मेट के कर्तव्य और दायित्व
Duties and Responsibilities of Mate

1. General

Every Gang Mate shall be responsible for maintenance and safety of track in every situation. While on duty wear the uniform, and be neat and tidy, he should be prompt, civil and courteous. They shall follow the instructions of their concerned higher authorities.

2. Knowledge of Rules and Signals

Every Gang Mate shall have the correct knowledge of hand and detonating signals and shall be conversant with the following rules:-

a) Hand Signals
(See Annexure-A for details)

b) Detonating Signals Rules
(See Annexure-B for details)

3. Duty for securing safety

a) Every railway servant shall see that–

I. Every exertion is made for ensuring the safety of the public.

II. Promptly report to his superior any occurrence affecting the safe or proper working of the railway which may come to his notice, and render on demand all possible assistance in the case of an accident or obstruction.

b) Every railway servant who observes that–

I. Any obstruction, failure or threatened failure of any part of the way or works,

I. Anything wrong with a train, or any unusual circumstances likely to interfere with the safe running of trains, or the safety of the public.

II. Shall take immediate steps, such as the circumstances of the case may demand, to prevent accident; and where necessary, advise the nearest Station Master by the Quickest possible means.

III. In the case of a train having parted, he shall not show a Stop hand signal but shall endeavor to attract the attention of the Loco Pilot or Guard shouting, gesticulating or other means.

IV. Any railway servant observing a hot axle on a running train is bound to do everything in his power to stop the train and warn the train staff by showing a danger signal.

c) Action to be taken where sabotage is suspected and patrolling in emergencies.

I. As soon as he observe any sabotage or likely sabotage, bomb blast explosion etc. to the track, bridges or other fixed installation, immediately he will protect the track and inform to nearest Station Master.

II. As instructed he will patrol over the length affected in case of any emergency.

4. Important Duties of Gang Mate

a) Safety of the Line

Every Gang Mate shall see that the line is kept safe for the passage of trains. All locations needing urgent attention shall be attended to without waiting for orders from the JE/SSE/P.Way.

b) Knowledge of track maintainer

Gang Mate shall ensure that every track maintainer is having knowledge of safety rules before deploying them on track. Gang Mate shall ensure that the safety equipment and signals supplied to the Gangs are kept in good order and ready for use and that every person in the Gang has correct knowledge of all these safety equipment and signals.

c) Equipment at Site of Work

Gang Mate shall ensure that all the requisite tools and equipment as prescribed with gang are with the track maintainer at the site of work.

d) Supply of Equipment to Patrolmen and Watchmen:–

The Gang Mate will be responsible for seeing that the Patrolman and stationary watchman possesses the correct equipment specified.

e) Musters and Gang Charts/Diary Books

I. The muster and Gang chart /diary shall be in the possession of each Gang Mate. The Gang chart should be carefully kept in a container provided for the purpose.

II. The muster should normally be marked by the Gang Mate. However, literate Track Maintainer may be allowed to sign muster, which should be checked by Gang Mate.

III. The Gang Mate shall see that the

prescribed system of track maintenance is adhered to and the tasks allotted, according to verbal instructions or entries made in his Gang chart/ diary, and explained to him, are efficiently carried out including lubrication of rail joints, attention to bad spots and isolated renewed of sleepers, If capable of entering details of work done in Gang diary, the Gang Mate should do so.

f) Observance of Sleeper Packing during Passage of Train

During the passage of the first and last trains in working hours, the Gang Mate and the track maintainer should stand on the cess, each about one rail length apart, and observe the effect on the sleepers. Loose sleepers should then be marked and adequately packed. On double line, the Gangs shall invariably stand on the cess side and not in between the tracks.

g) Precautions when View is Obstructed

When working at a place from which an approaching train cannot be seen, at least 600 metres away a Track Maintainer with hand signals should be sent out by the Gang Mate:

I. On double line in the direction of approaching trains,

II. On a single line in the direction the view is obstructed (in both directions if view is obstructed on both sides).

III. It will be the duty of such Flagman to warn the Gang Mate by means of signals when a train is approaching.

IV. The Gang Mate will be responsible for warning the Gang in good time to enable them to get clear off the track. It may be deemed expedient, as an additional precaution, to issue portable whistle boards of the type indicated in to the Gang Mates, who should fix them at least 600 metres from the work-site, in the direction the view obstructed to less than this distance.

h) Tidiness of Section

Gang Mate shall see that the entire Gang length is kept neat and tidy and that all loose materials are collected and brought to stations, gang's quarters or gate lodges.

i) Safe Custody of Tools

Gang Mate shall be responsible for the safe custody of tools used by himself, the Keymen and all Track Maintainers. Gang Mate should see that Track Maintainers on work remove their tools clear of the track on the approach of a train. The Gang Mate shall ensure that all tools are deposited in the tool box after working hours and kept locked. In no case should Track Maintainers be permitted to take tools home. Before Track Maintainers break for mid-day meals the Gang Mate should see that the tools are kept away from track.

j) Action when Line is Unsafe or in the Event of Accident

I. If a Gang Mate or his Keyman considers that the line is likely to be rendered unsafe, or that any train is likely to be endangered in consequence of any defect in the permanent way or works, or due to abnormal rain or flood or any other occurrence, Gang Mate shall take immediate steps to secure the safety of trains by using the prescribed signals to "Proceed with Caution" or to "Stop" as necessity may require, vide **Annexure- C**, and shall, as soon as possible, report the circumstances to the nearest Station Master and the JE/SSE/P.Way.
(See Annexure-C for details)

II. In the event of an accident, the Gang Mate, Keymen and Track Maintainers should lookout for broken fittings of wagons and track components and see that these are not disturbed until these have been seen and recorded by a responsible official.

k) Weather Warnings and Action to be Taken

On receipt of advice from the Station Master, the Gang Mate should take the following action:–

I. During the fair season, the Gang Mate of station yard gang should depute two reliable Track Maintainer provided with patrolmen's equipment for patrolling the block sections on either side and for alerting the intermediate Gangmates.

II. During monsoon period also, the Gang Mate of the station yard gang should send two Track Maintainer in opposite directions to alert intermediate Gangmates, Patrolmen and Watchmen.

III. If there is very heavy rain or a severe storm weather during the monsoon or fair season, the Gang Mate and Track

Maintainer of all gangs on their own initiative should commence monsoon patrolling by day as well as night. Similar action should be taken to carry out patrolling on receipt of bad weather warning for the duration of warning and 48 hours beyond.

l) **Patrolling during Abnormal Rainfall or Storm**

During abnormal rainfall or Storm, the Gang Mate should, on his own initiative, organize patrolling independently of other patrolling, if any, being done on the gang-length, whether or not Patrolmen are on duty. In the event of damage being detected, action should be taken to safeguard the traffic by protecting the line as per **"Temporary Signals in Emergency Situations"** mentioned in **Annexure-C**.

m) Commencing Work Affecting Safety of Trains

No work, which may involve danger to trains, should be under taken by the Gang Mate except under the personal supervision of the JE/SSE/P.Way, a competent Railway servant authorized by special instructions, unless it is an emergency where the requirements of safety warrant the commencement of the work. In such cases the Gang Mate shall ensure that Engineering Signals are exhibited at the specified distances according to rules and Flagmen are posted with necessary equipment to man them before commencing the work.

n) Weekly Inspection of Gang Length by Gang Mate

Gang Mate shall inspect the entire Gang length once a week. On that day Gang Mate will carry out the Keyman's duties; and the Keyman will remain in-charge of the Gang.

o) Preventing Trespass and Theft of P. Way Fittings

Every Gang Mate and the track maintainer shall endeavor to prevent trespass in Railway limits by persons or cattle on the gang length, of line, and report any attempts at encroachment or unauthorized structures when noticed. Gang Mate along with Gang, should also attempt to prevent theft of P. Way fittings and report any attempt to steal, to JE/SSE/P. Way.

p) Relief arrangement in Emergencies

Gang Mate shall arrange immediate relief for Keyman, Gateman, Patrolman and Watchman when, due to sickness, they are unable to perform their duties.

q) Assistance in protection of Trains

Gang Mate and the track maintainer should render assistance to Guards and Drivers of the trains for the protection of the trains in the event of an accident between stations, when called upon to do so.

r) Action to be taken in case of Rail fractures/Weld failures

I. It is of Paramount importance that whenever a fracture of a rail/welded joint is noticed, immediate action is taken to restore the track, if necessary with restricted speed, with the least possible delay.

II. The Mate/Keyman/track maintainer, as soon as he notices the rail fracture/weld failure should first protect the track. He should also send information to the JE/SSE (P.Way) and the Station Master of the nearest station.

III. If the fracture is with a gap of less than 30 mm, the fractured rail ends should be joined with fish plates and clamps.

IV. When the fracture gap is more than 30 mm, a closure of appropriate length should be used, and tied with fish plates and clamps.

V. In cases where a small portion or piece of rail has come off or in the case of multiple fractures, the rail has to be changed before allowing traffic.

VI. In the case of weld failure, joggled fishplates and clamps should be used.

VII. After carrying out the emergency repairs the trains may be passed by a Mate/Keyman at speed for **First train STOP DEAD & Proceed with 10 kmph, Subsequent trains 20 kmph,** until the Permanent Way Official replaces the rail. track maintainer deputed as patrolman (Railway Employee) may also pass only the first train which is stopped by him in the course of protection of track after detecting rail/weld failure and after carrying out the emergency repairs, if he feels confident of passing the train.

5. Responsibilities of the Gang Mate in LWR Track

The specific duties and responsibilities of the Gang Mate in LWR sections are as under: -

a) To carry out maintenance work under personal supervision, only if in possession of valid competency certificate issued by Zonal/Divisional Training Centre to work on LWR/CWR section.

b) To undertake only those works of track maintenance for which Gang Mate is authorized.

c) To maintain in good condition the spares/special equipment issued and if any defective equipment needs to be repaired, bring the same to the notice of JE/SSE/P.Way.

d) To introduce hot/cold weather patrolling when instructed by the Supervisors and ensure that hot/cold weather patrolmen turn out on duty during the specified patrol period and carry out the patrolling duties correctly.

e) To be vigilant during hot weather and order patrol if the temperature is likely to reach td+20°C and report to the supervisors any unusual occurrences that take place on the LWR/CWR in his beat.

f) To take prompt action to protect the track in case of rail/weld fractures and carry out emergency repairs to permit the restoration of traffic promptly and report to nearest Station Master /SSE/JE/P.Way.

g) To take immediate steps to secure the safety of the trains, if they consider that track is likely to be rendered unsafe.

h) To report any ballast deficiency or disturbance of track to the JE/SSE/P.Way.

i) To inspect SEJ and LWR/CWR under his jurisdiction frequently, especially during the hottest part of the afternoons in summer and report any unusual occurrence on LWR/CWR to JE/SSE/P.Way to obtain further order.

j) The Gangmate shall note down the details of missing fittings and fastenings on plain track, turn-outs, SEJs, Glued Joints, bridges etc. and recoup them as soon as possible. He will also note down the details of cracked/ broken/ notched sleepers in the track and advise the same to JE/SSE/P.Way.

k) Gang Mate shall be vigilant during summer and on hot days.

l) Replenishment of ballast shall be completed before onset of summer. Shortage of ballast in the shoulder at isolated places shall be made up by the Gangmate by taking out minimum quantity of ballast from the centre of the track between the two rails over a width not exceeding 600 mm and a depth not exceeding 100 mm.

m) Renewal of fastenings requiring lifting of rail

n) Fastenings requiring lifting of rails i.e., grooved rubber pads, etc. shall be renewed on not more than one sleeper at a time. In case fastenings of more than one sleeper are required to be renewed at a time, then at least 30 sleepers in between shall be kept intact. Work shall be done under supervision of Gangmate.

o) On receipt of advice of a danger of buckle

I. The Gangmate should proceed to the site quickly with all available men/resources and ensure protection of affected portion at site.

II. Thereafter the Gangmate should inspect the condition of track 100 m on either side of this suspected zone and commence heaping of surplus ballast, if available, on the shoulders and up to the rail head and keep on compacting the ballast with available tool.

III. No attempt should be made to slew or align the track or disturb the existing ballast section. The Gangmate should continue to remain at site till the arrival of JE/SSE/P Way.

IV. The rail temperature will also be noted by one of these officials at the place of apprehended/actual buckle. The rail facing the sun will be covered up to the level of rail-head on the outside by ballast or leaves etc. to bring down the temperature of the rail.

p) Authorized Level Of Supervision

I. Manual Packing, Alignment.

II. Packing or renewal of single isolated sleeper not requiring lifting or slewing of track .

III. Renewal/recoupment of fastenings requiring lifting.

IV. Making up of shortage of ballast in shoulders at isolated places.

V. Imposing speed restriction if the temperature exceeds (td+20°) Celsius after maintenance work is completed, manually or by machines.

VI. Ensuring that hot weather patrolman turns out promptly for duty during the required period of patrolling and during other periods when rail temperature exceeds (td + 20°) Celsius.

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Annexure – A

Hand Signals Rules

I. Exhibition of hand signals

(1) All hand signals shall be exhibited by day by showing a flag or hand and by night by showing a light as prescribed in these rules.

(2) During day a flag or flags shall normally be used as hand signals. Hands shall be used in emergencies only when flags are not available.

(3) During night a hand signal shall normally be given by showing a red or green light. A white light waved violently shall be used as a Stop signal only when the red light is not available.

(4) Red or green light shall be either a static or flashing type.

II. Stop hand Signal

(1) Indication: Stop dead

(2) How given by day

By showing a red flag or by raising both arms with hands above the head as illustrated below:-





(3) How given by night

By showing a red light or by violently waving a white light or horizontally across the body of the person showing the signal as illustrated below:-





III. Proceed hand signal

(1) Indication: Proceed

(2) How given by day:

By holding a green flag or by holding one arm steadily as illustrated.





(3) How given by night

By holding a green light steadily as illustrated:-

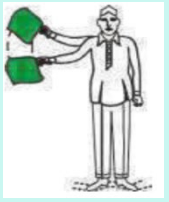


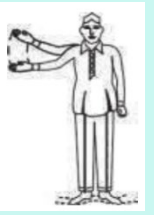
IV. Proceed with caution hand signal

(1) Indication: Proceed slowly reducing speed further if the signal is given at a progressively slower rate.

(2) How given by day

By waving a green flag vertically up and down or by waving one arm in a similar manner as illustrated below:-





(3) How given by night

By waving a green light vertically up and down as illustrated:-



V. Banner flags

A banner flag is a temporary fixed danger signal, consisting of a red cloth supported at each end on a post and stretched across the line to which it refers.



VI. Knowledge and possession of hand signals

(1) Every railway servant connected with the movement of trains, shunting operations, maintenance of installations and works of any nature affecting safety of trains shall have:–

i. Correct knowledge of hand signals; and

ii. The requisite hand signals with him while on duty and keep them in good working order and ready for immediate use.

(2) Every railway servant shall see that the staff under him concerned with use of hand signals are adequately supplied with all necessary equipment for hand signaling and have a correct knowledge of their use.

(3) A red flag and a green flag by day or lamp, which is capable of showing red, green and white lights by night, shall constitute the requisite equipment for hand signaling.

(4) Every Mate shall see that his unit is adequately supplied with all necessary equipment for hand signaling.

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Annexure-B

Detonating Signals Rules

I. Description of detonating signals

Detonating signals, otherwise known as detonators or fog signals, are appliances which are fixed on the rails and when an engine, a vehicle passes over them, they explode with a loud report so as to attract the attention of the Loco Pilot.

II. Use of Detonators

(1) The staff in possession of detonators shall not make any improper use of them.

(2) Life of Detonators:-

The normal life of detonators is five years.

(3) Method of using detonators:-

i. A detonator when required to be used shall be placed on the rail with the label or brand facing upwards and shall be fixed to the rail by bending the clasps around the head of the rail.



ii. Detonators should not be placed on rail joint and sleeper spacing, but should be kept on the rail where there is sleeper below.

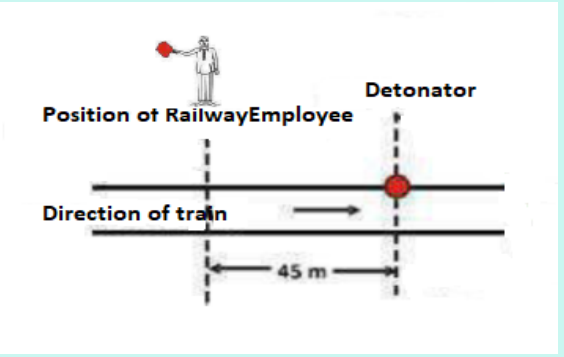
(4) Placing of detonators in case of obstruction

i. Whenever in consequence of an obstruction of a line, it is necessary for a railway servant to stop approaching trains, he shall proceed, plainly showing his Stop hand signal, to a point 600 metres from the obstruction and place on the line one detonator and then proceed to a point 1200 metres from the obstruction and place on the line three detonators, about 10 metres apart from each other.

ii. If the said railway servant is recalled before the obstruction is removed, he shall leave down three detonators and, on his way back, pick up the intermediate detonator.

(5) Safety range from detonators

When a railway servant has placed one or more detonators on the line, he must withdraw beyond the safety radius of **45 meter** from the detonator or detonators before they are exploded by an approaching engine or train.



Annexure-C

I. Works of Short Duration

(1) Protection in block section and procedure for passing of trains

Before commencing any work of such category the JE/SSE/P.Way or authorised Railway servant should issue a notice to the Station Master/Block-hut in-charge at each end of the Block section and obtain their acknowledgment. Depending as to whether the train is to be passed through the work site after stopping or at a restricted speed, the line should be protected in the following manner:–

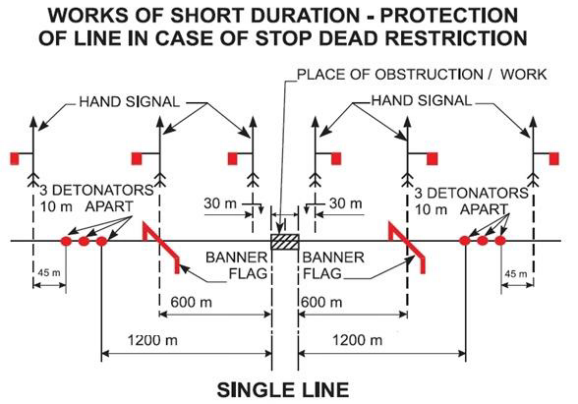
i. When the train is required to stop at the site of work (in Block section)

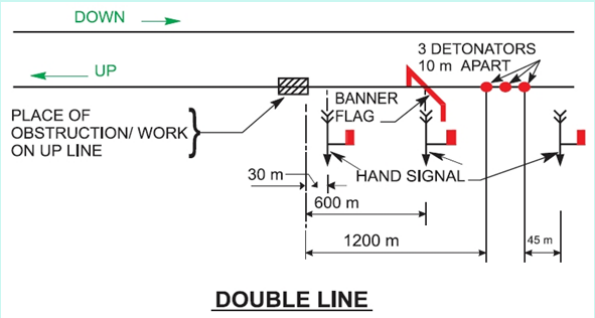
(a) Post a flagman with hand signals at a distance of 30 metres in rear of the place of obstruction, to show stop hand signals.

(b) Post a flagman with hand signals and place a banner flag across the track at a distance of 600 metres for BG in rear of the work. The flagman will show stop hand signals.

(c) Post a flagman with hand signals and detonators at a distance of 1200 metres for BG in rear of the work. The flagman shall fix three detonators on the line 10 metres apart and stand at a place not less than 45 metres from the adjacent detonators, from where he can obtain a clear view of the approaching train. He will show stop hand signals.

(d) The man at the site of obstruction shall give proceed hand signal to indicate to the Driver, when he may resume normal speed after the train has been hand signaled past the obstruction





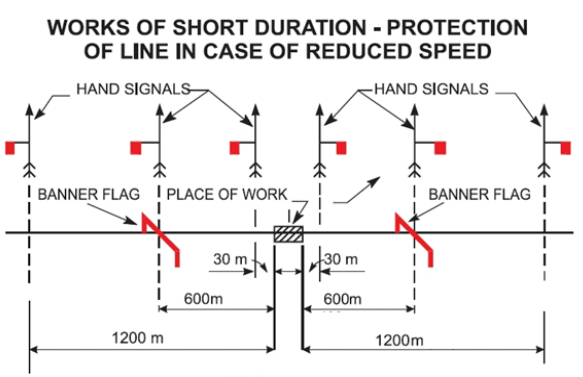
ii. When the train can pass over the work spot at restricted speed in Block section

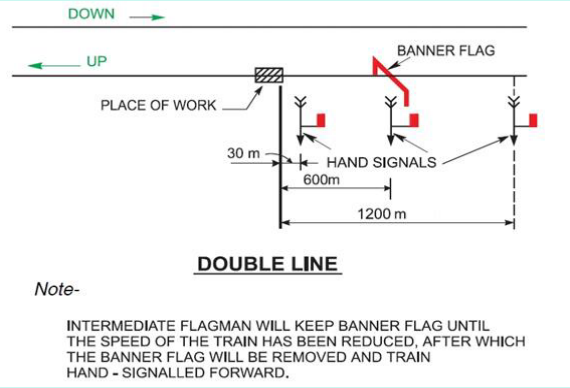
(a) Post a flagman exhibiting caution hand signals at a distance of 30 metres from the place of obstruction.

(b) Post an intermediate flagman with hand signals at a distance of 600 metres for Broad Gauge from the place of obstruction. He will also place a banner flag across the track. The intermediate banner flag must be kept across the line until the speed of the train has been reduced, after which the banner flag shall be removed and the train hand signaled forward.

(c) Post a flagman exhibiting caution hand signals at a distance of 1200 metres for Broad Gauge from the place of obstruction.

(d) The railway servant at the site of work should give proceed hand signals to indicate to the Driver, that he may resume normal speed after the train has been hand signalled past the site of work.





iii. The following points should be kept in view, while protecting the track in the cases mentioned in sub-Para i. and ii. Above:–

(a) On single line, the line must be so protected on both sides of the work.

(b) At places where there are curves or falling gradients and at times of poor visibility the distances for protection may be suitably increased wherever necessary and intermediate flagman posted to relay hand signals.

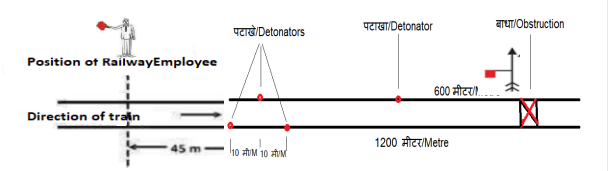
(c) The location of the banner flag, detonators and hand signals should be so selected as to avoid stopping of trains, as far as possible, on continuous steep rising gradients.

(d) If in an emergency, it becomes necessary to carry out such works at night, the provisions for protection of line must be complied with except that red light must be exhibited in the direction of approaching trains in place of red hand signal flags and banner flags.

(e) In an Emergency, when it is necessary on considerations of safety, the JE/ SSE/P.Way, or authorized railway servant may commence such work before issuing notice to the Station Master, after protecting the line and shall first bring the train to stop and advise the Loco Pilot of the train about the need to stop, If the work is likely to be prolonged, he should notify the Station Master as soon as possible.

II. Temporary Signals in Emergency

i. Whenever in consequence of an obstruction of a line or for any other reason it is necessary for a railway servant to stop approaching train he shall plant a danger signal at the spot and proceed with all haste in the direction of an approaching train with a danger signal (red flag by day and red light by night) to a point 600 metres from the obstruction and place one detonator on the line after which he shall proceed further for not less than 1200 metres from the obstruction and place three detonators on the line 10 metres apart. He should then take a stand at a place not less than 45 metres from there, from where he can obtain a good view of an approaching train and continue to exhibit the danger signal, until recalled. If recalled, he shall leave on the line three detonators and on his way back pick up the intermediate detonator continuing to show the danger signal.



ii. On single line the line must be protected on each side of obstruction.

iii. Where there are adjacent lines and it is necessary to protect such lines, action should be taken on each such line in a similar manner.

हमारा उद्देश्य /OUR OBJECTIVE

To upgrade maintenance technologies and methodologies and achieve improvements in productivity and performance of all railway assets and manpower which inter alia would cover reliability, availability for use, utilisation and efficiency.

भारत सरकार - GOVERNMENT OF INDIA
रेल मंत्रालय - MINISTRY OF RAILWAYS

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CAMTECH/C/2021/DRM/1.0
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