal and electrical staff must not issue or return a tablet nor operate the instruments for traffic

working.

If an instrument is not in phase to accept a tablet received from a train the Signalman must himself retain the tablet until the instrument is put in order.

The Inspecting Officer or Lineman must give the *Testing* signal before manipulating an instrument, and he must not permit the Signalman to issue or return a tablet for traffic working until the *Testing* signal has again been given and acknowledged.

When examining or cleaning instruments the Inspecting Officer or Line-man must on no account leave them open or tablets out of the instrument. If it is necessary for him to be absent even for a moment he must lock the instruments, and when leaving the station he must lock and seal the instruments.

When tablets are forwarded by train they must be securely packed and completely covered and waybilled as a parcel of value.

When a Lineman is conveying tablets he must on no account allow them out of his possession.

25. WORK TRAINS

(a) The Enginedriver of a work train that has work to do on the line must be told, when receiving the tablet, to which end of the section it is to be taken and at what time it is to be there, in order to clear the line for the next train. The Guard must also be given this information.

(b) If a work train is to return to the tablet station in the rear instead of going through to the tablet station in advance the Guard must obtain permission to return from the Signalman before the train enters the section. When the train has arrived back complete, and the line is again clear, the Signalman must restore the tablet to the instrument, and give the *Cancelling* signal.

(c) When a work train is to return to the tablet station in the rear, shunting outside the station limits at that end of the station must not be permitted until the work train has cleared the section.

26. CROSSING TRAINS OUT OF COURSE

(a) On sections on which train control is in operation the Train Control Operator will authorise alterations in crossing stations.

(b) Where train control is not in operation, or if communication with the Train Control Operator should fail, Signalmen must advise one another as to the running of trains so that delays may be avoided or minimised as far as possible, and if one of the trains which have to pass each other at a crossing station is late the train to arrive first must be sent on to the next crossing station if the Signalmen agree it would be advantageous to do so.

Signalmen, when considered necessary, will inform Guards and Enginedrivers when a train crossing is to be altered.

(c) When crossing trains out of course preference must be given to the more important trains.

When there is any doubt as to the proper course to pursue Officers in Charge must obtain the instructions of the Officer Controlling Train- running.

27. TRAIN DISABLED IN SECTION

(a) If a train should become disabled between two stations the Train Control Operator must be advised of the circumstances by the most expeditious means available. The Train Control Operator will advise from which station assistance is to be sent and, unless instructions to the contrary are given by the Officer Controlling Train-running, the Locomotive Assistant, after the train has been protected, must take the tablet and a completed Mis 39 undertaking (see Rule 73 (d)) to that station. Upon arrival he must advise the Signaller of the circumstances and show him the tablet. He must personally hand both the tablet and the Mis. 39 to the Enginedriver of the relief engine or train and must accompany the engine or train to the disabled train. The relief engine or train must proceed in accordance with clause (e) hereof.

If train control is not in operation or if communication with the Train Control Operator has failed, the Locomotive Assistant, after the train has been protected, must take the tablet and Mis 39 to the station from which assistance is more likely to be obtained. Upon arrival he must advise the Signaller of the circumstances and show him the tablet. If a relief engine or train is to start from that station the Locomotive Assistant must personally hand both the tablet and the Mis. 39 to the Enginedriver and must accompany the relief engine or train to the disabled train. The relief engine or train must proceed in accordance with clause (e) hereof.

(b) If the required assistance is not available at the station to which the tablet has been taken and a relief engine or train is to be sent from the station at the other end of the section, the Officers in Charge and the Signallers at both ends of the section must first communicate with each other and arrive at a clear understanding as to what is to be done. Upon receiving written instructions to do so from the Officer in Charge at the station to which he has taken the tablet the Locomotive Assistant must hand the tablet and the Mis. 39 to the Signaller. He must also advise him the precise location of the disabled train.

The Signaller must telegraph the Enginedriver of the relief engine or train that the completed Mis 39 has been received and also include information regarding the location of the disabled train. When the Engine-driver has acknowledged receipt of this advice the Signaller must place the tablet in the instrument and the Signaller at the other end of the section must withdraw a tablet and hand it to the Enginedriver of the relief engine or train, which may then be authorised to enter the section as provided in clause (e) hereof.

(c) Except as provided in clause (b) hereof, the Locomotive Assistant of the disabled train must not allow the tablet to pass out of his possession until he hands it to the Enginedriver of the relief engine or train; the Enginedriver must not allow it to pass out of his possession until the disabled train and the relief engine or train have both been removed from the section.

(For instructions *re* working trains on each side of an obstruction see Tablet Regulation 2

(d) When the Officer Controlling Train-running so directs the following procedure must be adopted instead of that set out in the preceding clauses:

The Guard (or Locomotive Assistant in the case of a light engine) must take possession of the tablet and Mis. 39 form and, after the train has been protected, telephone the particulars shown on the Mis. 39 form to the Officer Controlling Train-running and advise him the precise location of the disabled train. The Officer Controlling Train- running will issue a train advice informing all concerned of the circumstances and that telegraphed Mis. 39 has been received. The train advice will authorise a relief engine to enter the section without tablet, run to a pre-arranged and clearly defined point a safe distance from the disabled train, and thence proceed, piloted by a member of the crew of the disabled train, to the train.

The train advice must be acknowledged by the Officers in Charge and Signallers at both ends of the section, the Enginedriver and Guard of the disabled train and the Enginedriver of the relief engine, before authority is given for the relief engine to enter the section as provided in clause (e) hereof.

The member of the crew of the disabled train who is to pilot the relief engine must take the tablet to the pre-arranged point and there hand it to the Engine-driver of the relief engine who must then not allow it to pass out of his possession until the whole of the train has been removed from the section.

(e) If a relief engine or breakdown-van train is required to enter a section which has been obstructed by accident or otherwise, the relief engine or train, after having been brought to a stand and the Enginedriver informed of the circumstances, must be allowed to enter the section under the following conditions, provided the Enginedriver is in possession of both the tablet and the Mis. 39 or telegram referred to in clause (b), or has received the train advice referred to in clause (d) :

- (i) If the relief engine or train is to proceed from the tablet station in the rear of the obstruction the Signalman there must inform the Signalman at the tablet station in advance of the circumstances, give the *Train Departure* signal, and, after it has been acknowledged, allow the relief engine or train to proceed into the obstructed section for the purpose of removing the obstruction;
- (ii) If the relief engine or train is to proceed from the tablet station in advance, the Signalman there must similarly advise the Signalman at the tablet station in the rear;
- (iii) The relief engine or train must run at reduced speed;
- (iv) After the disabled train has been taken to the more convenient end of the section the tablet must be handed by the Engine-driver to the Signalman.
- (v) If the disabled train is taken through to the tablet station in advance the tablet must not be placed in the instrument or the *Train Arrival* signal given until the disabled train and the relief engine or train have both arrived complete, and the signalman is satisfied that the section is clear and safe for traffic.

If the disabled train is taken back to the tablet station in the rear the Signalman there, after he is satisfied that the disabled train and relief engine or train have both arrived complete and that the section is clear and safe for traffic, must replace the tablet in the instrument and give the *Cancelling* signal.

28. WORKING TRAINS ON EACH SIDE OF AN OBSTRUCTION

If an accident or obstruction occurs and traffic is likely to be stopped for a considerable time the Train Control Operator must be advised. Unless the Officer Controlling Train-running directs otherwise the following arrangements must be made for working trains to and from the station on each side of the point of obstruction:

(a) **If the accident or obstruction occurs when a train is on the section and the train can be moved back** out of the section by its own power under the provisions of Tablet Regulation 31, the tablet carried by the train which so moves back must be retained to work trains between the station to which the train has returned and the point of obstruction, and all subsequent traffic to and from the point of obstruction must be worked in accordance with clause (c) hereof.

(b) **If the accident or obstruction occurs when a train is on the section, and the line is blocked and the train cannot be removed from the section without assistance**, the tablet must be retained to work trains between the point of obstruction and the station on the side from which the Guard, after conferring with the Enginedriver, decides it is more convenient to use the tablet; on the other side trains must be worked by a Pilotman.

The following procedure must be adopted:

- (i) The Guard must place the Enginedriver in charge of the point of obstruction, and after

- obtaining from him a Mis. 39 undertaking {see Rule 73 {d)), must himself go to the end of the section where the tablet will not be used, and arrange for pilot working to be instituted;
- (ii) When pilot working has been instituted and the Pilotman is satisfied that arrangements are understood. trains may be allowed to travel between the station and the point of obstruction, under the control and by the permission of the Pilotman;
 - (iii) The Enginedriver in charge of the point of obstruction must hand the tablet and a Mis 39 to the Locomotive Assistant and instruct him to take it to the station from which trains will be worked by tablet to the point of obstruction;
 - (iv) The Enginedriver in charge of the point of obstruction will be responsible for seeing that the necessary protection is main tained until employees are specially appointed to take charge of the obstruction;
 - (v) When the line is again clear and safe for traffic, the tablet has been given up to the Signalman, and pilot working cancelled, normal tablet working may be resumed;
 - (vi) A train must not be allowed to pass the point where the obstruction existed without a tablet;
 - (vii) When an obstruction occurs away from a station the tablet must not be placed in the instrument at either end of the obstructed section until the line is again clear and safe for traffic, except in accordance with Tablet Regulation 27(b) or as may be authorised in special circumstances by the Officer Controlling Train-running.
- (c) **If an obstruction should occur when a train is not on the section** the Officers in Charge at both ends of the section must confer and –
- (i) Appoint a competent member to take charge of the point of obstruction; and
 - (ii) Arrange for tablet working on one side of the obstruction and pilot working on the other side, as may be considered advisable.
- The tablet first obtained must be retained to work all trains on that side of the obstruction.
- When the line is again clear and safe for traffic, and the tablet has been replaced and pilot working cancelled, normal tablet working may be resumed.
- (d) In each instance the necessary protection must be maintained until the line is again clear.

29. PORTION OF TRAIN LEFT ON A SECTION

(a) **When a portion of a train is left on a section** owing to an accident or to the inability of the engine to take the whole of the train forward, and it becomes necessary for the engine to return to the rear portion of the train from the tablet station in advance, the Enginedriver must retain possession of the tablet until the whole of the train has been removed from the section. If, however, the train engine is not to be used to remove the rear portion of the train the Enginedriver, upon receiving written instructions from the Officer Controlling Train-running, must deliver the tablet to the Officer in Charge, who will arrange for the line to be cleared in accordance with the provisions contained in the second, third, and fourth paragraphs of clause (b) hereof.

(b) If an Officer in Charge or Signalman should become aware as a train passes into the section in advance, or on receipt of information from the tablet station in advance, that a portion of the train has been left behind, he must take steps to clear the obstruction before any other train is allowed to enter the obstructed section, the first available engine at either end of the section being

detached from its train for the purpose. The engine must not be allowed to enter the section until it has been ascertained that the vehicles have been stopped and secured

If the relief engine is to start from the end of the section where the tablet is available, the Signaller must hand the tablet to the Engine-driver and instruct him to proceed cautiously to the vehicles which have become detached, and remove them to the more convenient end of the section.

If the relief engine is to start from the end of the section where the tablet is not available the tablet may, on receipt of written instructions from the Officer Controlling Train-manning, be placed in the instrument and a tablet withdrawn at the other end of the section. The Signaller at that station must hand the tablet to the Enginedriver and instruct him to proceed cautiously to the vehicles and remove them to the more convenient end of the section.

In all instances the Officers in Charge and Signallers at both ends of the section must have a clear understanding as to how the obstructed section is to be cleared.

(c) **If an engine assisting a train in the rear should fail** the Enginedriver of the train engine must obtain a Mis 39 undertaking (see Rule 73 (d) from the Enginedriver of the assisting engine and the train engine must then proceed to the tablet station in advance. After the front portion of the train has been disposed of and the Officer in Charge advised what is about to be done and handed the Mis. 39, the train engine must return and remove the remainder of the train and the disabled engine from the section.

The Enginedriver of the train engine must retain possession of the tablet until the whole of the train has been removed from the section.

(d) **If a train is assisted by a locomotive in the rear and the train locomotive becomes disabled** so that it cannot be moved forward, the tablet must be transferred to the Enginedriver of the locomotive in the rear, who must obtain a Mis. 39 from the Enginedriver of the train locomotive. The rear locomotive must then proceed with a portion of the train to the tablet station in the rear. After the rear portion of the train has been disposed of and the Officer in Charge advised what is about to be done and handed the Mis. 39, the rear locomotive must return and remove the remainder of the train and the disabled locomotive from the section.

The Enginedriver of the rear locomotive must retain possession of the tablet until the whole of the train has been removed from the section.

(e) In each instance the necessary protection must be maintained until the locomotive returns for the remainder of the train.

30. LOCOMOTIVE OR TRAIN DISABLED BUT CLEAR OF MAIN LINE

When a locomotive or train is disabled in a siding between two tablet stations and cannot be promptly removed, but the main line is unobstructed, or when, with the approval of the Train Control Operator, the whole of a train has been shunted into a siding and is clear of the main line, a certificate from the Guard and Enginedriver that the main line is clear and will not be obstructed, together with the receipt of the tablet, is sufficient authority for a Signaller to consider that the tablet section is clear.

The Signaller who receives the certificate from the Guard and Enginedriver must communicate its terms by telegram to the Signaller at the other end of the tablet section, and after receiving his acknowledgement must replace the tablet in the instrument, when normal tablet working may be resumed.

The Enginedrivers of trains passing through the section while the locomotive or train is in the siding must be advised of the circumstances.

31. TRAINS SETTING BACK TO STATION IN REAR

When a locomotive is unable to take a train forward but is able to return with it to the tablet station in the rear, the Enginedriver, with the concurrence of the Guard, may set the train back until the leading vehicle in the direction of travel is not less than 600 m distant from the Home signal (or Outer Home signal, where provided) of the tablet station in the rear, when the train must stop. The Guard must then proceed to the station and obtain the authority of the Signaller for the train to set back to the station.

In the case of a train which has failed to pick up the tablet before entering the section ahead, the train must stop and the Locomotive Assistant after advising the Guard, must proceed to the station in the rear in order to obtain the tablet or receive the authority of the Signaller for the train to set back to the station. When, however, the Home signal can be set at "Clear" for the train to return to the station, this may be done.

32. METHOD OF INSTITUTING AND WORKING UNDER LINE CLEAR WORKING

(a) **Instituting Line Clear Working-** When a tablet instrument fails at a station or when a tablet is damaged and cannot be replaced in an instrument, and communication by telegraph or telephone is available, trains must be worked under "Line Clear" in accordance with the following :

(i) Procedure to be adopted when Line Clear working is to be instituted (a train is to proceed from X to Y) -

Let x and y represent the employees in charge of stations at the ends of a tablet section.

After ascertaining that all trains have cleared the section, x will telegraph to y -

"Tablet failed; is line clear for No. ..., " ?"

y , if satisfied that the section is clear, will telegraph to x - "Tablet failed. Yes, line is clear for No. ."

x will then dispatch the train and telegraph to y - "No. ." left."

On the arrival of the train, y will telegraph to x -, "*No. arrived.*"

x will then telegraph to y - "*Understand No. arrived.*"

This procedure must be followed for all subsequent trains running between X and Y until the instruments have been examined by the Lineman or Signal Maintainer and the failure has been rectified.

(ii) Procedure to be adopted if a tablet instrument has failed at y 's station when a train is travelling to it, and the *Arrival* signal cannot be given by y and acknowledged by x -

y will telegraph to x -

"Tablet failed; No. ;... arrived." x will then telegraph to y -

"Understand No. ." arrived."

For subsequent trains running between X and Y the procedure outlined in subclause (i) must be followed until the failure has been rectified.

(iii) Telegrams as above must be entered on Mis 21A form.

The usual entries must be made, in red ink, in the train registers with a note indicating that Line Clear working is in operation.

The telegrams advising the departure and arrival of the train must be timed with the actual time of departure or arrival, as the case may be. and these times must be entered in the train registers. The Mis 21 form (see clause (b) hereof) and the telegram stating that the line is clear, are printed as a detachable portion of the Mis 21A form. The Mis. 21 form must not be filled in until after the telegram giving "Line Clear" has been received from the station in advance. The Mis 21 form which is not used at the station in advance must be cancelled.

(iv) The Signaller must sign the Line Clear telegrams with his own name and must personally send and receive them. He must (where applicable) inform the Officer in Charge immediately a tablet instrument fails, and the Officer in Charge must keep closely in touch with the position whilst Line Clear working is in operation.

(v) A Signaller working "Line Clear" must remain on duty until any train for which he has given or obtained Line Clear has cleared the section and the entries in the train register are complete.

(b) Enginedriver's Mis. 21 Authority to Proceed Without Tablet - The completed Mis. 21 form, together with the telegram from the station in advance stating that the line is clear (folded so that the station names on the Mis 21 are immediately visible) , must be secured in the ordinary tablet sling and delivered to the Enginedriver in place of a tablet; this will be the Enginedriver's authority to proceed with the train over the section. It will not be necessary to stop a non-stopping train to deliver a Mis. 21 authority.

The particulars shown on the Mis. 21 and telegram must be read aloud independently by both the Enginedriver and Locomotive Assistant and each must satisfy himself that the train is properly authorised to proceed through the section.

The Mis. 21 and telegram will apply only to the single journey to the other end of the section, where they must be immediately collected by the Signaller, who must at once write the word "Cancelled" across the face of the form and the telegram.

(c) Working "Line Clear" when Tablet Out of Instrument - When a tablet instrument fails and a tablet is out of and cannot be placed in the instrument, the tablet must be locked away by the Signaller before Line Clear working is instituted, and must be retained in safe custody until the failure has been rectified and Line Clear working discontinued.

If the Signaller should go off duty before the failure is rectified he must obtain a receipt for the tablet from the employee who relieves him.

(d) Failure of Tablet Instruments Owing to Earth Currents - Occasionally tablet instruments are affected by the passage of electricity through the earth (called "earth currents") , the currents being at times sufficiently strong to move the indicator needles of the various instruments from one position to another, and to ring the bells.

When this occurs to such an extent as to make tablet working unreliable the tablet instruments must be considered to have failed and Line Clear working or pilot working must be adopted.

The Lineman or Signal Maintainer must be advised immediately, and the circumstances reported to the District Traffic Manager.

(e) Tablet-battery Cupboards -The cupboards containing tablet batteries must be sealed by the Signal and Electrical Inspector, Lineman, or Signal Maintainer. The seal must not be broken or the battery interfered with by the Traffic Staff unless there is a leakage from the battery cupboard, in which instance the seal may be broken and any leaking cell removed.

(f) Reporting Tablet Failures -Immediately a tablet instrument fails the Lineman or Signal Maintainer must be advised by the Signaller who will first require a tablet. If the failure should

right itself before Line Clear working has been commenced but after the Lineman or Signal Maintainer has been advised, the Signaller must immediately advise him. The instrument should, however, be examined at the first opportunity.

Officers in Charge must forward a written report of any tablet failure to the District Traffic Manager; the report must include the following information :

Tablet section;
Date and time at which failure occurred;
Trains operated under Line Clear working; Train delays;
Date and time at which tablet working was restored;
Name and designation of employee operating tablet instrument which failed;
Cause of failure (if known).

The forms used for Line Clear working and the report of the employee operating the instrument at the time of the failure must be attached.

33. PILOT WORKING

(a) Pilot working must be instituted in the following circumstances:

- (i) When a bank-engine key is lost or damaged. (See Tablet Regulation 18.)
- (ii) When communication has failed. (See Tablet Regulation 21.)
- (iii) When a switch-out station is opened at a time when pilot working is in operation on the through section. (See Tablet Regulation 22.)
- (iv) When trains are being worked up to an obstruction from both sides. (See Tablet Regulation 28.)
- (v) When a tablet is lost (See Tablet Regulation 34.)
- (vi) In any other circumstances, when so directed by the Officer Controlling Train-running.

When it is necessary to institute pilot working the Signaller must (where applicable) inform the Officer in Charge of the circumstances.

The Train Control Operator will direct as to which station pilot working is to be instituted from. When train control is not in operation, or if communication with the Train Control Operator has failed, the Officers in Charge at both ends of the section must, if possible, communicate with each other and arrange as to which shall institute pilot working.

(b) **Instituting Pilot Working** -The Officer in Charge who is instituting pilot working must appoint a competent man as Pilotman. The Pilotman must wear round his left arm, above the elbow, a distinctive badge, which is a red armlet with "Pilotman" in white letters upon it. If the badge cannot be obtained the Pilotman must wear a red flag tied round his left arm, above the elbow.

The Officer in Charge must prepare a sufficient number of Mis 33 pilot-working forms for delivery to all employees concerned in accordance with the following :

- (i) The Officer in Charge must retain one form, hand one form to the Signaller, and deliver the remainder of the forms to the Pilotman;
- (ii) The Pilotman must deliver one form each to the Officer in Charge and Signaller at the station at the other end of the section (or when there is an obstruction in the section, to the Officer in Charge at the point of obstruction) ;

- (iii) Each employee who receives a pilot-working form must sign both his own form and the form held by the Pilotman;
- (iv) The Pilotman must sign all forms;
- (v) Signatures must not be obtained by telegram; there must be a personal delivery of the forms by the Pilotman.

When pilot working is being instituted up to a point of obstruction in a section, the Pilotman must accompany the relief train and deliver a Mis 33 pilot-working form to the Officer in Charge at the obstruction; in all other instances, unless otherwise instructed by the Officer Controlling Train-running, the Pilotman when making his first journey over the section must travel by trolley or velocipede, or alongside the railway where a good view of the line is available to ensure that it is not obstructed.

When all employees to whom a Mis 33 pilot-working form was delivered have signed the form held by the Pilotman, and he is satisfied that the arrangements for pilot working are understood, trains may be allowed to run over the section.

Officers in Charge at stations where pilot working is in operation will be held responsible for seeing that all concerned at their stations are immediately advised of the arrangements in force and are instructed in the necessary duties; when possible they must also keep the Officer Controlling Train-running fully advised of the position.

(c) Pilotman to Accompany all Trains or to Furnish Enginedriver with Pilot Ticket -The Pilotman must accompany each train, unless two or more trains are required to follow in the same direction, in which instance the Pilotman must personally order each train to proceed, and must furnish the Enginedriver of each train not accompanied by himself with a Mis 29 pilot ticket properly filled in and signed. The Pilotman must personally authorise each train to start, and must himself travel with the leading Enginedriver of the last train. The pilot ticket will apply only to a single journey to the other end of the section, where it must be immediately cancelled by the Officer in Charge, who must at once write the word "Cancelled" across the face of it.

The Pilotman must not authorise any train to depart without the concurrence of the Officer in Charge, Signalman, and Guard.

Where communication by telegraph or telephone exists the arrival of each train unaccompanied by the Pilotman must be telegraphed to the Pilotman by the Officer in Charge at the other end of the section and the Pilotman must not dispatch another train until he has received the telegram stating that the preceding train has arrived.

Where communication by telegraph or telephone does not exist and unless the Pilotman can ascertain that the section is clear, or special authority has been received from the Officer Controlling Train-running, a train must not be allowed to follow another train until the ordinary running time of the section has elapsed, and the Engine-driver has been advised of the nature and departure time of the preceding train.

Where communication does not exist intermediate stations and sidings must be worked only by trains which are accompanied by the Pilotman.

(d) Fixed Signals – Pilot working does not override fixed signals, which must be operated and observed in the usual manner. The Signalman must not place signals at "Proceed" or allow a train to pass into a section that is controlled by the Pilotman unless under the Pilotman's instructions and when he is present.

(e) Train Disabled when Pilot Working in Operation -When a train accompanied by a Pilotman is disabled, the Guard, Enginedriver, and Pilotman must confer and make arrangements for procuring assistance without delay.

When a train unaccompanied by a Pilotman is disabled the Guard must communicate with the Pilotman as soon as possible.

In each instance the necessary protection must be provided immediately, and be maintained until the whole of the train has been removed from the section.

(f) Signalman not to Allow Trains to Enter Section Without Permission of Pilotman -When pilot working is in operation a train must not enter the section for any purpose unless the Pilotman is present and personally authorises the movement; the Signalman must stop any train about to enter the section, and not allow it to proceed until he has ascertained that the Pilotman is accompanying it or has given permission for it to start; when an engine unaccompanied by the Pilotman is returning for the rear portion of a train the Signalman must stop it and not allow it to proceed until he has ascertained that the Enginedriver is in possession of a Mis 29 pilot ticket.

(g) Working of Tablet-locked Sidings when Pilot Working in Operation - Tablet-locked sidings must be worked only by trains accompanied by the Pilotman and the Signal Maintainer who will require to open the locks at the siding with the master tablet as directed by the Pilotman. The Guard, Signal Maintainer, and Pilotman will be held responsible for the points being properly locked for the main line after the shunting has been completed.

(h) Relief of Staff Concerned in Pilot Working -When it is necessary to relieve a Pilotman, new forms, on which the name of the new Pilotman has been inserted, must be delivered by the employee appointed to relieve the Pilotman, and substituted for the old forms, and the necessary signatures obtained on the new forms in the presence of the Pilotman.

The new forms must be issued only by the Officer in Charge for the time being at the station at which pilot working was originally instituted, to whom the new Pilotman must afterwards deliver the old forms.

The outgoing Pilotman must continue as Pilotman until the incoming Pilotman has obtained the signatures of all concerned on the new forms and has collected and cancelled the old forms.

After one Pilotman has been relieved by another the Pilotman who has been relieved must not ride with an Enginedriver unless he resumes duty as Pilotman.

If the Officer in Charge or the Signalman should be changed during the time pilot working is in operation the employee coming on duty must be made acquainted by the employee going off duty with the arrangements in force and with the Pilotman; he must, before taking charge of the station or signal box, countersign both the form which was held by the employee going off duty and the form held by the Pilotman.

(i) Cancelling of Pilot Working -When the member of the Way and Works Branch who is in charge of work at the obstruction advises that the line is again clear and safe for traffic, or when the tablet instruments have been put into working order, a tablet must not be obtained from the instrument at either end of the section until pilot working has been cancelled.

The Officer in Charge for the time being at the station at which pilot working was originally instituted, provided there are no trains on the section, must cancel pilot working by telegraphic advice to the Pilotman and to each employee who received a pilot-working form.

Each employee receiving the advice must at once acknowledge receipt, by telegram where necessary.

Upon receipt of all acknowledgments the Officer in Charge must advise the Signalman at his station and the Officer in Charge and Signalman at the other end of the section that normal working may be resumed. Trains may then be dispatched over the section under tablet.

Upon receipt of the cancellation telegram each pilot-working form must be cancelled and returned to the Officer in Charge who issued it. The Officer in Charge at the other end of the section must collect all cancelled pilot-working forms held at his station and return them by the Pilotman or by value letter.

When making his last trip under pilot-working conditions the Pilotman must, when possible, advise all the employees concerned along the line that tablet working is being restored.

The Pilotman, if required to return to his home station after pilot working has been cancelled, must not (except in the case of a light engine) travel on the engine of the train.

If the tablet instruments should be put into working order while pilot working is being instituted and before the arrival of the Pilotman at the other end of the section, the pilot-working arrangements must still be completed and cancelled in the ordinary way; **once the Pilotman has left his station it must be considered that pilot working is in operation.**

When pilot working has been instituted a tablet must not be withdrawn from the tablet instruments by the Inspecting Officer, Lineman, or Signal Maintainer unless the Pilotman is present.

All forms which have been used in connection with pilot working, and all telegrams or recorded messages exchanged must be forwarded, together with reports on the matter, to the District Traffic Manager.

34. LOST TABLET

(a) **Train Control Operator to be advised at once** - When a tablet is lost the Train Control Operator must be advised immediately. After taking such safeguards as may be considered necessary the Officer Controlling Train-running may authorise trains to be dispatched without tablet through the section to which the lost tablet applies. The stations concerned, when so directed by the Train Control Operator, must arrange to institute pilot working for trains running subsequently to the trains for which tablet working was suspended

The authority for trains to run without tablet must be covered by a separate train advice for each train concerned, copies being supplied to the Guard and Enginedriver of the train in each case.

The arrival of each train so authorised to run without tablet must be telegraphed by the Signaller at the station in advance to the Train Control Operator (or Officer Controlling Train-running as the case may be) and the Signaller at the station in the rear, as follows "No... arrived."

(b) If difficulty or delay is experienced in communicating with the Train Control Operator, or should the Officer Controlling Train-running not authorise the train to run without a tablet, pilot working must be instituted in accordance with Tablet Regulation 33.

(c) **Tablet Found** -When a lost tablet is found after the Officer Controlling Train-running has authorised a train to run through the section without tablet, the tablet must be locked away until the section is clear; the Train Control Operator (or Officer Controlling Train-running as the case may be) will then instruct regarding the replacement of the tablet in the instrument and the resumption of normal working.

When a lost tablet is found after pilot working has been instituted but before a certificate has been issued in terms of clause (d) of this regulation, the Officer in Charge at the station at the most convenient end of the section must obtain possession of it and lock it away until the Pilotman is present, when it must be placed in the instrument in the presence of the Officer in Charge, the Signaller, and the Pilotman. The Officer in Charge and Signaller at the other end of the section must first be advised of what is about to be done. A certificate giving the number of the tablet and the time at which it is placed in the instrument must be entered in the train register and signed by the Officer in Charge and the Pilotman. Pilot working must then be cancelled in accordance with Tablet Regulation 33.

(d) **Tablet Considered Absolutely Lost**-When a lost tablet cannot be found after diligent search, and is regarded as being absolutely lost, a certificate to that effect must be given to the District Traffic Manager by the Area Traffic Manager or his deputy and the Linemen or Signaller

Maintainer.

On receipt of this certificate a train advice will be issued giving full particulars of the missing tablet and cancelling it. When this has been done the District Traffic Manager will authorise the Lineman or Signal Maintainer to put the tablet instruments into working order; pilot working, if instituted, will then be cancelled and tablet working will again be brought into operation.

A copy of the train advice notifying particulars of the lost tablet must be affixed to the tablet instrument and displayed on the train-advice notice board at each of the stations concerned.

If the lost tablet should afterwards be found it must on no account be placed in the tablet instrument, but must be securely locked away until a further train advice has been issued cancelling the former one and authorising the use of the tablet which has been found. The tablet must then be placed in the instrument by the Lineman or Signal Maintainer in the presence of the Area Traffic Manager or his deputy, and a certificate giving the number of the tablet and the time at which it is placed in the instrument entered in the train register and signed by both persons.

If the lost tablet has not been found after a period of one year the District Traffic Manager will arrange for it to be replaced. At a previously notified time the train advice regarding the lost tablet will be cancelled and the replace tablet will be placed in the instrument by the Lineman or Signal Maintainer. A certificate giving the number of the tablet and the time at which it is placed in the instrument must be entered in the train register and signed by the Signaller and the Lineman or Signal Maintainer.

35. DAMAGED TABLET

When a tablet is only slightly damaged and there is no doubt that it can be safely placed in an instrument and taken out when required, it may be replaced, but in doing so careful judgment must be exercised.

When a tablet is damaged so that it cannot be placed in an instrument it must be securely locked away and Line-Clear working instituted. Provided, however, that if the tablet was damaged during delivery to a departing train, and the name of the tablet station at each end of the section to which it applies is easily readable, the pieces of the damaged tablet may be tied together and used for **one journey only** on the train for which it has been obtained. **This action is permitted only in instances where a train delay could not otherwise be avoided**

When a tablet has been damaged so that it cannot be repaired immediately and placed in an instrument, the Signaller must allow the Lineman or Signal Maintainer to take possession of the damaged tablet and to place the tablet instrument in working order, after which Line Clear working, if instituted, may be discontinued.

When a tablet is removed from or returned to a section, particulars must be noted in the train register and signed by the Signaller and the Lineman or Signal Maintainer.

36. TABLET-LOCKED SIDINGS

(a) Points on the main line giving access to sidings and controlled by a tablet lock cannot be opened without a tablet for that section of the line where the siding is situated being placed in the tablet lock; the tablet cannot be moved from the tablet lock until the points have been placed in the proper position for trains to pass upon the main line, and are securely locked.

A points padlock also is provided on the points lever for the purpose of securing the lever in the normal position.

(b) On arrival at a tablet-locked siding the Enginedriver must hand the tablet to the Guard or employee in charge of the siding to enable the points to be unlocked, When the necessary shunting has been completed, and the points have been placed in the proper position for trains to pass on the main line and are securely locked, the Guard or employee in charge of the siding must return the tablet to the Enginedriver, who must not proceed on the journey until he has obtained possession of it.

(c) When the working of an intermediate station or siding between tablet stations necessitates the return of the train and the tablet to the starting station, the train must be bell-signalled as *Train Entering Section to Return to Starting Point*. After the train has returned to the starting station and the main line is clear the tablet must be replaced at once in the instrument and the *Cancelling Departure or Line Clear* signal given.

The Signalman at the station at the other end of the section must be kept informed of the circumstances by telephone.

(d) If a Guard or other employee finds that the tablet-locked points at an unstaffed station have been damaged he must endeavour to ascertain the cause and take steps to ensure safety. All damage must be reported at once by the Guard or employee to the Train Control Operator in Charge or the Signalman.

37. MASTER TABLETS FOR TABLE-LOCKED SIDINGS

(a) Master tablets will be issued to Signal and Electrical Inspectors or Signal Maintainers as required, to enable them to clean and examine the interlocking apparatus and tablet locks at tablet-locked sidings.

(b) Particulars of members authorised to be in possession of master tablets will be advised in notices from time to time. Officers in Charge must exercise close supervision and see that employees other than those specified in such notices do not obtain possession of master tablets.

(c) The employees authorised to be in possession of master tablets must not allow the tablets to pass out of their possession unless by a written order from the District Engineer, and each such employee will be held personally responsible for the safe custody of the tablet delivered to him. When a master tablet is transferred from one employee to another a dated and timed receipt must be taken.

(d) When practicable the apparatus and points at tablet-locked sidings should be serviced when sidings are being shunted; when this cannot be done the provisions of Rule 96 must be carried out.

When necessary the Signal Maintainer must apply to the Officer in Charge at a convenient station for a points key to open the points pad-lock on the lever, presenting a dated statement showing the places at which he intends to work. If in order, the Officer in Charge will provide the points key. The Signal Maintainer must not allow the points key out of his possession until he returns it to the Officer in Charge from whom he obtained it. In each case a timed and dated receipt must be given for the key.

(e) A Signal and Electrical Inspector or Signal Maintainer must not open the points at tablet-locked sidings unless accompanied by an authorised member, so that the two members will be in attendance when the points are being tested.

(f) When the examination is completed the Signal and Electrical Inspector or Signal Maintainer, on arrival at either end of the section, must inform the Signalman and show him the master tablet,

and the Signalman must then inform the Signalman at the other end that the examination has been completed.

The main line points of any siding must not be moved within half an hour of the due time of any express, railcar, or passenger train.

38. CUSTODY OF TABLETS WHEN OUT OF USE, AND WHEN NEW STATIONS OPENED OR SECTIONS ALTERED.

(a) District Traffic Manager, will issue the necessary instructions relative to the opening or closing of stations and the provision of new or altered tablets.

(b) When a new station is opened, or when a station which has been temporarily closed and the tablets removed is reopened, or when a section is altered in such a way that new or altered tablets are brought into use, the Lineman or Signal Maintainer must place the new tablets in the instrument in the presence of the Area Traffic Manager or his deputy.

When a station is closed or when a section is altered in such a way that tablets require to be taken out of use, the Lineman or Signal Maintainer must remove the tablets from the instruments in the presence of the Area Traffic Manager or his deputy.

(c) In each such instance of tablets being placed in or removed from an instrument a certificate giving particulars and stating the numbers of the tablets and the time and date at which the instruments were placed in or out of working order, must be entered in the train register and signed by both the Area Traffic Manager or his deputy and the Lineman or Signal Maintainer.

(d) The Lineman or Signal Maintainer will be held responsible for the safe custody of tablets after receipt and prior to their being placed in the instruments, or after their removal from the instruments and prior to disposal in accordance with instructions received.

39. LOCKING OF SIGNAL LEVERS AT SWITCH OUT TABLET STATIONS EQUIPPED WITH TWO-POSITION SEMAPHORE SIGNALS

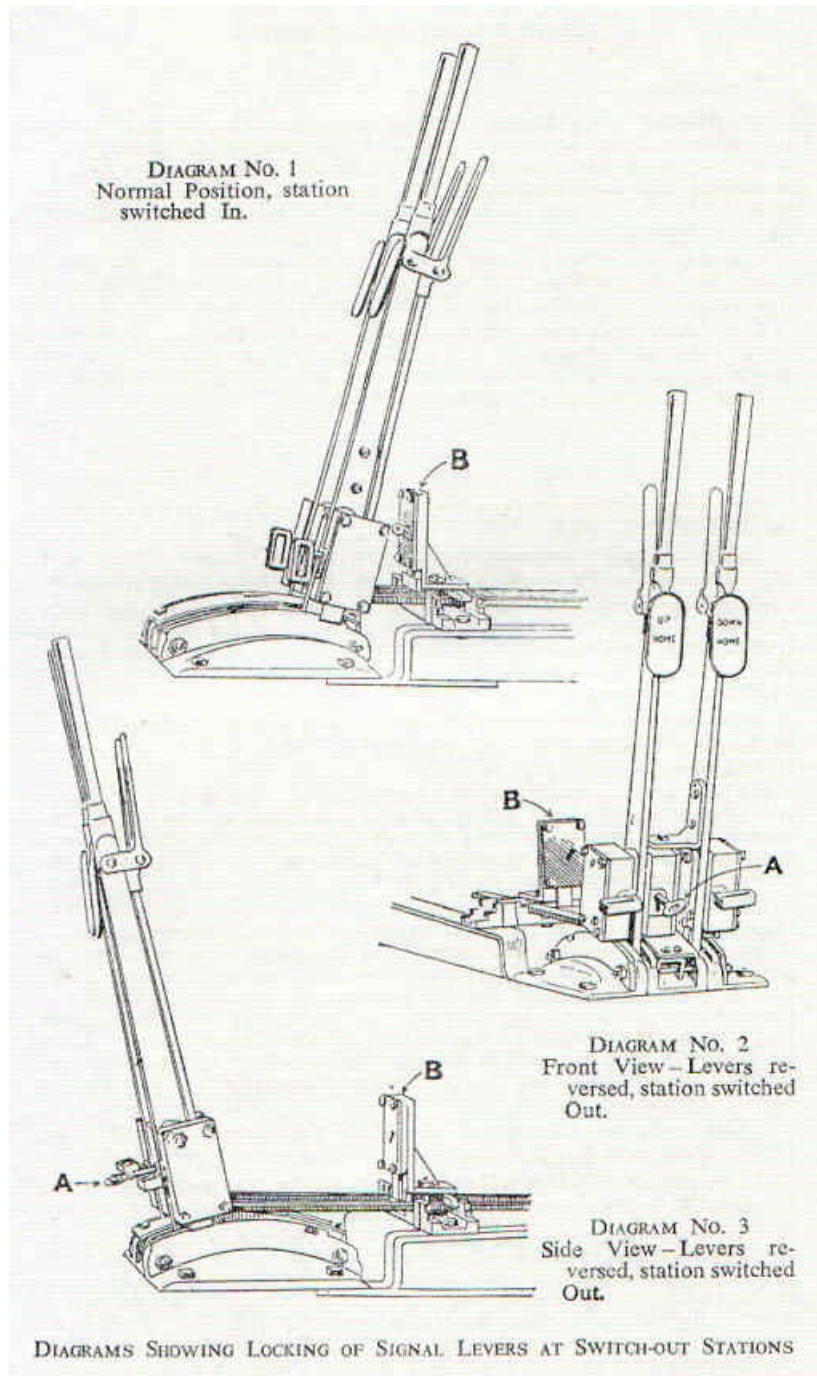


Diagram No.1 shows levers in normal position -station switched In.

Diagrams Nos. 2 and 3 show the front and side views of levers reversed – station switched Out.

The following procedure must be adopted when operating the locking arrangement of signal levers at switch-out stations :

(a) **Switching In** -The Signalman must insert the ordinary points padlock key stamped "Officer in Charge" in lock B, unlock the levers (key remaining locked in), and place them in the normal position; he must then turn the switch key and withdraw it from lock A, which leaves the Home signal levers interlocked one with the other in the normal position. The switch key is then inserted

in the intermediate switch of the tablet instruments, and the station switched In in accordance with Tablet Regulation 22.

When the station is switched In and tablet working is in operation, the switch key remains locked in the intermediate switch of the tablet instruments, and the signal levers, interlocked one with the other, may be worked in the ordinary way

(b) **Switching Out-** When a station is to be switched Out the switch key is released from the intermediate switch of the tablet instruments, and inserted in lock A on the levers and turned, which will release the locking between the two Home signal levers and lock up the key. If the Woods points keys are in their respective levers and turned as indicated in Diagram No.2, both levers will be free and must be reversed. This releases the key stamped "Officer in Charge" which must then be removed from lock B, locking the levers with the signals in the "Proceed" position.

The key stamped "Officer in Charge" must be held by the Signaller, being his guarantee that the station is switched Out and signals locked in the "Proceed" position.

Where Distant signals are installed, the Distant signal levers also must be reversed before the key stamped "Officer in Charge" can be released.

During the time the tablet instruments are switched at the station will not be staffed for signalling purposes.

(c) **Shunting when Station Switched Out-** The Guard must first use his points padlock key and unlock lock B, releasing the levers, which must be placed in the normal position, thereby locking up his key. He must then take the Woods points key from either lever, as required, and with it unlock the stop block or blocks, the siding points, and finally the main line points.

The stop blocks and siding points can be unlocked by the Woods points key only, and they must be unlocked before unlocking the main line points; they become locked automatically when properly replaced.

When shunting is completed the Guard must lock the main line points, replace the stop blocks and siding points, and then replace the Woods points key in the lock on the signal lever and reverse all levers, which will enable him to obtain his points padlock key.

40. AUTOMATIC TABLET-EXCHANGING APPARATUS

(a) Particulars in connection with the use of tablet exchangers at certain stations or by certain trains are notified in the working timetables.

(b) When, owing to the failure of the apparatus on an engine or railcar, the use of the automatic tablet exchanger is suspended for a train, the Enginedriver must so advise the Officer in Charge at the nearest tablet station, who will advise all stations concerned by telegram to exchange tablets by hand sling.

(c) Enginedrivers are responsible for seeing that they have spare slings to permit of the transfer of tablets from one kind of sling to the other when necessary.

(d) The normal position of the apparatus on an engine or railcar is with the exchanging arm set parallel with the side of the vehicle and secured by the pin, and it must be kept in that position when not being used for exchanging. The apparatus on the engine or railcar is adjustable, and the Locomotive Supervisor will make arrangements for it to be kept adjusted to gauge.

(e) When about to effect an exchange the Enginedriver or Locomotive Assistant must place the

exchanging arm in position, secure it with the pin, and set the receiving fork; then, when close to the exchanger at the station, place an automatic sling in position for exchanging. Immediately the exchange has taken place the sling must be removed from the receiving fork, the tablet examined to see that it applies to the section (see Tablet Regulation 3 (a) (ii)) hung in its appointed position, the receiving fork removed or retracted, and the exchanging arm properly restored to its normal position.

Enginedrivers on railcars are responsible for exchanging tablets, but Guards should assist with this as far as their normal duties permit.

(f) At stations at which tablets are to be left but not picked up or vice versa, tablet slings must be exchanged in the normal way, but one will be empty.

(g) The normal position of an exchanger at a station is with the exchanging arm pointing away from the line. Officers in Charge must see that when it is not being used for exchanging the arm is kept secured with a padlock and chain in the normal position. The single-ended receiving fork must be removed from the arm immediately an exchange has taken place, and must be kept in the office when the station is closed. The protection boards supplied for double-ended receiving forks must be used when the forks are not in use.

{h) Officers in Charge must see that the exchangers at their stations are kept oiled, in a clean condition, and in good working order.

Care must be taken to see that the slot at the back of an automatic sling is not damaged in such a way as to permit of the engine picking up the sling without tripping the exchanging arm.

{i) When a lamp is provided at an exchanger it must be lighted for the passing of a train which will use the exchanger after dark; the light of a hand lamp must also be turned on to the exchanger from the side on which the train is approaching.

{j) Employees attending to the exchange of tablets must stand close to the exchanger. They must warn any persons in the vicinity, and be prepared to trip the apparatus, if necessary.

(k) If a station exchanger is defective the Officer in Charge must arrange for the Enginedrivers of all approaching trains to receive advice before reaching the station.

Any failure of an exchanger must be recorded in the train register and immediately reported by the Officer in Charge to the Lineman or Signal Maintainer; the District Traffic Manager must be advised. The following particulars are to be given: Date, train number, engine or railcar number and class (if known), the probable cause of the failure, and train delays. The tablet sling in use at the time of the failure must be held for examination.

Any defect in the working of an exchanger observed by an Engine-driver must be immediately noted in the repair book.