

# A Presentation on ART

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# Introduction

**To give relief measure & to conduct rescue operation at the site of accident as quickly as possible, the arrangement of Accident Relief Train (ART) have been made at different stations of the railways. In an ART, all the necessary equipments required for relief & restoration are kept in ready state for use as & when required**

# Requirements for an ART

An ART must be capable of -

- Providing adequate facilities for relief & rescue of passengers involved in a train accident.
- Lifting heavy loads i.e. BOX, BOXN, BCN loaded wagons whose gross load is about 81 tonne.
- Reaching to the site of accident as quickly as possible.
- Restoring the through communication as quickly as possible.

# Provisions in an ART

- The minimum capacity of the ART cranes should be 140 T on BG and 60 T on MG.
- The maximum speed of ART 's is limited due to-
  1. Steam crane (65 kmph on BG and 50 kmph on MG) with their jib lower & in trailing position & (45 kmph on BG & 30 kmph on MG) when Jib in leading.
  2. IRS bogies & in some coaches built on the over aged underframe of condemned stock which is not fit to run at higher speed.

# Provisions in an ART

- **Standard BEML / ICF coaches & roller bearing fitted stock, fit for running at higher speed, should be attached.**
- **ART cranes should have hydraulically operated and centrally controlled outriggers.**
- **With steam crane restoration speed is slow due to frequent watering and coaling. In some cases, steam generation problem resulting further delay.**

**So, adoption of Diesel powered cranes, which are-**

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- **Much faster in operation and can work long hours.**
- **It can be shut down when not required thus achieving economy in operation.**

## Class & Composition of ART (BG)

- **A-Class**

- 140 T Diesel crane with match truck
- One tool van with HRE, Generator etc.
- Two staff van
- One BFR for engineering material.
- One BFU for Bulldozer and other heavy material
- One van containing material for OHE

# B-Class

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Same as A- class except  
crane and bulldozer.



# Class & Composition of ART (M G)

- A-Class 35 T steam crane
- Water tank
- 8-wheeler power van
- 8-wheeled engg. cum HRE van
- 8-wheeled loco tool van
- 8-wheeled staff cum brake-van
- 8-wheeled rail truck

# B-Class

- **20.4 /10.2 T steam crane or hand crane.**
- **Water tank**
- **8-wheeled power van**
- **8-wheeled engineering cum hydraulic rerailing van**
- **8-wheeled loco tool van**
- **8-wheeled staff cum brake-van**

# C-Class

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**A tool van containing screw jacks, re-railing ramps etc. to deal with minor accidents in traffic yards requiring no assistance.**

# Jurisdiction and beat of ART

- The beat of ART from its base station should be about 250 to 300 KM on BG and 150 to 200 KM on MG.
- It should be possible for ART to reach the farthest points on its beat in less than 4 hours

# Location of ART

## Broad Gauge

- **ART** - A-Class -Gorakhpur, **Sonpur** (E.C.Railway)  
SPART -Maduwadih
- **HRE** - Gorakhpur, Gonda, Chhapara Kachehari,  
Maduwadih, Mau,  
**Sonpur, Barauni** (E.C.Railway)

# Location of ART M G

- **ART-** A-Class- Bareilly city, Kashganj, Mailani, Gonda, Chapara Kachehari, *Samastipur, Saharsa, Narkatiaganj, Darbhanga* (E.C.Railway)
- **HRE-** Bareilly city, Kashganj, Lucknow Jn. Gonda, *Samastipur, Darbhanga* (E.C.Railway)

# Siren Code

- loco shed or traffic yard adjoining the loco shed. 2 long
- out station & main line is clear. 3 long
- out station & main line is clear & ART is to be turned out with ARME. 3 long & 1 short
- out station & main line is blocked & ART is to be turned out without ARME. 4 long
- out station & main line is blocked & ART is to be turned out with ARME 4 long & 1 short

# Despatch of ART

- The ART should start with in the target time 30 minutes during the day & 45 minutes during in night from receipt of information.
- Due to some operational problem at some stations, this time is somewhat deferent.

**Note:-** Warning message to station master to keep the line clear will be given by section controller.



# Movement of ART

- ART must be given precedence over all other trains when proceeding to the site of accident &/or returning to the terminal station carrying injured persons.
- ART/ARME must not be detained for want of guard but may leave in the charge of any responsible loco/traffic official.
- After completing relief operation the returning ART must be given precedence over all goods train

# Maintenance & Inspection of ART

- **Sr.S.E. (C&W), incharge of an ART, is responsible for proper & sufficient equipment (as per standard list) in running order. He is also responsible for its proper marshalling.**
- **Sr.S.E. (C&W) should personally see that no over aged, overdue POH and overdue schedules stocks are attached in ART.**
- **C&W staffs examine ART Should once in every week and/or after return from a site of accident.**

## Maintenance & Inspection of ART

- **Incharge of an ART must see First aid box, Fire extinguishers & other safety items are checked / refilled at proper interval.**
- **Incharge of an ART must also ensure food stuff & other eatable item are in good condition & within its expiry limits.**
- **Incharge of an ART should ensure proper training of nominated staff for handling the equipment provided in the ART.**

## Maintenance & Inspection of ART

- **An inspection register must be maintained in ART.**
- **Inspection and remarks must be attended as quickly as possible and informed to DRM for necessary action.**
- **Mock drill should be ordered by DRM personally and conducted under direct supervision of an official not lower than Sr.scale officer.**

## Documents to be maintained in ART

- Inspection register officers - trimonthly
- Inspection register Sr.subordinates- monthly
- ART log book
- Chain testing register
- Pay order book
- T & P register
- G & SR book
- Accident Manual
- Operating Manual
- Mock Drill register
- Any other document ordered by administration



**Thank you**