

ANSY 516

Pilot Staff Working

Applicability

NSW

SMS

Publication Requirement

External Only

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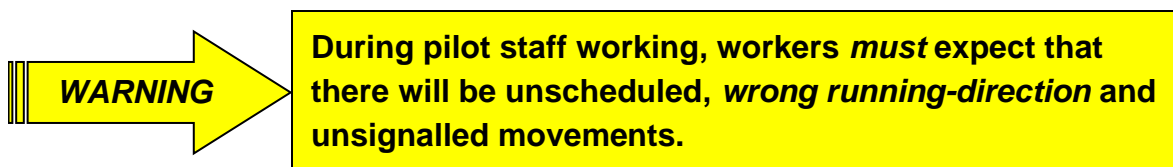
Purpose

To prescribe the rules for *pilot staff working* in the *Australian Rail Track Corporation (ARTC) NSW Network*.

Method principle

Pilot staff working is a method of *special working* that *may be used to authorise rail traffic* movements that are not permitted under a *system of Safeworking*.

Pilot staff working allows following rail traffic entries into an occupied *pilot staff section*, but not into the same *block*.



The correct pilot staff, *half pilot staff* (half-staff) or a *Pilot Staff Ticket* is the *token* to enter and *travel* in a pilot staff section.

The pilot staff for a pilot staff section must be marked with:

- the limits of pilot staff working, and
- either the line for which pilot staff working is authorised, or a reference to the lines detailed in the *Pilot Staff Notice*.

The half-staff for a pilot staff section must be marked with:

- the pilot staff working limit, and
- the line for which pilot staff working is authorised.

A pilot staff section must have:

- a pilot staff, or
- for *unidirectional* movements only, the entry-end half-staff if the exit-end half-staff for the pilot staff section is *secured* out of use.

If not in use, pilot staffs and half-staffs must be secured.

Rail traffic must not enter or occupy the pilot staff working section until the pilot staff or half-staff is on hand at the *points, crossover, signal* or sign providing entry to the pilot staff section.

Limits of a pilot staff section

A pilot staff section extends:

- from the signal or STOP sign at the entry to the portion of line used for pilot staff working
- to the signal or STOP sign at the exit from the pilot staff section.

Pilot staff working may include more than one section usually provided by the system of Safeworking, if:

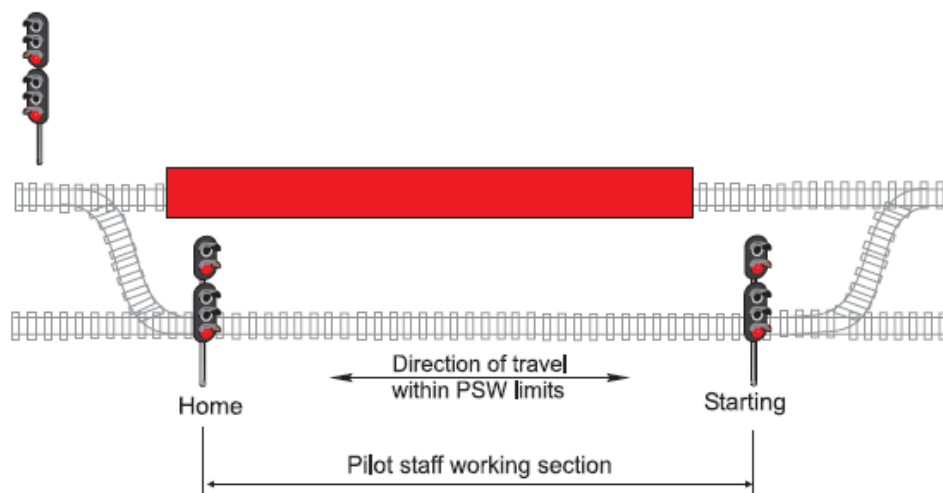
- a large pilot staff, or a Pilot Staff Ticket, is used as the token, and
- half-staffs, if present, are removed and secured, and
- the working has been *advertised*.

Unidirectional lines

For unidirectional lines, pilot staff working limits are expressed in terms of travel in the *right running-direction*.

A pilot staff section must extend from a starting or home/starting signal at the entry end to a signal or STOP sign at the exit end.

Figure ANSY 516-1



Example of a pilot staff section defined by signals

If for rail traffic working arrangements, there is no suitable starting or home/starting signal, a pilot staff section may extend to the signal or the STOP sign at the exit end of the section, from:

- the signal or STOP sign immediately protecting the points or crossover being used, or
- the first available signal within 2000m beyond the points or crossover being used, or
- an additional STOP sign placed not more than 2000m beyond the points or crossover being used.

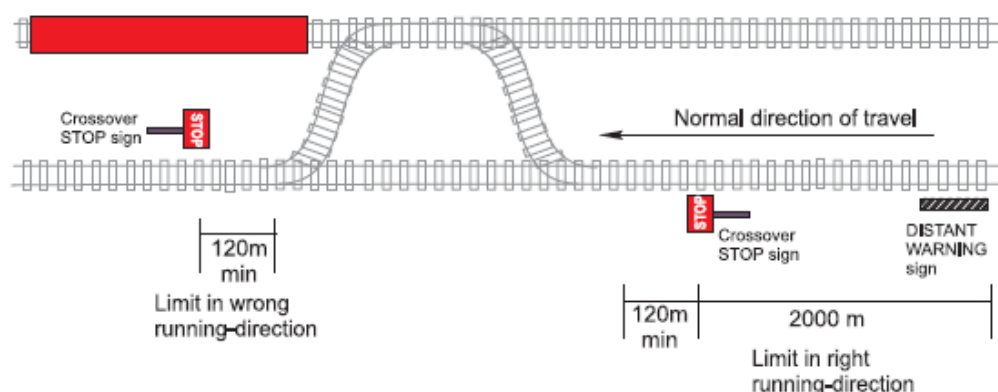
If the pilot staff section extends from the first available signal or the additional STOP sign in the right running-direction, an opposing STOP sign must be placed at least 500m beyond the signal or STOP sign, to control the approach of rail traffic from the wrong running-direction.

Using points or crossovers

If points or a crossover is used for pilot staff working, a *Qualified Worker* must be placed, to act as the *Signaller*, at the points or crossover.

If points or a crossover used for pilot staff working is not immediately protected by a *running signal* in the direction of approach, a STOP sign must be placed 120m before the *facing points* of the crossover.

Figure ANSY 516-2

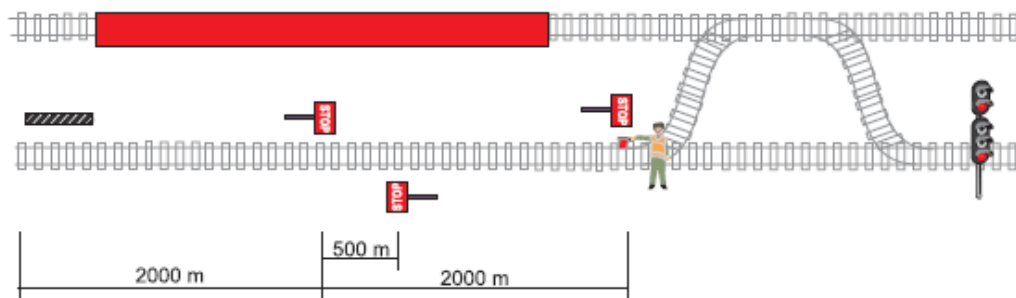


Example of using STOP signs at a crossover for pilot staff working

If there is no signal within 2000m of a STOP sign being used to protect points or a crossover for right running-direction travel, a DISTANT WARNING sign must be placed 2000m before the STOP sign.

A WARNING sign must be placed 2000m from the first STOP sign reached by rail traffic approaching from the wrong running-direction.

Figure ANSY 516-3



Example of pilot staff limits with the use of an additional STOP sign

If the *route* used for a pilot staff working section changes from one running line to another, temporary speed restriction signs must be placed, in accordance with *ANSG 604 Indicators and signs*, to indicate approach to a crossover.

Bidirectional lines

Rail Vehicle Detection systems

A pilot staff section must extend from a starting or home/starting signal at the entry end to the opposing starting or home/starting signal at the exit end.

Token systems

A pilot staff section must extend from the home signal at one end to the opposing home signal at the other end.

Method description

Assurances

The *Train Controller* must make sure or be assured that:

- *effective communication* is established, and
- prior *Proceed Authorities* and *work on track authorities* for affected portions of line have been *cancelled* or *fulfilled*, and
- unless authorised by a Train Controller, *intermediate* signal boxes and *local control panels* on live roads in affected sections are not switched in or out while pilot staff working is in force, and
- the *interlockings* at both ends of the pilot staff section are attended, and
- *level crossings*, obstructions and worksites are protected, and
- when not being used as the pilot staff working Proceed Authority, signals used to allow entry to the limits of pilot staff working are set and kept at STOP, and
- *blocking facilities* are applied, and
- if necessary, facing points are or will be clipped and locked before rail traffic travelling under pilot staff working passes over them.

If other rail traffic movements can conflict with the authorised pilot staff working, the Train Controller must be assured that the movements are prevented by:

- signals set at STOP
- *groundframe* releasing switches set in NORMAL position
- application of blocking facilities
- if blocking facilities cannot be applied, arranging for *issue* of Condition Affecting the Network (CAN) forms (ANRF 004) to relevant *Drivers* or *track vehicle operators*.

Introducing pilot staff working

Only the Train Controller may authorise the introduction of pilot staff working. A Pilot Staff Working Introduction form (ANRF 010) must be used.

The form must include details about:

- the limits of the pilot staff section, and
- the identification details of the pilot staff.

Before authorising the introduction of pilot staff working, the Train Controller must arrange to tell:

- affected Train Controllers and Signallers, and
- workers known to be on the affected portion of line.

The Train Controller must record, in *permanent form*, the introduction of pilot staff working.

Changing a pilot staff section

To change an established pilot staff section, the Train Controller must:

- cancel the existing Pilot Staff Working Introduction form, and
- issue a new Pilot Staff Working Introduction form.

Pilot staffs

A pilot staff is:

- a large pilot staff, or
- joined half-staffs.

Large pilot staffs are individually numbered, and inscribed:

- if the aperture is diamond-shaped, BLACK AND WHITE, or
- if the aperture is circular, BLACK AND YELLOW.

Adjoining pilot staff sections using large pilot staffs must use staffs with different aperture shapes in the head.

Half-staffs are secured in locks at the ends of some *bidirectional* sections.

Removing a half-staff from its lock prevents clearance of signals allowing entry to the section.

Pilot Staff Tickets

If at least one movement in the same running-direction will follow, a Pilot Staff Ticket must be issued as the token.

A train must travel on the authority of a Pilot Staff Ticket only after the Driver has sighted the corresponding pilot staff or half-staff.

Warning Drivers and track vehicle operators

Before arrival at the *location* where pilot staff working is in operation, Drivers or track vehicle operators must be warned:

- that pilot staff working is in use, and
- to expect the signal before the entry to the limits of pilot staff working to be at STOP.

Proceed Authority

If available, signals must be used to allow entry to pilot staff sections.

The authority to enter a pilot staff section is:

- possession of a pilot staff, or a half-staff, or a Pilot Staff Ticket, and
- clearing of the relevant signal, spoken authority from the Signaller or the Signaller's representative, or a PROCEED *handsignal*.

Issuing a Proceed Authority

The Signaller must compile, and issue to each Driver or track vehicle operator, a Pilot Staff Notice (PSN) form (ANRF 008) detailing the pilot staff working.

A Driver or track vehicle operator must hold:

- the pilot staff, or
- a Pilot Staff Ticket, having seen the pilot staff, or
- the half-staff, having seen the Pilot Staff Working Introduction form, or
- a Pilot Staff Ticket, having seen the half-staff and the Pilot Staff Working Introduction form, or
- a half-staff, having seen the Signaller separate the joined half-staffs.

Authorising rail traffic to enter or exit a pilot staff section

Before authorising rail traffic to enter or exit a pilot staff section, the Signaller must make sure that:

- the Train Controller has authorised the movement, and
- the block ahead is unoccupied, and
- the correct route is set and secured, and
- no conflicting routes are set.

A Driver or track vehicle operator must:

- check that the half-staff or pilot staff is correct for the section, and
- pass signals at STOP only if authorised in the Pilot Staff Notice, or in accordance with Rule *ANSG 608 Passing signals at STOP*.

Signallers must record departure details in the *Train Register Book*.

The Train Controller may authorise a Driver or track vehicle operator holding the pilot staff or half-staff for the section to:

- travel through the section, or
- terminate at an intermediate location clear of the *main line*, or
- travel to a nominated location within the section and return to the entry end.

Before starting to return the Driver or track vehicle operator must get authority from the Train Controller.



A Pilot Staff Ticket must not be used to authorise travel to a nominated location within a section and return to the entry end.

Before authorising the return the Train Controller must:

- advise Signallers, and
- arrange for affected *Handsignallers at block posts* to be told about the movement.

Handsignallers

Handsignallers must be stationed at:

- STOP signs
- block posts
- protecting signals which must be passed at STOP to enter or exit the limits of pilot staff working
- automatic level crossings.

Block posts

Only the Train Controller may authorise establishment and removal of block posts.

Block posts must not be so located that rail traffic:

- stands on a level crossing, or
- stands on the controlling *track-circuits* of an automatic level crossing.

The establishment of block posts must be recorded, in permanent form, by

- Network Control Officers, and
- Handsignallers at block posts.

Handsignallers at block posts must perform no other duties.

Before authorising establishment or removal of a block post in a pilot staff section, the Train Controller must be assured that the pilot staff section:

- is not occupied, and
- will not be occupied before the block post is established or removed.

Clearance Handsignallers

If the Signaller cannot be sure that the block beyond the pilot staff working section is clear of rail traffic, they must arrange for a *clearance Handsignaller* to be placed at the first running signal beyond the pilot staff working section.

The clearance Handsignaller must report clearance of rail traffic past the signal to the Signaller.

The clearance Handsignaller must not do other work.

Using pilot staffs

Change of running-direction

Before the running-direction of a pilot staff section is changed, the Signaller at the entry end for the first movement in the new running-direction must:

- hold the pilot staff, and
- arrange for affected Handsignallers to be told about the change.

Transferring pilot staffs

Only the Train Controller may authorise transfer of a pilot staff by a means other than rail.

The Train Controller must:

- make sure that the pilot staff section is not occupied, and
- tell the Signallers at both ends of the pilot staff section and at intermediate locations.

Using half pilot staffs

Unidirectional movements

A half-staff authorises movements in only one direction.

The Train Controller must be assured that the exit-end Signaller for the section has:

- withdrawn the exit-end half-staff from its lock, and
- secured it out of use.

The entry-end Signaller must make sure that the Pilot Staff Notice records that the exit-end half-staff has been secured out of use.

Bidirectional movements

The half-staffs for a section must be joined to authorise bidirectional movements.

Transferring half-staffs

Only the Train Controller may authorise transfer of a half-staff by a means other than rail.

The Train Controller must:

- make sure that the pilot staff section is not occupied, and
- tell the Signallers at both ends of the pilot staff section and at intermediate locations.

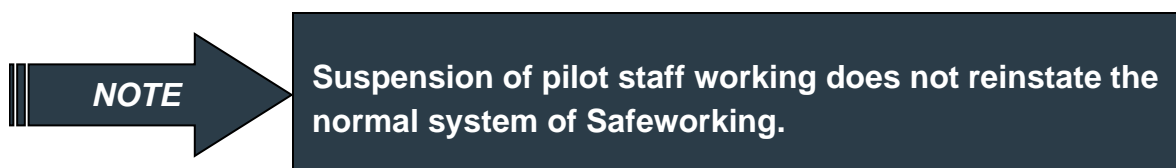
If it is necessary to separate joined half-staffs and to return one half-staff to its correct location by rail, a Signaller must make sure that:

- the joined half-staffs are separated in the sight of the Driver or track vehicle operator, and
- the correct half-staff is given to the Driver or track vehicle operator, and
- the remaining half-staff is secured out of use, and
- the Driver or track vehicle operator is given a Pilot Staff Notice recording that the remaining half-staff has been secured out of use.

Suspending pilot staff working

Pilot staff working may be suspended if the section is not required for rail traffic movements. Only the Train Controller may suspend pilot staff working.

Rail traffic must not enter the pilot staff working section during the suspension of pilot staff working.



Before suspending pilot staff working, the Train Controller must be assured that:

- the pilot staff section is not occupied, and
- Qualified Workers concerned have been told about the suspension of pilot staff working, and
- Signallers have secured the pilot staff or half-staffs for the section out of use.

Ending pilot staff working

Only the Train Controller may authorise the end of pilot staff working.

Before ending pilot staff working, the Train Controller must be assured that:

- the pilot staff section is not occupied, and
- Qualified Workers concerned have been told about the end of pilot staff working, and
- block posts and *clearance locations* have been removed, and
- the large pilot staff has been secured out of use, or half-staffs have been returned to their correct locks.

Network Control Officers must:

- record, in permanent form, the end of pilot staff working, and
- fulfil the Pilot Staff Working Introduction form.

Related ARTC Network Procedures

ANPR 707	Clipping points
ANPR 715	Protecting Type F level crossings
ANPR 717	Using emergency roadside warning equipment
ANPR 721	Spoken and written communication
ANPR 722	Manual block working
ANPR 723	Using block posts
ANPR 724	Using clearance locations
ANPR 725	Using large pilot staffs
ANPR 726	Using half pilot staffs
ANPR 727	Using crossovers for special working
ANPR 728	Operating emergency crossovers
ANRF 011	Worksite Warning

Effective Date

11 October 2015