

Human Factors in Security

BY

**P.K.Mehta
Director General
Railway Protection Force
Indian Railways**

THE NETWORK

Largest Railway under single management

Route kms	64400 kms
Stations	7133
Electrical Multiple Units (EMU) trains	4710 (per day)
Total no. of trains	12000 (per day)
Passengers	22.7 millions (per day)
Freight	2.54 million tonnes (per day)

AREAS OF CONCERN

- **Vast network – geographical spread**
- **Stations: open and easily accessible –leaves it vulnerable**
- **Volume of passengers – High!!**
- **Over 12000 passenger trains – Crimes against passengers in running trains**
- **Public/Political agitations affecting railways often due to issues not related to Railways.**
- **Makes Railways a soft target for the criminals/insurgents**
- **Passengers' expectations : a peaceful and hassle free journey to be provided by the system.**

AREAS OF CONCERN

Attack on Railway system by Left Wing Extremists (LWE), Militant/Insurgent/Terrorist outfits.

- **Sabotage**
- **Explosion on Railway track.**
- **Abduction of Railway employees**
- **Firing on Railway passengers, trains by militant/ terrorist outfits.**

Security of Railway Projects in LWE/ Insurgency/ Militancy affected areas.

VOLUME OF COMMUTERS

(2011-12)

- Total **8.3 Billion** passengers per year
- **4383 Millions** i.e. **53%** of total passengers are sub-urban passengers in Metro Cities.
- **3,922 Millions** passengers are of non-sub-urban/ordinary classes.
- **7,875 Millions** passengers (95%) travel either in unreserved classes or EMU trains in sub-urban sections.



VOLUME OF COMMUTERS

- Suburban trains in Metros viz. Mumbai & Kolkata are the life lines of the cities.
- Primary mode of transport in Metro cities
- Millions of commuters use EMU local trains.
- Over **5,200** EMU trains are run daily to cope up with the huge commuters in Metro cities.



SPECIAL OCCASIONS

- **FESTIVALS :**
 - **Diwali**
 - **Holi**
 - **Id-ul-fitr**
 - **Chhath**
- **Kumbh Mela:** a religious congregation
- **International meets like Common Wealth Games need special attention.**

KUMBH MELA

- **Maha Kumbh 2010 at Haridwar was for a duration of 44 continuous days.**
- **Millions of devotees visited Haridwar to take Holy Dip in Ganga River daily.**
- **Majority of the devotees travelled by train to reach Haridwar from every corner of the country.**
- **Devotees visited Haridwar on 06 days of main bath:**
 - 1st day: 6.6 Million**
 - 2nd day: 3.3 Million**
 - 3rd day: 16.6 Million**
 - 4th day: 10.5 Million**
 - 5th day: 9.0 Million**
 - 6th day: 3.3 Million**

CHALLENGES - KUMBH MELA

➤ It was a major challenge to provide security to the huge number of Railway passengers during their journey as well as in station premises.

➤ Handle the crowd to avoid stampede and chaos on foot over bridges and platforms due to the high volume of footfall each day

➤ Diversion in road traffic added to the inflow in the Railways.



MEASURES TAKEN

- **Mobilization of additional manpower from other locations for deployment at Haridwar and nearby stations.**
- **Deployment aimed to control movement of passengers**
- **Reduce residency period in station premises**
- **Surveillance through CCTV network**
- **Peak hours identified**
- **Additional booking counters**
- **The station area including the portico divided in different beats.**

MEASURES TAKEN

- **Security personnel were deployed in each beat according to the importance and sensitivity.**
- **Additional booking offices to facilitate the passengers to procure daily tickets.**
- **Security personnel were deployed in booking offices for crowd management as well as security of passengers and Railway earning.**
- **CCTV Control room with adequate cameras for round the clock surveillance.**
- **Deployment of security personnel in plain clothes.**
- **Coordination with civil police / intelligence units**

MEASURES TAKEN

- **Women personnel**
- **Medical personnel**
- **Emergency help line activated**
- **Use of public address system to warn and direct passengers**
- **Collection of intelligence by plain clothed personnel**
- **Baggage scanners/ door frame metal detectors/ hand held metal detectors installed**
- **Frisking of passengers and their luggage checking – a near impossibility**

MUMBAI EXPERIMENT

- **Mumbai train bombing - 2006**
- **Serial blasts in trains**
- **Measures adopted included installation of scanners to check 100% passengers entering the Church Gate station/ Mumbai**
- **Devices had to be removed within 12 minutes to avoid stampede!!!**

PILOT PROJECT

In an attempt to take care of the unreserved segment of the passengers;

Pilot Project on computer based unreserved ticketing has been launched at all stations in Delhi area and in due course throughout the country by which unreserved tickets can be issued even from locations other than the boarding stations and will reduce crowds at booking offices and stations.

CONCLUSION

- **In any emergency it is the man on the spot who is the first responder and it is his decision that matters**
- **Data analysis and action thereon needs trained human requirement.**
- **Machines in the form of scanners, metal detectors, CCTVs are important**
- **Machines, however act as a Force Multiplier but can not replace the human element in security.**

THE ROAD AHEAD

- **Emphasis on training**
 - **People friendly**
 - **Tech friendly**
 - **Gender mainstreaming – increase the current percentage of women in police from 2-3% to about 10%**
 - **Sensitive towards human rights – especially the old and infirm**

TRAINING MODULE

- **Competency based training**
 - **Security of Railway passengers, property and allied activities with special emphasis on human touch.**
 - **Handling of sophisticated weapons.**
 - **Use of Dog Squad (Trackers & Sniffers)**



THANK

YOU