FEBRUARY 2020

INDIAN RAILWAYS

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Inside

PERFORMANCE REVIEW OF INDIAN RAILWAYS 2019

Interview with KATHAK MAESTRO **Pandit Birju Maharaj**

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FRP Toilet Cubical

Side Panels and Roof Panels for Coach Interiors

Seats and other Accessories for Coach Interiors

Diesel Locomotives

Traction Alternators

Traction Motors

Radiator Cooling Fans

Dynamic Brake Grids

Dynamic Brake Blower Motors

Auxiliary Generators

Dustbin Blower & Motor

Driver Cab Air Conditioners

Electric Locomotives

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Traction Transformers

Pantographs

Harmonic Filters

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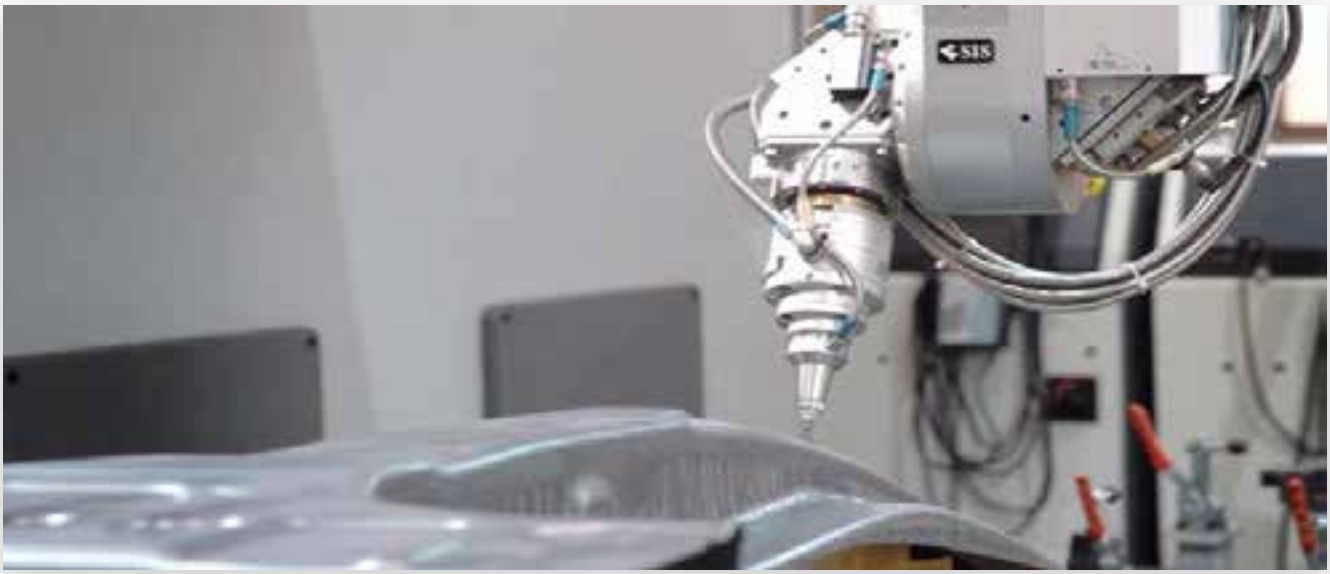
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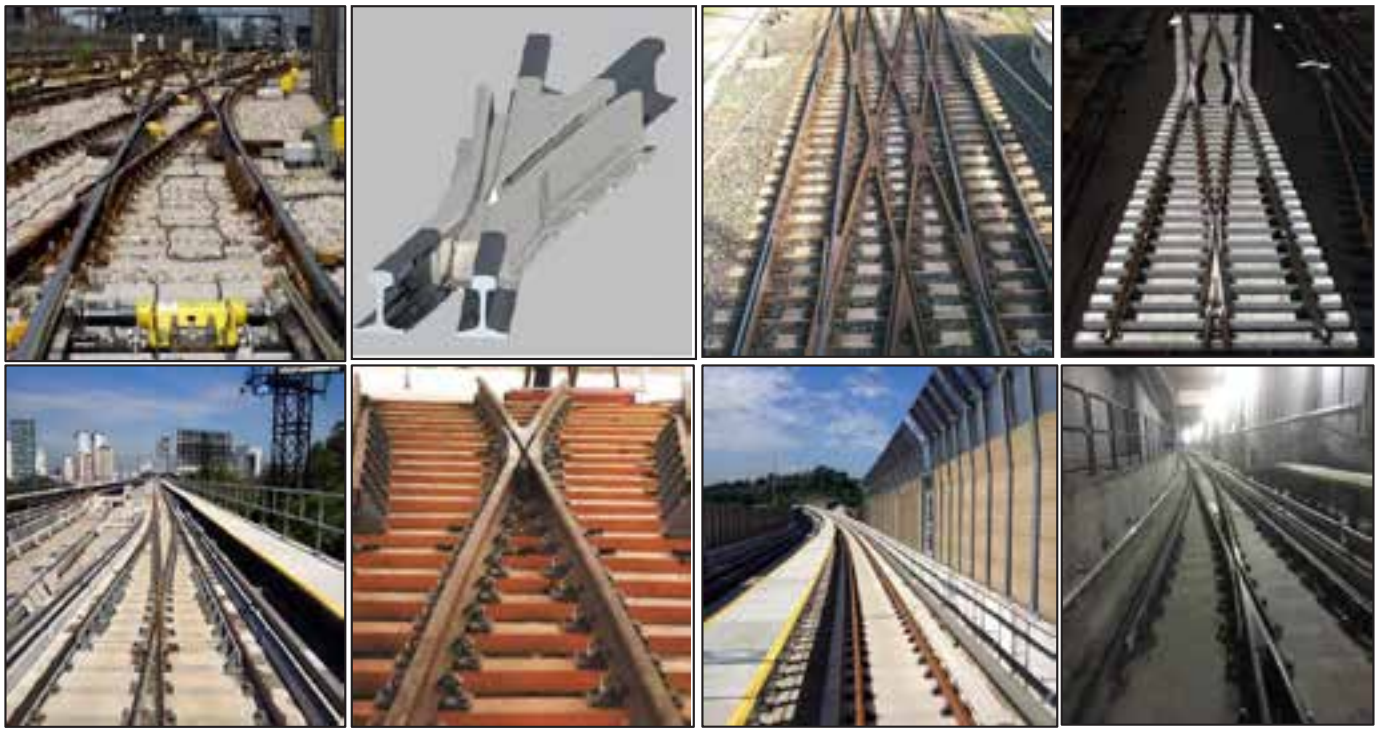
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Editorial

The 14th Foundation Day of Dedicated Freight Corridor of India (DFCCIL) was celebrated in New Delhi on 18th January, 2020. Shri Piyush Goyal, Minister of Railways and Commerce & Industry congratulated the team DFCCIL on the occasion. The 351 km long Khurja-Bhaupur section of the project is expected to be commissioned during the current Financial Year and the entire project (both the corridors – Eastern and Western) is targetted to be completed by December, 2021. DFC was conceptualised on the realisation of the need for separate tracks for freight and passenger, to ensure faster movement of both.

With a view to aiding those people of Odisha who are not comfortable in either Hindi or English, unreserved tickets in Odia script in addition to English and Hindi has been introduced. Now they can easily check the tickets issued to them in terms of destination, class of travel, Train type and date.

Environment pollution is now a global concern. Protection and improvement of the natural environment is enshrined in our constitution also as one of our Fundamental Duties. Indian Railway is also playing a part in this direction. In a bid to foster paperless culture on Indian Railways, E-Office has been introduced. RailTel, a miniature PSU under Ministry of Railways completed execution of Phase-I of the project and has now been entrusted with Phase-II of it. While, 50,000 users in 58 units were covered by Phase-I, in Phase-II RailTel will register 39,000 users over 34 Railway divisions in NIC e-office platform by 30th June, 2020. East Coast Railway has commissioned the Government's first waste-to-energy plant which will turn e-waste and plastic into light Diesel oil in 24 hours.

The 164-year old and world's oldest working locomotive, the Express EIR 21, a Fairy Queen look-alike, was originally shifted to India in 1855. It was withdrawn from service in 1909 and was kept as an exhibit for 101 years until 2010, when Loco Works, Perambur took the challenge to revive it. Thenceforth, Steam Heritage runs are operated to showcase the heritage value of Indian Railways. So far nine such heritage runs have been organized by Southern, Railway, the latest being on 7th January, 2020 which was flagged off by Shri Rajesh Agarwal, Member, Rolling Stock.

This issue also contains an exclusive interview with Kathak Maestro, Pandit Birju Maharaj and Performance Review of Indian Railways during 2019.

The magazine wishes Shri Vinod Kumar Yadav on his re-appointment as Chairman, Railway Board w.e.f. 1 January, 2020. ✻

Main Proposals Pertaining to Railways as Contained in the Union Budget Proposals 2020-21

- 148 Km long Bengaluru Suburban Transport Project at a cost of Rs 18600 Crore proposed
- A National Logistics Policy to create a single Window E-Logistics Market
- Proposal to Monetise at least 12 Lots of Highway Bundles of over 6000 Km before 2024
- Proposal to Set up large Solar Power Capacity Alongside Rail Tracks, on Railway's Land
- Four Station Re-Development projects and Operation of 150 Passenger Trains through PPP Mode
- National Skill Development Agency to give Special Thrust to Infrastructure-Focused Skill Development Opportunities
- Setting up of 'Krishi Rail' with refrigerated coaches through PPP arrangement for National Cold Supply chain for Perishables.









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Year End Review 2019 : Ministry of Railways



Major Initiatives & Achievements in the Year 2019

- Best ever safety record - Zero passenger fatalities during the year; Punctuality performance for Mail/Express trains increased to 75.67%
- Union Cabinet approves transformational organisational restructuring of the Indian Railways - A landmark reform initiative
- Budget 2019 lays roadmap for Railways to become growth engine of the country with proposed investment of ₹50 lakh crore till 2030
- Big Thrust for Infrastructure Development - Speed of trains on Delhi-Mumbai and Delhi-Howrah routes to be raised to 160 kmph; Signaling system to be modernized; Steady progress towards a Green Electrified Railways; Station Redevelopment on PPP Mode
- Indian Railways to manufacture 44 rakes of Vande Bharat trains, Tenders floated; Record production of coaches and locomotives; 194 trains upgraded to Utkrisht standard in 2019-20
- Artificial Intelligence based PNR confirmation predictor integrated with IRCTC website; First ever train run by IRCTC and not by Railways - Tejas Express starts operation between Delhi and Lucknow. Second Tejas train between Mumbai-Ahmedabad started
- Stations with High Speed free Wi-Fi cross 5500; Real Time Train Information System in collaboration with ISRO fast tracked; Complaint Management portal and application 'RailMadad' rolled out
- Stations provided with CCTV based Surveillance System cross 500; First Railway Commando Battalion 'CORAS' to tackle the menace of terrorism and naxalism in Railways launched
- Indian Railways rationalizes menus to further improve variety, hygiene and quality of food for its passengers; Web-based live streaming facility through CCTV extended to 40 kitchens units of IRCTC
- No single use plastic material in Railways from 150th Gandhi Jayanti on 2nd Oct 2019; Total numbers of bio-toilets increase to 2,34,248 in 65,627 coaches
- Dedicated Freight Corridor to be fully commissioned in phases by the year 2021; Rewari - Madar section of Western DFC and Bhadan – Khurja section of Eastern DFC completed and trial commercial runs started
- E-office Project implemented over 58 establishments of Indian Railways replacing manual files by creating 72000+ Digital Files; Procurement process of Indian Railways end-to-end digitised
- Successfully completed one of the world's largest recruitment exercises; Ayushman Bharat introduced in 91 hospitals of Indian Railways

Higher Investment in Railways

- Highest ever CAPEX: Rs. 1,60,176 crore in 2019-20 Budget Estimates.
- 20.1% higher over 2018-19
- Utilization upto end of November 2019 (April-November 2019) is Rs.1,02,008.61 crore, which is 63.7%. The utilization of funds during the corresponding period in 2018-19 was 61.3%.
- With a proposed investment of Rs 50 lakh crore until 2030, Budget 2019 laid the roadmap for Railways to become the growth engine of the country.

Infrastructure Thrust

Faster construction

- Construction of Total New Line, Doubling & Gauge increased from 1014 Track KM last year to 1165 Tkm this year (+15%) (period: April-Nov)
- Elimination of manned level crossings increased by 199%
  - 904 MLCs have been eliminated up to November 2019 compared to 296 during the same period last year; increased mechanization leading to 27% higher deep screening of track & turnouts (9,059 km this year vis a vis 7,159 km last year); production and use of longer rails (260 meter) (~ 75% of total) reducing weld joints; drastic reduction in rail/weld failures by 23%.
  - Higher Bridge rehabilitation (+82%): 861 bridges rehabilitated in Apr-Nov 2019 compared to 472 last year during the same period
- Construction of Foot Over Bridges (FOB) increased by 44%
  - 170 FOBs constructed between Apr-Nov 2019 as compared to 118 during Apr-Nov 2018.
- Higher Rail Renewal (+27%) - 3,560 Track km (Tkm) between Apr-Nov 2019 as against 2,812 Tkm during Apr-Nov 2018

Commissioning of Complete Projects

- 320 km long Gauge Conversion Project from Jaipur-Ringas-Sikar-Churu in Sept 2019
- Doubling project (7 Km length but very important to decongest New Delhi Station) between New Delhi to Tilak Bridge (5th & 6th line)
- 113 Km long New Line Port connectivity project in Andhra Pradesh connecting main land with Krishnapatnam port
- 55.47 Km long Doubling work in UP from Meerut-Muzaffarnagar
- 42.5 Km long New Line Coal Project from Kharsia-Korichhapar
- New Line stretching to 67 km from Rajgir-Hisua-Tilaiya including Islampur-Natesar in Oct 2019
- Doubling of Line stretching to 42 km from Hajipur-Ramdayalu Nagar in Oct 2019
- 19 Km long coal project named Bakhtiarpur-Barh completed and commissioned for coal movement to Barh NTPC Thermal Power Plant.
- 45 Km long length doubling project from Lumding to Hojai
- 112 Km long New line National Project construction in Tripura named Agartala–Sabroom

Connecting India - Lines approved

- 3rd line between Allahabad- Pt. Deen Dayal Upadhyay Junction (UP)
- New Line between Sahjanwa-Dohrighat (UP)
- Doubling of Line from New Bongaigaon-Agthori (Assam)
- New Line between Vaibhavwadi-Kolhapur (Maharashtra)

Approval for raising of speed to 160 kmph by 2022-23 on Delhi-Mumbai and Delhi Howrah routes : Benefits:

- 60% increase in average speed of passenger trains
- Journeys by Rajdhani train to become fully overnight

Modern Train Control System

Indian Railways to modernize its Signaling system by implementing Modern Train Control system with Long Term Evolution (LTE) based Mobile Train Radio Communication (MTRC) System.

- This is one of the most ambitious modernization projects of Indian



Railways, which envisages upgradation of signaling system for improving safety, Line Capacity and to run trains at higher speed. It is to be implemented after approval of NITI Aayog, Extended Board for Railways (EBR) and sanction of CCEA.

- As a prelude to taking up the above modernization work of signaling system on pan-India basis, 4 works of total 640 Route KM at a total cost of ₹1810 Crores have been sanctioned as pilot projects for extensive trials. The four sections are Renigunta (RU) – Yerraguntla (YA) section on South Central Railway, Vizianagaram (VZM) –Palasa (PSA) section on East Coast Railway, Jhansi (JHS) – Bina (BINA) Section on North Central Railway and Nagpur (NGP) – Badnera (BD) Section on Central Railway. These are some of the busiest routes on Indian Railway network with heavy traffic.



Towards a Green Electrified Railways

Railway Electrification increased from 1440 Route KM to 2041 RKM this year (+42%) (period: April-Nov)

From April 2018 to 5th November 2019, 436 trains converted from End of Generation (EoG) to Head on Generation (HoG) to reduce diesel consumption; taking cumulative number to over 500 trains.

- Total 39 Workshops, 7 Production Units, 5 Diesel Sheds and one Stores Depot are now 'GreenCo' certified. Of these, 7 received the certification in 2019-20.
- With 4 more Railway Stations getting Green Certification in 2019-20, 13 Railway Stations have achieved Green Certification till now. 18 more Railway Buildings, Offices, Campuses and other establishments are also Green certified, including 2 Supervisor Training Centres (STCs) and 3 Railway Schools. Railway Hospital Ajmer is the first railway hospital to achieve Green rating.
- 85 Railway Stations have been given ISO:14001 certification in current year for implementation of Environment Management System.
- **Renewable Energy**

Indian Railways has planned to source about 1000 Mega Watt (MW) Solar Power and about 200 MW of wind power progressively by 2021-22 across Zonal Railways & Production Units. Details are as follows:

i. Solar Energy

v. Roof Top Power Plants

- 500 Mega Watt (MW) solar plants on the roof top of Railway buildings through developers' PPA mode with 25 years agreements, which will be used to meet non-traction loads at Railway Stations, etc.
- Out of this, 96.84 MW of solar plants have already been installed. These plants will reduce CO2 emission & reduce carbon footprints.
- 16 stations have been declared Green Railway stations across IR, which are meeting energy needs completely either through solar or wind power. These stations are Roha, Pen, Apta in CR, Niamatpur halt, Kanhaipur halt, Teka Bigha halt, Mai halt, Garsanda halt, Niyazipur halt, Dhamaraghat in ECR, Shri Mata Vaisno Devi, Shimla in NR, Unhel, Khanderi, Bajud, Ambli Road, Sadanapura & Sachin in WR – are 100% Green Powered stations.



- Work in progress for about 111 MW Solar plants.
- Tenders for 93 MW Solar plants have recently been awarded by Railway Energy Management Company Limited (REMCL), a company under the Ministry of Railways.
- Tenders for 45 MW rooftop solar capacity floated by REMCL.
- Balance 154 MW is under different stages of planning.

Land based Power Plants

- About 500 MW Land based solar plants to meet Traction & Non-Traction requirements.
- Out of this about 3 MW has already been installed at MCF, Raebareili.
- Bhilai (50 MW) on 300 acre vacant Railway land – Work awarded by REMCL & is under progress. Targeted for commissioning by March 2021.
- In addition to the above land based solar projects, IR has also taken up two pilot projects for feeding solar power directly to 25 kV AC traction system.
- Diwana Solar Plant Project (2 MWp) through REMCL: PPA signed on 14 June, 19.

Work started & targeted for completion by March 2020.

- Bina Solar Project (1.7 MWp) through BHEL: Work started & under execution & targeted for completion by February 2020.
- Tenders for Two Hybrid plants (solar + wind) of 140 MW (35 MW solar + 105 MW wind) and 109 MW (27 MW solar + 82 MW wind) capacity have also been floated by REMCL.

ii. Wind Energy

Out of 200 MW target of IR, 103.4 MW wind plant has already been installed.

- Wind Mill Plant of 21 MW (for non-Traction) capacity in Tamil Nadu, 26 MW (for traction) capacity in Rajasthan, 6 MW (for non-traction) & 50.4 MW (for traction) capacity in Maharashtra has been installed.
- Further, tenders for 187 MW capacity floated by REMCL as part of Hybrid renewable energy plants.

Initiatives for Station Redevelopment

- For three (03) stations (Anand Vihar, Bijwasan, and Chandigarh), contracts have been awarded by Indian Railway Station Development Corporation (IRSDC) on 30.10.2019.
- For Five (05) stations, MoU signed with
- RLDA & NHAI in April, 2019 for Redevelopment of Ajni (Nagpur) as Multi-Modal Transport Hub. Broad scheme has been finalized and Bids are under invitation.
- RLDA & Mussoorie Dehradun Development Authority (MDDA) in Oct, 2018 for Redevelopment of Dehradun station. MDDA has engaged architectural consultant for preparation of plan.
- ECoR & State Govt. of Odisha on 19.09.2019 for redevelopment of Bhubaneswar station.
- RLDA & DDA on 19.12.2019, for redevelopment of Anand Vihar and Bijwasan station.
- IRSDC has taken up integrated facility management for five stations, viz, Pune, Secunderabad, Chandigarh, Anand Vihar and Bangalore city since March/April 2019.
- For redevelopment of Gwalior, Nagpur, Sabarmati and Amritsar Railway Stations through Public-Private Partnership, in-principle approval was granted by PPPAC-Public Private Partnership Appraisal Committee on 20.12.2019. The tender process for this has set in motion. The objective of the project is to give world class facilities at these railway stations to passengers just like at airports. Important features for all the stations are - segregated arrival/departure routes of passenger movement, 100% Divyang friendly, obstruction free entry and exit to the station, ample sitting spaces, provision of lifts and escalators to assist passenger movements. The development shall be on Transit Oriented Development (TOD) principles, aiming to decongest the cities.



MAKE IN INDIA



- Indian Railways to manufacture 44 rakes of Vande Bharat Trains. Its Production Unit Integral Coach Factory (ICF), Chennai set the process in motion by publishing tender on 22nd December 2019 for supply of electrical equipment and other items for 44 train sets of 16 coaches each. The procurement shall be done in accordance with extant "Make in India" policy of DPIIT, Government of India.
- Diesel Locomotive Works, Varanasi has exported 07 diesel locomotives to Srilankan Railways
- Indian Railways to provide Broad Gauge and Meter Gauge Diesel Locomotives to Bangladesh Railways for a period of 2 years to help them in improving train operations
- Taking ahead Make-in-India initiative, some of the track maintenance machines such as Utility Vehicles (UTVs), Rail Bound Maintenance Vehicles (RBHVs), Track Laying Equipment (TLE), Rail Threader (RT) and Rail-cum-Road Vehicle (RCRVs) have been fully indigenized.
- Most of the track maintenance machines supplied during the last five years were manufactured in India by world's leading manufacturers under Make-in-India.
- One more manufacturing plant by a world's leading manufacturer of track machines has been commissioned at Karjan in Gujarat in the month of Nov.2019. First machine manufactured in this plant is likely to be rolled out by Feb.2020.



Locomotive exported to Myanmar



RITES exports customised DMUs and locomotives to Sri Lankan Railways

FOCUS ON PASSENGER SERVICES

Punctuality

- The punctuality performance of Indian Railways for Mail/Express trains has increased to 75.67% (April-Nov) as compared to 68.19% in the same period of last year reflecting an improvement of 7.5%.

New coaches and trains

- First Tejas Train between Delhi-Lucknow started operating - first ever train with operations managed by IRCTC and not Indian Railways
- Booking for 2nd Tejas Train operated by IRCTC between Mumbai and Ahmedabad started.
- 2nd Vande Bharat Express inducted in regular service from New Delhi to Katra
- 194 trains have been upgraded to Utkrisht standard in 2019-20
- 78 New Train services (overall) introduced between Apr-Nov 2019.
- 120 pairs of ICF trains converted to faster and safer LHB utilizing 156 LHB rakes.
- 104 passenger trains have been converted into faster and safer MEMU utilizing 60 MEMU rakes of 8-Car each.
- Augmentation of on-board carrying capacity in train: 656 additional coaches have been augmented in the period from April to November 2019.
- Sleeper coaches attached in Humsafar trains for ensuring convenience and affordability of Humsafar trains.
- Running of special trains: 28,500 trips of special trains run during festivals and holidays in the period from April to November 2019.

Increased Rolling Stock Production

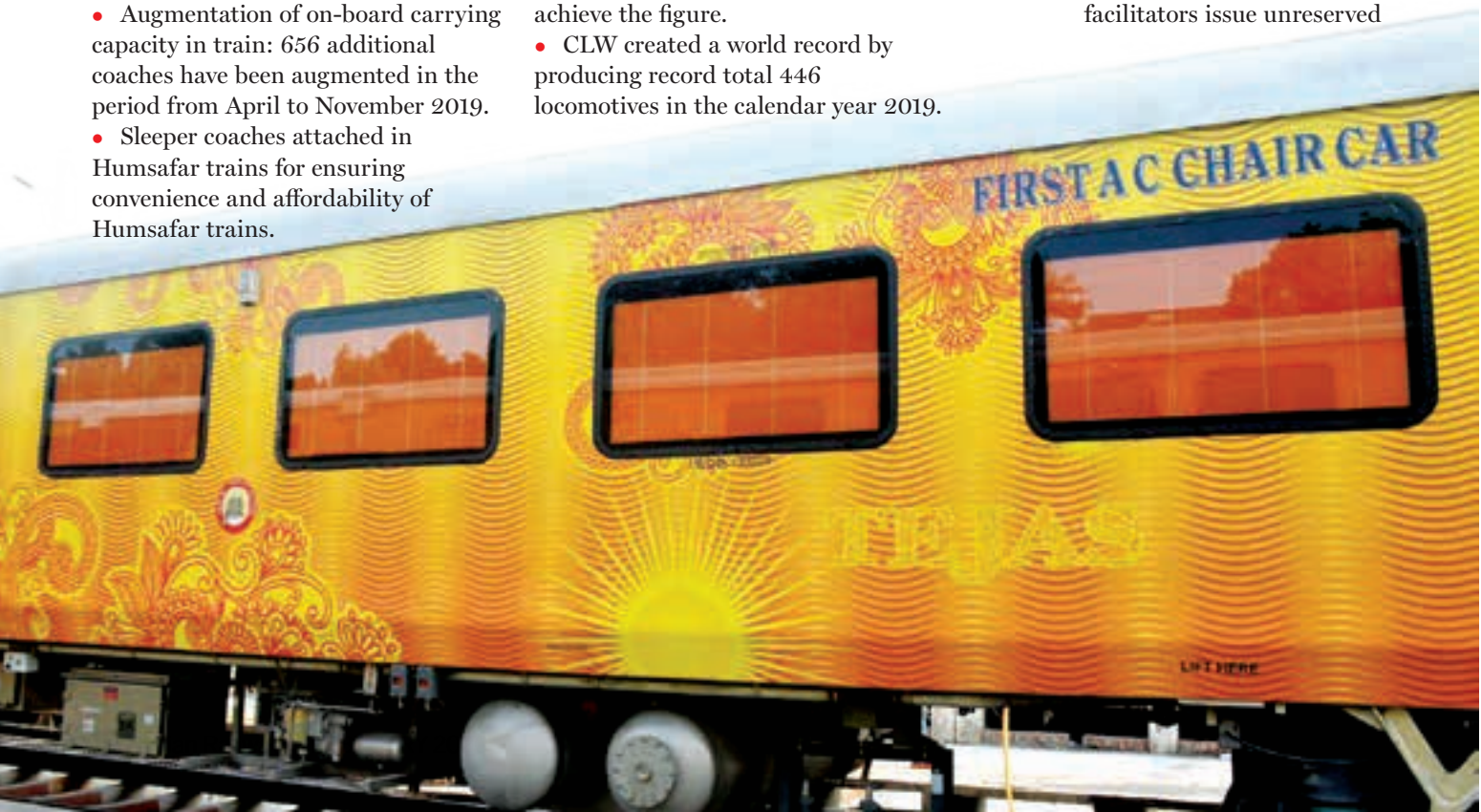
- 495 Electric Locomotives produced in April-Nov 2019 compared to 309 in Apr - Nov 2018 (+60%)
- 3,837 LHB coaches produced in April-Nov 2019 compared to 2,739 in Apr-Nov 2018 (+40%)
- Integral Coach Factory (ICF) of Indian Railways produced its 3000th coach of the year 2019-20 in less than 9 months. Number of working days to achieve this reduced from 289 days in 2018-19 to 215 days in the current year, a reduction of 25.6%.
- Chittaranjan Locomotive Works (CLW) turned out 300th locomotive of the FY 2019-20 on 21st December 2019, in less than 9 months (in 216 working days). The working days for production of 300th loco has reduced from 292 days in the year 2017-18 to 249 days in 2018-19 and further to 216 days in the current FY 2019-20. Therefore, a reduction of 28% since 2017-18 in number of working days to achieve the figure.
- CLW created a world record by producing record total 446 locomotives in the calendar year 2019.

Passenger Charges

- ***The Terminal Tax on Railways Passenger Act, 1956*** repealed. Terminal tax used to be levied on passengers carried by Railways from or to certain places of pilgrims or where fairs, melas or exhibitions were held.
- Passenger Earnings: The total originating passenger earnings on Indian Railways for the period April 2019 to November 2019 is 35249.13 crore which is 4.20% higher than the 33829.58 crore earned during the corresponding period of last year.

Measures to make Ticket Reservation Easier

- Proliferation of Ticket selling Facility to common Passengers:
  - With a view to encourage passengers to purchase unreserved tickets through Automatic Ticket Vending Machines (ATVMs), the policy of facilitator liberalized.
  - The spouse/adult children of retired railway employees have also been allowed to become facilitator. These facilitators issue unreserved







tickets through ATVMs to the intending passengers through smart card issued to them.
- Zonal Railways have been empowered to increase the facilitator based ATVMs as per field requirement.

- Easy and economical access of information to Passengers: Charges for verification of journey details rationalized for easy accessibility of information regarding self travel to rail passengers.
- SMS Alerts to passengers: In order to enhance passenger convenience, SMS alerts are being sent to those passengers who furnish their mobile number at the time of booking of tickets in case of following scenarios:-
  - At the time of booking and cancellation of reserved tickets through counters
  - SMS alerts as and when the status of waitlisted ticket changes to RAC/ Confirmed or from RAC to Confirmed
  - At the time of charting conveying the final status of ticket to Confirmed, RAC and Waitlisted ticket holders
  - SMS alerts in case of upgradation of ticket
  - SMS in case of short termination & diversion of trains.
- HHT on trains:
  - Hand Held Terminals (HHT) have been provided to ticket checking staff of Rajdhani and Shatabdi trains. Instructions issued to provide HHTs to TTEs manning all premier category of trains viz. Tejas, Gatiman, Duronto, Mahamana, Humsafar and Vande Bharat Express trains.
  - HHT enables downloading of the reservation chart on the device and mark turned up/ non-turned up status of passengers. Vacant accommodation, if any, after preparation of second reservation chart gets transferred to the next remote location for booking.
- **Rationalisation of Flexi Fare:** Flexi



LHB Coach



Vistadome Coach

Fare earlier introduced in premium trains like Rajdhani, Shatabdi and Duronto has been further rationalized and made people-friendly based on the feedback viz., reduction of maximum cap in all flexi fare applicable classes, offering graded discounts in all flexi-fare trains and discontinuation of flexi fare in certain trains with low occupancy. The Flexi Fare scheme has given an additional earning of ₹532.53 crore in the current year. Flexi fare has been removed from Humsafar train fare.

- Artificial Intelligence based PNR confirmation predictor has been integrated with Indian Railway Catering and Tourism Corporation (IRCTC) website which predicts the probability of waitlisted ticket getting confirmed at the time of booking and eliminates last minute uncertainties faced by the rail passengers,.
- **Refund of fare due to misconnection of Train:** If a Passenger misses connecting train owing to late running of the train by which he had been travelling, the fare for travelled portion shall be retained and the balance amount of ticket shall be refunded as the fare for untraveled portion.
- Scope of booking online reserved ticket by foreign tourists enhanced: Earlier foreign tourists could book reserved accommodation upto 365 days in advance in1AC, 2AC, 3AC & EC class only, now this advanced booking facility has been extended for booking tickets in AC Chair Car, Sleeper and 2S class also.



HYGIENIC & QUALITY FOOD



Live streaming of IRCTC kitchen

- Web-based live streaming facility through CCTV of Kitchen units of IRCTC extended to 40 kitchens units from 18 kitchen units (May, 2019).
- Introduced Food packets with QR Codes linked to live kitchen feed from previous 2 to 28 in present.
- The number of POS machines installed on trains for billing and digital payments has increased from 2,742 (May, 2019) to 5122 on 417 trains and 703 rakes
- In addition, 6002 other digital modes of payment including POS machines made operational in 2018 in Static Units (Food Plaza, Fast Food Units, Refreshment Rooms, Catering Stalls etc.)
- E-catering has increased from an average meal of 11,858 for FY 2018-19 to 21,026 meals for FY 2019-20 (upto 30 Nov 2019)
- 8223 Metallic Boards containing message for availability of menu and 'Right to Bill' for the passengers, have been fixed in 185 pairs of trains.
- Number of Rail Neer plants have been enhanced from 9 to 12 May, 2019 with an increase in the average production from 6.62 Lakh litres to 9 Lakh litres of Rail Neer per day.
- Taking note of the need to further improve variety, hygiene and quality of food for its passengers, Indian Railways rationalized the menus and revised the tariff for catering services on trains and railway stations.
- The tariff on Rajdhani/ Shatabdi/ Duronto trains has been revised after 6 years while the tariff of standard meals for Mail/ Express trains after 7 years since the last revision in 2012. The rate of Janta Meal has been kept unchanged at ₹20.
- There shall be three categories of standard meals viz., Standard Vegetarian Meal, Standard Non-Vegetarian Meal (with 2 Eggs curry) and Standard Non-Vegetarian Meal (with Chicken Curry) against the previous two. Now more regional food variety including three types of Biryani will also be available for the passengers.
- As part of the 'Eat Right India' movement launched in 2018 by the Food Safety and Standards Authority of India (FSSAI), Mumbai Central Railway Station became the country's first "Eat Right Station" as certified by FSSAI. The Railway station was conferred with "Eat Right Station" certification with 04 Stars rating by FSSAI on 29th November 2019. CSMT Mumbai was conferred with "Eat Right Station" certification with 5-star rating in December 2019.

ENHANCING VENDOR BASE



- 49,466 new vendors/contractors and 535 bidders (for e-Auction) registered on IR E-Procurement website since 01.01.2019. Total numbers of registered vendors and bidders on IREPS as on date are 1,57,109 and 4077 respectively.
- Vendor meets organised on a pan-India basis at 24 prominent locations across the country during May 2019. During these meets, a total of 4008 vendors participated, out of which 1845 vendors were new to Railways. High value items required by Railways were displayed along with important information such as detailed specification, annual requirements, vendor approving agency etc. Also, Technical sessions as well as interactive Q&A sessions were held to disseminate important information to vendors and address their queries.
- Vendors were also made aware of the crucial policy initiatives taken by the government in the field of 'Ease of Doing Business'.

FINANCIAL INITIATIVES

Payment through Letter of Credit in Domestic Supply/Works contracts:

The scheme of payment through Letter of Credit in Domestic Supplies/ Works contracts has been implemented on all Indian Railways in coordination with CRIS and SBI. All tenders invited by Zonal Railways and Production Units both for supplies/works having an estimated value of ₹10 lakhs and above, have an option for payment from Railways through a Letter of Credit arrangement.

Centralised Integrated Payment System (CIPS)

Implementation of SBI's CIPS is a system improvement to ensure online payments without manual intervention. This initiative was one of the action points of 100 Days Action Plan of Finance Department. Indian Railways has implemented Centralized Integrated Payment System (CIPS) with effect from 12.09.2019 after entering into MOU with SBI. CIPS facilitates digital signing of payment files and it is automatic & secure server to server transfer from Integrated Payroll & Accounting System (IPAS) server to SBI server.

Implementation of GST

CGST Act, 2017 and IGST Act, 2017 was passed by the Parliament and assented by the President of India on 12th April, 2017. Given the strict guidelines, following milestones have been completed in a time-bound manner:-

(a) Income Tax PAN for Ministry of Railways has been obtained across the Railways;
(b) Modification made in the software for PRS, UTS, FOIS, to levy GST;
(c) Timely instructions are issued to all the GMs to levy of GSTs on Parcel, Sundry Commercial Receipts, Engineering Receipts;
(d) CRIS developed GST Manual Utility for capturing Offline transactions;
(e) Modification effected in Accounting Software to account for Input Tax Credit;
(f) To ensure that all pre-GST Contracts are aligned with the transitional guidelines into the GST Regime;
(g) To ensure that the new Contracts entered into post 1.7.2017 is aligned with the GST Rules;
(h) To study the impact of the GST Rules in respect of transactions with SPVs;
(i) In all around 140 policy circulars were issued to all the Units;
(j) Re-engineering of processes are done from time to time. For example, remodelling of IRFC funded contract has been done recently that will result in reduction of leasing cost to Indian Railways;



SWACHH BHARAT, SWACHH RAILWAYS

- 38,331 Bio-toilets installed in 11,703 coaches from Apr-Nov 2019. This takes the cumulative numbers of bio-toilets to 2,34,248 fitted in 65,627 coaches. Now, the percentage coverage of coaches with bio-toilet has reached at 98%.
- No single use plastic material in railway system from 150th Gandhi Jayanti on 2nd Oct 2019
- Ministry of Railways has been adjudged as the best Central Ministry for implementation of 'Swachhta Action Plan' (for 2018-19), and was awarded by Hon'ble President of India on 06th Sept 2019.
- Integrated mechanised cleaning is now provided at 950 stations.
- Independent third party Survey of passenger perception on the cleanliness standards was carried out at 720 major Stations.
- The number of trains including Rajdhani, Shatabdi, Duronto and other important long distance Mail/ Express trains with facility of On Board Housekeeping Service (OBHS) for cleaning of coach toilets, doorways, aisles and passenger compartments during the run of the trains has increased to 1090 pair of trains.
- OBHS service is supported by SMS based on demand "Coach-Mitra" service to cover over 1050 pairs of trains.
- Railways continued setting up of more mechanized laundries for improving quality of washing of linen provided to AC coach passengers. 61 mechanised laundries were set up till 2018-19 and 5 more added in 2019-20. Orders for 14 more mechanized laundries with a total capacity of 109 tonnes per day (TPD) have been placed. It is planned to cover 100% linen washing requirement by mechanised laundries by next financial year.
- As an initiative to reduce, recycle and dispose plastic waste generated in stations in an eco friendly manner, comprehensive policy guidelines have been brought out for installation of Plastic Bottle Crushing Machines (PBCMs) by Zonal Railways. At present, around 315 PBCMs have been installed at 229 stations including several district headquarter railway stations over Indian Railways.





SAFETY AND SECURITY





Best ever safety record

- Zero passenger fatalities during April-December 2019

New Measures to Enhance Security

- Number of stations with the installation of CCTV based Surveillance System increased to more than 500.
- One seat/ berth earmarked for Railway Protection Force staff to travel in the trains for attending to any safety related requirements on board.
- Indian Railway Institute of Disaster Management at Bangalore has been opened for training of officers and staff.
- Commandos for Railway Security - Launch of the first Railway Commando Battalion 'CORAS' on 14.08.2019 to tackle the menace of terrorism and naxalism in Railways.
- The recruitment in Railway Protection Force (RPF) against vacancy of 1121 Sub-Inspectors & 8619 Constable notified in 2018 has been finalized and training has been started.
- The recruitment of 798 Constable (Ancillary) and 246 Constable (Band) in RPF is in final stage.
- Empowerment of RPF to make seizure under Narcotics, Drugs and Psychotropic Substances (NDPS) Act
- Government of India through its notification dated 11.04.2019 empowered RPF to make seizure and arrest under NDPS Act.
- Subsequently RPF has made a large number of such recoveries amounting to the total amount of ₹6,74,56,340 with the arrest of 211 persons up to Oct. 2019.



Commitment to Humanity

- Lives of 151 passengers were saved during the current year 2019 upto Nov. (106 male & 45 female.) in an emergency situation such as from railway tracks during train movement and during natural disasters such as floods.
- 9150 cases of left behind luggage valued at ₹1,59,93,186/- (approximately) were retrieved and handed over to their owners during the year 2019 (up to Nov.).
- During the year 2019 (up to Nov.) RPF rescued 255 children (Boys 214 + Girls 41) from human traffickers with arrest of 64 persons.
- Besides, this a total of 10681 children (Run away, Drug addict, Destitute, Kidnapped, Left behind, Missing etc.) were rescued during the year 2019.
- RPF Security Helpline no. 182 (Toll free) is operational 24 X 7 for security related grievances of passengers in distress and in need of help. 32222 calls received on it have been redressed up to Nov. 2019.
- To facilitate safe and comfortable journey of women passengers, besides regular drives, special drive was also launched to restrict entrance of male passengers in coaches reserved for ladies. The detailed figure of offenders prosecuted is as under –





Drive	No. of cases registered	No. of persons arrested	Amount of fine realized in ₹
04.12.19 (Special drive)	5938	7151	685890
2019 (up to Nov.)	97737	92131	18152974

- Drives to deter unauthorized entry into compartments reserved for persons with disabilities were conducted regularly. On the "International Day of Persons with Disabilities" a special drive was conducted and offenders were prosecuted. The details are as under -

Drive	No. of cases registered	No. of persons arrested	Amount of fine realized in ₹
03.12.19 (Special drive)	4788	5674	533195
2019 (up to Nov.)	65482	74471	15342435

- A drive named "Operation Thirst" was conducted in which 1430 persons were apprehended for sale of sub-standard packaged drinking water over the railways with recovery of 69041 unauthorized water bottles.
- Sustained drive against touts involved in procuring & selling of e-tickets using fake IRCTC IDs was conducted. Annual comparative figure:-

Year	No. of cases registered	No. of persons arrested
2017	1859	2060
2018	2843	3192
2019 (up to Nov.)	3861	4377





PUTTING FREIGHT IN FAST LANE





- The Dedicated Freight Corridor is targeted to be fully commissioned in phases by the year 2021.
  - Bhadan – Khurja section (194 km) of Eastern DFC completed in all respect and trial commercial runs have started from 2 October, 2019.
  - Rewari-Madar section (305 Km) of Western DFC has also been completed in all respects and trial commercial runs have started from 27.12.2019.
- Induction of new Wagons: Total induction of new wagons during April-Oct., 2019 is 9153 wagons v/s 6114 wagons inducted during April-Oct., 2018
- In 2019-20, freight charges rationalized with (i) removal of 15% Busy Season Surcharge on all commodities (except POL and Iron Ore), (ii) removing 5% supplementary charge on two point rake combinations and Mini rake, (iii) mini rakes are allowed upto 1000 km intra-zonal traffic.
- Round trip charging for container traffic has been introduced for a distance of less than 50 Km on each way. Under this scheme, Haulage Charge for 0-100 Km slab will be charged for total to and from movement, instead of charging for 0-50 Km slab each way. This is around 35% cheaper per TEU/round trip.
- 90 commodities de-notified from the list of notified and brought under Freight All Kind (FAK) rates i.e., lower rates are now applicable when transported in container.
- Electronic Transmission of Railway Receipts (eT-RR) facility has been implemented pan-India in 2019. Under this, customer has the option to receive, transfer and surrender the Railway Receipt (RR) electronically. It enhances the ease of doing business multifold for Railway freight customers. As a precursor to enable this, Indian Railway has implemented electronic registration of demand for wagons (e-RD).
- In place of entering into a tripartite agreement with each zonal railways, single agreement e-payment facility with base terminal Railway has been allowed to Automobile Freight Train Operators (AFTOs) from 20th May 2019.
- Exemption from mandatory

weighment was allowed in case of import containerized traffic to three operators (CONCOR, GRFL, DLI) on the basis of transmission of SMTP details from Custom server to Freight Operations Information System (FOIS) of IR via Electronic Data Interchange. In May 2019, five more operators namely Adani, ICT&IPL, HTPL, IILPL and PMLPPL have been permitted exemption from weighment in case of import containerized traffic.

- Further, Nepal bound containerized import traffic has also been exempted from mandatory weighment from September 2019 on the basis of Custom document submitted by CONCOR. This step is expected to further lower operational time and improve fluidity.
- Integration of Electronic In-motion Weighbridge Locations: In pursuance to Railway Board's instructions dated 14.01.2019 to all Zonal Railways regarding proliferation of In-motion Weighbridge with FOIS, till November 2019, a total of 218 locations have been configured for integration with FOIS and data have been captured of weighment and total 43 locations are online.
- Methodology for levying of Terminal Access Charge @one time for double operation of container handling at railway terminals has been extended till further advice.
- IR has changed its business processes and procedures which earlier maintained container itself as the commodity. Now, the commodities being carried in it are recognized and due GST exemption on service of transport of goods by rail in containers by IR is being given.
- For freight stability to customers, long term tariff contracts entered with 31 key customers till 15.12.2019. It is customer friendly as inbuilt in the system as per the agreement with the customer.
- 5 new routes upgraded and notified with enhanced loadability of CC+8 in 2017-18. 13 routes in 2018-19 and 21 routes in 2019-20 till 15.12.2019.
- Charging of traffic through Bogibeel, Digha and Monghyr Rail-cum-Road Bridges were notified.
- Permissible Carrying Capacity of various newly inducted wagons was notified like BOBRNHSM1, BAFRDR, BFNS, BFNSM, BFNS 22.9. Permissible Carrying Capacity of BCNHL and BRN wagons was modified.
- Notifications were issued for extending help of transportation of water, relief material etc. to areas affected by drought in Rajasthan/ Maharashtra, flood in Kerala/ Assam/ Karnataka/ Maharashtra, cyclone in Odisha/ Tamil Nadu/ West Bengal/ Andhra Pradesh etc.
- **E-Payment Facility:** A total of 1231 Freight Customers are now availing e-payment facility since November 2019.









Digital India

- Number of Stations with the High Speed free Wi-Fi increased to more than 5,500.
- Real Time Train Information System (RTIS) in collaboration with ISRO for automatic chart preparation and passenger train information, fast tracked: 2700 electric locomotives have been provided with RTIS and 3800 diesel locomotives provided with RAMLOT; Automatic control charting being done for 6500 locomotives; balance 6000 electric locomotives to be provided with RTIS equipment in a year's time. Tender for balance in process.
- Industry 4.0 in Modern Coach Factory, Raebareli for higher productivity.
- Two modern techniques (i.e. Use of Drone mounted camera and 3D scanning of riverbed) introduced in Railways during the year for inspection of bridges.
- For predictive maintenance, an automated system for detecting defective wheel, bearing and catching the same before it fails, IR is in the process of installation of 25 OMRS way-side inspection systems at 20 locations spread over entire network. Defect report generation and alert communications takes place in real time for taking corrective action, accordingly. As on date, 6 OMRS systems have been installed and total installations will be completed in the



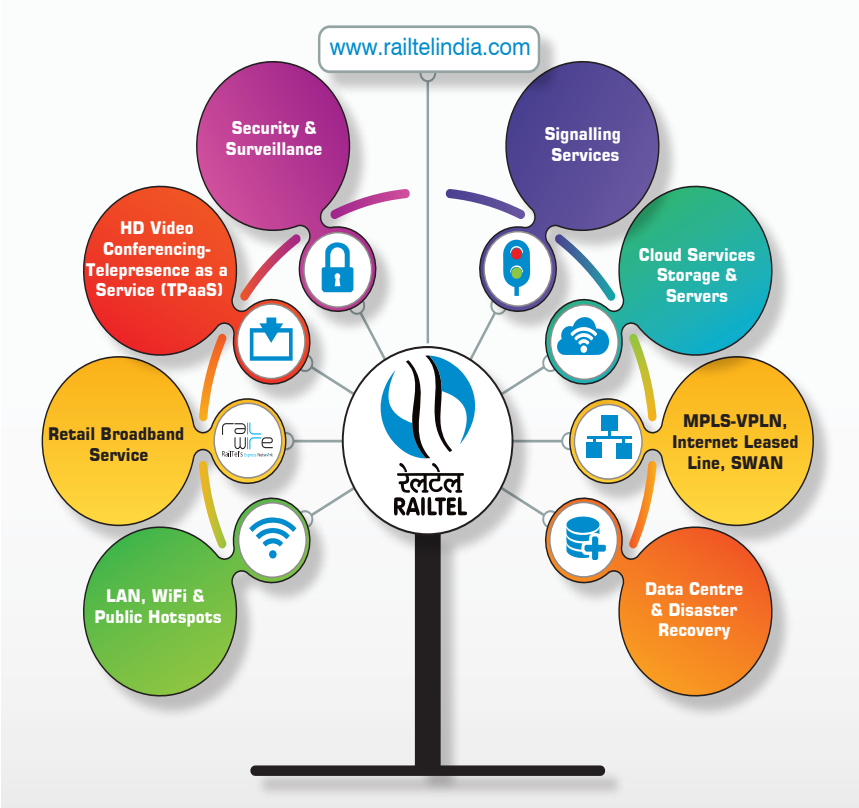
year 2020 itself.
- Computerization of Train Signal Register (TSR): TSR equipment have been supplied on 650 stations. All stations have been commissioned and made live at 508 stations by November 2019. All locations are expected to be made live by March 2020.
- A separate land management system viz. Indian Railways Land Management System (IRLAMS) being developed for the management of land related data such as land records, lease license records documented at one place.
- End-to-end digitalization of procurement process of Indian Railways has been accomplished. All the processes from generation of demand, processing of demands, publication of tenders, technical evaluation of bids, tender finalization, preparation and issue of letter of acceptance / contracts / modifications, inspection of material by RITES/ Consignee, acceptance and accountal of supplies, online receipt and processing of vendors' bills, issue of material to consignees etc. are digital.
- e-Reverse auction made as the default mode of tendering for tenders for procurement of goods valuing more than ₹5 cr. The process of e-RA has now been further improved to have better competition.
- An e-application IR-WCMS launched as a pilot project in 17 divisions of IR to handle works contracts on e-platform. This e-application shall be extended soon to all divisions of IR.
- All activities/stages of sale of scrap from Lot formation, Catalogue publication, e-auction, collection of Earnest Money Deposit (EMD) and Balance Sale Value (BSV) to issue of Sale Release Order (SRO) etc. digitized.
- 72000+ Digital Files created in mere 6 months' time over 58 establishments of Indian Railways replacing manual file. The NIC e-office





implemented by RailTel is helping Indian Railways to save tons of paper every day. In the phase I of the project 50000+ users have been created.

- Other digital initiatives: Electronic Drawing Approval System (E-DAS); Unique Medical Identity Card (UMID) for health care; Human Resource Management System (HRMS).
- In order to cater to ticketing needs of passengers at Halt stations, a scheme launched where computerized unreserved tickets are being made available at Halt stations through Unreserved Ticketing System (UTS) terminals replacing earlier manual printed card tickets system. This is being done through the nearest nodal station. In addition, trials of Portable-UTS have been approved over Southern Railway for issue of tickets at halt stations. Trials of enhanced ETM using android mobile phone and Bluetooth printer in connected mode have been approved over Northern Railway.
- RailMadad: The Complaint Management system was rechristened as 'RailMadad' and was decided to remain as a Railways-only Portal for redressal of customers' grievances. It was conceptualised in April 2019 as an integrated complaints platform (Web, SMS, App, Manual Dak, Social Media & IVRS Helpline 139). The RailMadad application was rolled out on 15.07.2019 (Beta application) and on 21.10.2019 (Final Version). RailMadad application was designed and developed as per industry standards to make it more user friendly.
- To increase non-fare revenue, it has been decided to allow advertisements on IR website indianrail.gov.in for a period of one year on a trial basis, as a pilot project.
- IRCTC will do the marketing and all the liaisoning with advertisers.
- The net revenue sharing between IRCTC and MOR shall be 50:50.
- Instructions have been issued on 03.09.2019 and advertisements have started w.e.f. 19.09.2019.
- It has also been decided to allow advertisements on NTES website, IREPS website and UTS-on-mobile App on similar terms and conditions.
- Instructions have been issued on 17.10.2019.
- Instructions have been issued to IRCTC on 24.10.2019 to integrate Chatbot solution on IR website indianrail.gov.in on a trial basis for 6 months. Net revenue accrued from this initiative shall also be shared between IRCTC and MoR in 50:50 ratio.
- To make public aware of the on-going activities of Railways, upgraded Rail Drishti Dashboard (www.raildrishti.in) has been launched encompassing all the digitisation efforts in Indian Railways and promoting transparency and accountability. It brings information from various sources on a single platform and gives access to key statistics and parameters to every citizen of the country.



EMPLOYMENT

Indian Railways successfully completed one of the world's largest recruitment exercises

- An unprecedented 47.45 Lakhs candidates applied for over 64,000 posts of Assistant Loco Pilots & Technicians
- About 1.17 Crores candidates appeared for over 63,000 posts in Level I (erstwhile Group D) posts including over 2400 vacancies reserved for Disabled candidates (Divyangjan) with around 600 for each of the 4 Disability categories of LD, VI, HI and MD, and
- About 24.75 lakhs candidates appeared for over 13,500 posts for Junior Engineer (JE).
- Indian Railways provided another chance to eligible Multiple Disability (MD) 'Divyangjan' Level-1 candidates to rectify disability option for Railway jobs.

AYUSHMAN BHARAT IN RAILWAY HOSPITALS

Introduction of Pradhan Mantri- Jan Arogya Yojna (PM-JAY) in Railways. Ayushman Bharat has been introduced in 91 hospitals of Indian Railways. Treatment of Ayushman Bharat beneficiaries has already started at empanelled Railway hospitals.

One Integrated Helpline

for any Help, Enquiry and Grievances Redressal During Travel

To overcome the inconvenience over multiple helpline numbers for grievances and enquiry during railway travel, Indian Railway has integrated railway helplines into single number 139 for the passengers for quick grievance redressal and enquiry during their journey. As the new helpline number 139 will take over all the existing helpline numbers (except 182), it will be easy for the passengers to remember this number and connect with Railways for all their needs during the travel.

Following Railway grievances helplines are being discontinued

- **138** (for general complaints) ✗
- **1072** (for accidents and safety) ✗
- **9717630982** (for SMS complaints) ✗
- **58888/138** (for clean my coach) ✗
- **152210** (for vigilance) ✗
- **1800111321** (for catering services) ✗
- **182** ✓



1

For security & medical assistance, passenger has to press 1, which connects

?

2

For enquiry, passenger has to press 2 and in the sub menu, information regarding pnr status, arrival/departure of the train, accommodation, fare enquiry, ticket booking, system ticket cancellation, wake up alarm facility/destination alert, wheel chair booking, meal booking can be obtained.

3



For catering complaints, passenger has to press 3

Number "139"

139

Based on IVRS
(Interactive Voice Response System)

12

Available in 12 Languages

4 For general complaints, passenger has to press 4

5 For vigilance related complaints, passenger has to press 5

6 For queries during accident, passenger has to press 6

9 For status of complaints, passenger has to press 9

***** For talking to call center executive, passenger has to press *



Traction Transformers for railways
Enabling sustainable mobility

More than half the world's electrical locomotives and train sets are powered by ABB transformers, and the vast majority of the world's train manufacturers and rail operators rely on them.

ABB's comprehensive range of traction transformers provides an ideal and eco-efficient means not only to power trains but also boost rolling stock speed and performance. These include:

- AC and DC traction feeder transformers
- Traction transformers for rolling stock
- Traction static converter transformers

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14TH FOUNDATION DAY OF DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA CELEBRATED

The 14th Foundation Day of Dedicated Freight Corridor Corporation of India Limited (DFCCIL) was celebrated at a function in New Delhi on 18th January, 2020. Speaking on the occasion, Minister of Railways and Commerce & Industry Shri Piyush Goyal congratulated team DFCCIL for completing 500 km of Dedicated Freight Corridor and exhorted the team to achieve the goal of 991 km by March 2020. He said that DFC has the impact to transform the railways sector. It is necessary to have separate tracks for freight and for passengers to ensure faster movement of both. Shri Piyush Goyal said that Indian Railways should run freight trains in convoys for maximum utilisation of the path and increasing the average speed of freight trains. Just like IRCTC which pays compensation for delays in its Tejas trains, Railways freight customers should be compensated for late arrival of goods trains and emphasized for time-tabled goods train run on DFCCIL.



Running Shield for the Western Corridor was awarded jointly to Ajmer & Ahmedabad units by Shri Piyush Goyal, Minister of Railways and Commerce & Industry in the presence of Shri Vinod Kumar Yadav, Chairman, Railway Board and Shri Anurag Sachan, MD DFCCIL

Shri Vinod Kumar Yadav Chairman, Railway Board and Chairman DFCCIL, enunciated that consolidation, growth and reforms are the three crucial areas which Indian Railways are working on. He said that Dedicated Freight Corridors are ushering in a paradigm change in Indian Railways and asserted that DFCCIL will play a significant role in shaping the Indian economy. He said that IR is upgrading the Railway network, especially the Delhi – Mumbai and Delhi – Howrah sectors for running faster and modern trains.

Minister of Railways and Commerce &Industry Shri PiyushGoyal said that DFC has the impact to transform the railways sector

He further emphasized that by having acquired 98.5 % land, DFCCIL is on the fast track for project completion.

Shri Anurag Sachan, MD, DFCCIL, while addressing the gathering on this occasion profusely recognised the dynamic leadership and continuous support of Shri Piyush Goyal. He also assured that team DFCCIL will work hard to complete the project on time.

Other dignitaries present in the function were Smt. Manjula Rangarajan, Financial Commissioner, Railway Board, Shri Pradeep Kumar, Member S&T, Railway Board, Ms Pinky Anand, Additional Solicitor General. An array of senior officers from Railway Board, DFCCIL, PSUs, World Bank & JICA, and other stakeholders attended the event.

In the awards ceremony 28 individual awards and 4 Group awards were given. The running shield for the Western Corridor was given to Ajmer & Ahmedabad units jointly and for Eastern Corridor, it was given to Pt Deendayal Upadhayaya (Mughalsarai) unit. ✻

TIMELINES

EDFC

Section	Length	Time of Completion
Khurja - Bhaupur	351 km	Partly trial runs have started on Bhadan. By FY 2019-20, the total 351 km will be commissioned
Bhaupur - Mughalsarai	402 km	Dec-2020
Sonnagar - Mughalsarai	137 km	Dec-2020
Khurja - Dadri	46 km	Dec-2020
Khurja – Ludhiana	401 km	Dec -2021

WDFC

Section	Length	Time of Completion
Rewari - Palanpur	641 km	Mar-2020
Rewari - Dadri	127 km	Mar-2021
Palanpur - Makarpura	308 km	Sep-2021
Makarpura - JNPT	430 km	Dec-2021

MINISTER OF RAILWAYS FLAGGED OFF INAUGURAL RUN OF TWO NEW EXPRESS TRAINS BETWEEN MADHUPUR & ANAND VIHAR

Shri Piyush Goyal, Minister of Railways and Commerce & Industry flagged off the inaugural run of two new Express trains between Madhupur & Anand Vihar (through video conference) viz. 22465/22466 Madhupur – Anand Vihar – Madhupur Baba Vaidhyanathdham Deoghar Weekly Express and 22459/22460 Madhupur – Anand Vihar – Madhupur Baba Vaidhyanathdham Deoghar Weekly Humsafar Express on 14th January, 2020), towards fulfilment of long cherished demand of the people of Jharkhand.

Shri Nishikant Dubey, MP and Haji Hussain Ansari, MLA were present at Madhupur station on the occasion of flagging off of inaugural run of these two new trains by Minister of Railways and Commerce & Industry through video conference.

The regular run of 22466 Anand Vihar (T) – Madhupur weekly Express has commenced from Anand Vihar (T) w.e.f. 15 January, 2020 and 22465 Madhupur – Anand Vihar (T) weekly Express from Madhupur w.e.f. 16 January, 2020. Regular run of 22460 Anand Vihar (T) – Madhupur weekly Humsafar Express has commenced from Anand Vihar (T) w.e.f. 20 January, 2020 and 22459 Madhupur – Anand Vihar (T) weekly Humsafar Express from Madhupur w.e.f. 21 January, 2020.

These two new trains have been introduced to enhance the connectivity between Jharkhand & New Delhi and will offer more convenient accommodation for the intending passengers.

Shri Nishikant Dubey and Haji Hussain Ansari also inaugurated a Vertical Garden at Madhupur and a new toilet complex ("Sulabh Souchalaya") at Madhupur station circulating area for better station environment and providing more amenities to the passengers.

Shri Sumit Sarkar, DRM, Asansol and other officers of ER were also present on the occasion. ✻

MINISTER OF STATE FOR RAILWAYS LAUDS JAIPUR STATION AS A MODEL OF CLEANLINESS

Shri Suresh C. Angadi, Minister of State for Railways (MoSR) reached Jaipur on 19 January, 2020 on one day visit. During the visit, he inspected Jaipur Railway station. He appreciated the cleanliness of Jaipur railway station as excellent and said that such cleaning system should be adopted everywhere and we should be aware of the need for cleanliness.

MoSR along with Shri Anand Prakash, General Manager, North Western Railway and other officials, conducted a thorough inspection of Jaipur station and got information about passenger amenities provided at the station. Shri Angadi praised Jaipur station for its cleanliness. On cleanliness and passenger amenities at the station, he said that our officers are doing very well but we have to work harder so that we can deliver better services to the passengers. He said that prime objective of the Prime Minister for the Indian Railways is cleanliness, safety and punctuality of trains; all officers have been directed to pay full attention to them. Describing Jaipur station as an international standard station, he said that the officers of North Western Railway are doing very well; for this, he congratulated Shri Anand Prakash, General Manager; North Western Railway and all the officials.



MoSR further said that in the coming time, heavy investment will be made in railways so that more facilities can be provided to the passengers. Regarding catering services, the Minister of State for Railways urged all railway passengers to always take a bill from the catering vendors working in the railway so that action can be taken against them in case of any complaint.

During the inspection, Shri Angadi also inspected the Ajmer-New Delhi Shatabdi Express which had halted at Jaipur station, and interacted with the passengers & received feedback regarding passenger amenities. He asked them what reforms they wanted and instructed railway authorities to take quick action.

The Minister of State for Railways inspected all areas including Concourse Area, Waiting Rooms, Food Stalls, Executive Lounge, etc. He interacted with the passengers at the station to know their views and also interacted with the representatives of press & media and answered their questions and urged them to also provide suggestions in the development of the Railway and expansion of passenger amenities. ✻



Shri Dharmendra Pradhan along with Smt. Aparajita Sarangi, Dr. Raghunath Mohapatra are seen flagging off the train

RAJDHANI EXPRESS SHOWCASING HERITAGE AND CULTURE OF ODISHA FLAGGED OFF

Minister of Petroleum & Natural Gas and Steel Shri Dharmendra Pradhan flagged off the Bhubaneswar-New Delhi Rajdhani Express showcasing heritage and culture of Odisha from Bhubaneswar Railway station on 26th December, 2019 in presence of MP (Lok Sabha) Smt. Aparajita Sarangi and MP (Rajya Sabha) Dr. Raghunath Mohapatra. The Minister also introduced Unreserved tickets in Odia script in addition to English and Hindi on this occasion.

Shri Vidya Bhushan, General Manager, East Coast Railway welcomed the guests. Shri Sashikant Singh, DRM, Khurda Road and Shri Sridhar Patra, CMD, NALCO alongwith other senior officers of East Coast Railway were also present on the occasion.

Odisha's Art, Culture and Heritage are now being displayed on the exteriors of Bhubaneswar Rajdhani Express. Sponsored by NALCO, the designs have been made in such a way that each coach will have a distinct display. The designs are promoting Dance forms, Archaeological monuments and flora & fauna of Odisha. This will go a long way in promoting tourism potential and promote traditional Art of Odisha.

Unreserved Tickets in Odia Script in addition to English and Hindi also introduced

The introduction of Unreserved tickets in Odia in addition to English and Hindi will be helpful to many people from Odisha not comfortable in reading English & Hindi languages on Train Tickets. Now, they will know if they have the right tickets vis-a-vis their intended originating & destination Stations as well as Class of travel and Train Type. ✻

DEDICATION OF NAYAGARH TOWN-MAHIPUR NEW RAIL LINE

Minister of Petroleum & Natural Gas and Steel Shri Dharmendra Pradhan dedicated the new Rail line between Nayagarh Town and Mahipur under Khurda-Balangir Rail Line project on 26th December, 2019 at a function held at Nayagarh Town Railway station in presence of Shri Arun Kumar Sahoo, Minister of Agriculture & Farmers' Empowerment, Fisheries & Animal Resources Development, Higher Education, Govt. of Odisha. On this occasion, Minister also flagged off the extension of the services of Khurda Road-Nayagarh Town upto Mahipur. Shri Vidya Bhushan, GM, East Coast Railway welcomed the guests. Shri Sashikant Singh, DRM, Khurda Road gave vote of thanks during the function. Dr. P. Tudu, Collector, Nayagarh alongwith other senior officers of East Coast Railway were also present on the occasion.



Shri Dharmendra Pradhan dedicating the Nayagarh Town-Mahipur new Rail Line project

The 11.9 km long Nayagarh Town-Mahipur station rail line is a part of Khurda-Balangir project. There is one Major Bridge, 37 Minor Bridges, one ROB and 11 RUBs constructed under this new section. It may be noted that Railways has expedited the work from both the ends of the project. Altogether, 92 kms of rail line out of total 289 kms under this project has already been completed.

Services of Khurda Road-Nayagarh Town Passenger Trains Extended upto Mahipur

The services of 58429/ 58430 and 58431/58432 Khurda Road-Nayagarh Town-Khurda Road Passenger trains have been extended upto Mahipur Railway station. Khurda Road-Mahipur Passenger leaves Khurda Road at 20:15 hrs and reaches Mahipur at 22:15 hrs. In the return direction, Mahipur-Khurda Road Passenger leaves Mahipur at 04:30 hrs and arrives Khurda Road at 06:45 hrs. Similarly, 58431 Khurda Road-Mahipur Passenger leaves Khurda Road at 08:20 hrs and reaches Mahipur at 1015 hrs. In the return direction, 58432 Mahipur-Khurda Road Passenger leaves Mahipur at 10:45 hrs and arrives at Khurda Road 1245 hrs. ✻

Second Premium TEJAS TRAIN FLAGGED OFF on Ahmedabad-Mumbai Route





Chief Minister of Gujarat, Shri Vijay Rupani flagging off the second Tejas Express at Ahmedabad railway station. A view of the Tejas Express on the right

After the successful run of semi-high speed and fully air-conditioned Lucknow-Delhi Tejas Express, the second premium Tejas train has started running between Ahmedabad and Mumbai. The inaugural run of this second Tejas Train was flagged off by Chief Minister of Gujarat, Shri Vijay Rupani from Ahmedabad. Shri V.K. Tripathi, AGM Western Railway, Shri Mahendra Pratap Mall, CMD IRCTC, senior railway officers, staff and people in large numbers were present on this occasion. The commercial run of the train, to be operated by IRCTC like the first Tejas train, has started with effect from 19th January, 2020 from Ahmedabad.

The booking for this train has commenced and passengers can book their tickets exclusively on IRCTC website and its mobile app "IRCTC Rail Connect". There is no booking at railway reservation counters. However, passengers can get their tickets booked through IRCTC authorized agents. The train is also available for booking through IRCTC's online travel portal partners.

This is yet another step of the Ministry of Railways in its endeavour to improve the overall traveling experience of rail passengers by providing state of the art amenities to them on trains. The train is equipped with all modern on board facilities for ensuring a high level of comfort to the passengers.

To start with, this fully air-conditioned train has two Executive Class Chair Cars having 56 seats each and Eight Chair Cars having capacity of 78 seats each. The total carrying capacity of the train is 736 passengers.

The train starts ex-Ahmedabad in the morning at 06:40 hours and reaches Mumbai Central at 13.10 hours having scheduled commercial halts at Nadiad, Vadodara, Bharuch, Surat, Vapi and Borivali. For the return journey, the train leaves Mumbai Central at 15:40 hours and reaches Ahmedabad at 21:55 hours having scheduled enroute halts at Borivali, Vapi, Surat, Bharuch, Vadodara and Nadiad. Train runs on all days of the week except Thursday.

Train fare is dynamic in nature keeping in consideration the prevailing bus, taxi, rail and airfares. Train has different series of fares for lean, busy and festive seasons. Further, train fares are on point to point basis. There is no tatkal quota or premium tatkal quota in the train. There is only General Quota and Foreign Tourist Quota. Foreign Tourist Quota of 6 seats in EC and 12 seats in CC is available for Foreign Tourists.

All passengers travelling on IRCTC train are provided with Rail Travel Insurance of up to ₹25 Lakhs, free of cost by IRCTC. This complimentary travel insurance also includes an exclusive coverage of ₹1 lakh against household theft / robbery during the travel period of the passengers. Besides this special feature, in a first of its own, IRCTC will also compensate passengers with ₹100/- in case the train is delayed by more than one hour and ₹250/- in case of delay of more than two hours. In case of cancellation of train, automatic full refund of full fare on confirmed and /or waitlisted e-tickets will be made.

Complimentary on board infotainment services are available to the passengers. High quality food and beverages are provided to the passengers on board in the train and included in the ticket fare. Service in the train is done through trolleys similar to airlines. Each coach is provided with RO water filter in addition to the packaged drinking water bottle for each passenger. Detailed information about the facilities at stations and in the train, rules for ticket booking, procedures, refunds and cancellations etc is available to users on IRCTC website. ❋

Shri Vinod Kumar Yadav Assumes Charge as Chairman, Railway Board on Reappointment for a Period of One Year



Shri Vinod Kumar Yadav, IRSEE (1980 Batch) has assumed charge on 1st January, 2020 after being reappointed as Chairman, Railway Board, in the rank of Ex-Officio Principal Secretary to Government of India. The Appointments Committee of Cabinet (ACC) has approved re-employment of Shri Vinod Kumar Yadav as Chairman, Railway Board for a period of one year w.e.f 01.01.2020.

Earlier, Shri Vinod Kumar Yadav was appointed as Chairman, Railway Board (Ministry of Railways) and ex-officio Principal Secretary to Govt. of India on 01.01.2019. Prior to this assignment, Shri Yadav had worked as General Manager, South Central Railway.

His academic qualifications includes a Masters Degree in Business Administration –MBA (Technology Management) from La Trobe University, Australia and a Bachelors Degree in Engineering (Electrical Engineering) from Allahabad University, Uttar Pradesh. He holds immense experience in the fields of Project Management, General Management, Industrial Policy Formulation, Foreign Collaboration & Foreign Direct Investment, Management of Sector Specific International Technical Programmes and Co-ordination of World Bank and Japan International Cooperation Agency (JICA) Funding.

During the course of his illustrious career, Shri Yadav held several important executive and managerial positions in Indian Railways and on deputation to various Organizations. In Indian Railways, his assignments included serving as Chief Electrical Engineer, Planning/ Traction Distribution, Northern Railway; Divisional Railway Manager, Lucknow Division, North Eastern Railway and Additional Divisional Railway Manager (Operation), Delhi Division, Northern Railway.

Amongst the assignments he held on deputation are – Executive Director, Railway Electrification Projects, Rail Vikas Nigam Limited (RVNL), New Delhi; Group General Manager (Electrical), Dedicated Freight Corridor Corporation of India Limited; Project Director, International Centre for Advancement of Manufacturing Technology at United Nations Industrial Development Organization (UNIDO); he was also Director, Department of Industrial Policy & Promotion, Ministry of Industry, Government of India.

He also held an important foreign assignment as Deputy Manager (Electrical), IRCON at Turkey, where he was instrumental in planning, execution and commissioning of Railway Electrification Project for Turkish Railway.

Shri Vinod Kumar Yadav is the recipient of the first ever "Best Transformation Initiative Award" of the Ministry of Railways. ❊

Indian Railways Signs MoU with RAILTEL for Phase 2 of e-Office Execution

After the successful completion of the Phase 1 execution of NIC e-office for 50,000 users in 58 units, Indian Railways has signed MoU with RailTel, a miniratna PSU under Ministry of Railways, for the phase 2 of the project. In phase 2, RailTel will register 39000 users over 34 Railway divisions on NIC e office platform by 30th June, 2020. The phase 1 of NIC e-office execution started with a mandate to complete the work by March 2020. But with a lightning speed of execution RailTel completed the work way ahead of time and successfully created 50000+ users in 58 units of Indian Railways and trained the executives to handle the platform in a span of mere 6 months' time.

In phase 2, RailTel will register 39000 users over 34 Railway divisions in NIC e-office platform by 30th June 2020. 58 units of Indian Railways were made paperless office by RailTel in phase 1

ED/TD, Railway Board, Shri Umesh Balonda, and GM/IT project/RailTel, Smt. Haritima Jaipuriar, signed the MoU. Chairman, Railway Board, Shri Vinod Kumar Yadav, Member S&T, Railway Board, Shri Pradeep Kumar, CMD, RailTel, Shri Puneet Chawla and other senior officials of Railways and RailTel were present on the occasion.

NIC e-Office is a cloud enabled software developed by National Informatics Centre (NIC) that is being deployed/ hosted from RailTel Tier III certified data centres at Secundrabad and Gurgaon. It is based on Central Secretariat Manual of e-Office Procedure (CSMeOP). Currently 4 modules File Management System (eFile), Knowledge Management System (KMS), Collaboration & Messaging Services (CAMS) & Personnel Information Management System (PIMS) are the part of the e-office system being implemented.

E-Office fosters paper-less culture which will not only save operational cost but also reduce the carbon foot print which is one of the most urgent needs of the world and directly impacting every citizen of the country. ✻



Signing of MoU between the Indian Railways and RailTel



SEGWAYS Self Balancing Scooter commissioned at Tirupati Railway Station



Shri Vinod Kumar Yadav inspecting progress of works at Tirupati Railway Station

CRB Reviews Infrastructural Development Works at Tirupati Railway Station

Shri Vinod Kumar Yadav, Chairman, Railway Board reviewed the ongoing infrastructural works pertaining to construction of new platform and inspected passenger amenity works at Tirupati Railway Station. He commissioned three SEGWAYS 'Hover Board', a Self-Balancing Scooter for enabling quick response towards Security needs of passengers by Railway Protection Force (RPF) personnel round the clock on 6th January, 2020 in the presence of Shri Gajanan Mallya, General Manager, SC Railway.

RPF "SEGWAYS" (Self-Balancing Scooter) for Quick Response commissioned

Tirupati is the first railway station on South Central Railway to be provided with these two-wheel battery operated scooters. The Railway Station is one of the major rail hubs catering to a huge number of passenger traffic. The three SEGWAYS commissioned will facilitate mobility of RPF personnel to attend distress calls of passengers. This will also enhance visible policing. Shri Yadav complimented the efforts of the Zone and Guntakal Division for execution of infrastructural and passenger amenity works in and around Tirupati Railway Station and maintaining utmost cleanliness standards despite huge footfall. ✻

Heritage Special Run of WORLD'S OLDEST WORKING Loco Conducted



Shri Rajesh Agarwal flagging off a Steam Heritage Run. A view of the Steam Heritage Run train on the left

Shri Rajesh Agarwal, Member, Rolling Stock, Railway Board, New Delhi flagged off a Steam Heritage Run on 7th January, 2019 from Chennai Egmore to Kodambakkam Railway Station, in the presence of Shri John Thomas, General Manager, Southern Railway, Principal Head of the Departments of Southern Railway, Officers and Staff. About 70 Foreign Tourists travelled in the Heritage Runs conducted by Southern Railway.

World's Oldest Working Locomotive, the Express EIR 21, which is similar to Fairy Queen in appearance, is 164 years old. The locomotive was originally shipped to India from England in 1855. After withdrawal from service in 1909, this loco was kept as an exhibit at Jabalpur Workshops and Howrah Station for over 101 years. Loco Works, Perambur took the challenge of reviving the presently 164 year old steam loco 'EXPRESS EIR 21' in the year 2010. Thenceforth, Steam heritage runs are operated to showcase the heritage value of Indian Railways. So far, the nine such Heritage runs have been organized by Southern Railway in Chennai Division. Heritage special runs were also conducted in Salem, Tiruchchirappalli, Madurai and Thiruvananthapuram Divisions. ❊

Promoting Tourism on Nilgiri Mountain Railway - Meeting with Stakeholders Held



Shri Rajesh Agarwal addressing the meeting

A meeting for promoting tourism on Nilgiri Mountain Railway (NMR), was conducted at Southern Railway Head quarters, Chennai. The meeting was chaired by Shri Rajesh Agarwal, Member Roling Stock, Railway Board.

Shri John Thomas, General Manager, Southern Railway, Principal Head of the Departments of Southern Railway and ICF, Divisional Railway Manager, Salem, and representatives from Travel and Tourism industry participated. Discussions were held on devising plans to exploit the tourism potential of NMR and running of tourist special trains in the section. In addition to the special trains announced, interested tour groups were invited to book Chartered train services on NMR from Salem Division. ❊

Writers and Contributors

Writers are invited to contribute original general articles on subjects like SHORT STORIES, TOURISM, HEALTH, YOGA, CINEMA, GARDENING, MEDITATION, COOKING, SPORTS, FAMOUS PLACES ABROAD, TREKKING etc. in 800-1000 words/poems/quiz/puzzles. Relevant pictures along with article may be sent only on Email ID editorindianrailways@gmail.com. A suitable remuneration shall be paid after its publication.

–Editor



RAIL WHEEL FACTORY : Meet on Smart and Sustainable Manufacturing & Operations

A one day meet on "Smart and Sustainable Manufacturing and Operations" was conducted by Rail Wheel factory Yelahanka on 17-01-2020, on the eve of the 40th Anniversary of its dedication to the nation by the then President of India Late Shri Neelam Sanjeeva Reddy.

Chief Guest for the meet was Shri Rajesh Agrawal, Member Rolling Stock Railway Board. In his address, he highlighted the important aspects of Smart and Sustainable Manufacturing and Operations on Indian Railways. He stressed on the transformative initiatives required to be taken to identify potential of application of artificial intelligence and smart manufacturing while ensuring responsible environmental sustainability with a goal for carbon neutrality and attempts to be E-energy positive. He cited the example of initiatives taken by Indian Railways in RWF, MCF, ICF, Workshops and also the bio- toilets in Railway Stations etc. He appreciated the gathering of established players from the Industry, academia, innovators etc., all under one roof.

Shri Rajiv Kumar Vyas, General Manager, Rail Wheel Factory, Yelahanka, stressed upon the need for collaboration across industry and academia to find how technology can help industry meet the challenges of sustainable manufacturing and operations.

Shri A K Tewari, Principal Executive Director Railway Board discussed some of the challenges faced by Indian Railways in providing environment friendly services to its customers.

Shri Sanjeev Kishore, Principal Chief Mechanical Engineer, Shri Ajay Singh, Chief Workshop Engineer and Shri K. Raman Chief Workshop Engineer, gave presentations on various aspects of Smart and Sustainable Manufacturing and Operational Practices at RWF.

The meet consisted of sessions chaired by experts from the fields of sustainable manufacturing processes and systems, sustainable design, Supply Chain Management, Industrial Automation and Data Analytics. The aim of this meet was to bring together persons from heavy manufacturing industries and academia to identify the way forward towards the goal of improving the triple bottom line of People-Planet-Profit. Papers presented were a combination of technical and managerial content. ✻

Member, Rolling Stock, Railway Board, Holds REVIEW MEETING at Southern Railway

Shri Rajesh Agarwal, Member, Rolling Stock, Railway Board, New Delhi reviewed the performance of the Mechanical Department of Southern Railway in the presence of Shri John Thomas, General Manager, Southern Railway and Principal Heads of Departments of Southern Railway. He appreciated the various efforts of Southern Railway in improving the passenger comfort in the rolling stock through innovations and system improvements. He also released the compendium of Innovations and System Improvements over Southern Railway as a guide for Southern Railway coach maintenance staff, the first copy was received by Shri John Thomas, General Manager, Southern Railway in the presence of Shri Chetram, Principal Chief Mechanical Engineer, and other Prinicipal Heads of Departments and officers of Southern Railway. ✻



The Member, Rolling Stock releasing the compendium of Innovations and System Improvements over Southern Railway

East Coast Railway Creates New History In Waste Management And Disposal





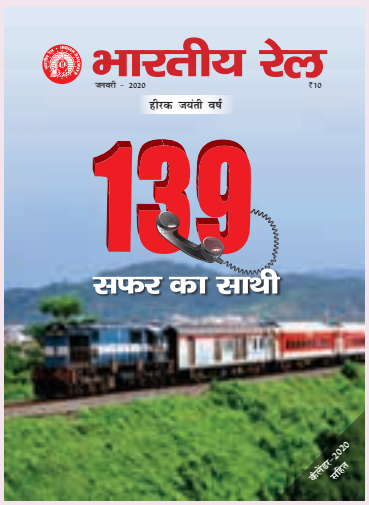
Shri Rajesh Agarwal inaugurating Plant at Mancheswar near Bhubaneswar at Carriage Repair Workshop

The Waste to Energy Plant in Mancheswar Carriage Repair Workshop at Bhubaneswar was inaugurated by Railway Board Member (Rolling Stock) Shri Rajesh Agarwal in presence of General Manager ECoR Shri Vidya Bhushan, Addl. General Manager Shri Sudhir Kumar and Principal Heads of the Departments of East Coast Railway, on 22nd January, 2020. This Waste to Energy Plant, a patented technology called POLYCRACK, is 1st-of-its-kind in Indian Railways and 4th in India. It is world's first patented heterogenous catalytic process which converts multiple feed stocks into hydrocarbon liquid fuels, gas, carbon and water. Earlier, lots of non-ferrous scrap generated from the Carriage Repair Workshop had no efficient method of disposal. As a result, these elements were being disposed by landfills, which had environmentally hazardous impact.

Polycrack Plant can be fed with all types of Plastic, Petroleum sludge, Un segregated MSW (Municipal Solid Waste) with moisture up to 50%, E–Waste, Automobile fluff, Organic waste including bamboos, garden waste etc., and Jathropa fruit and palm bunch.

This Waste to Energy Plant has been constructed in 3 months and the target date of commissioning of this Plant was January 2020. About 2 crores has been spent for commissioning of this Polycrack Plant. Waste generated from Mancheswar Carriage Repair Workshop, Coaching Depot and Bhubaneswar Railway Station will be feeder material for this plant. This plant will access 500 KG waste materials per day. ✣

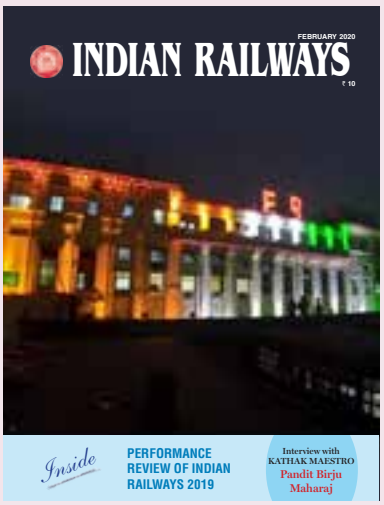
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RENEWABLE ENERGY : Investors' Meet Organized by Indian Railways



Leading financers and leading renewable energy organizations attended the meet and shared their expectations of being partners in the journey of renewable energy of Indian Railways

Indian Railways and Railway Energy Management Company Ltd. (REMCL - a Joint Venture of Ministry of Railways & RITES Ltd.) organized a Renewable Energy Investors' Meet on 9th January, 2020 in New Delhi. The objective of the Investors' Meet was to disseminate information about the opportunities available under renewable energy in Indian Railways. In the meet, experience of developers with Railways and key benefits of partnering with Indian Railways was showcased.

The Investors' Meet was attended by leading financers and institutions including Department for International Development, Government of United Kingdom (DFID), Asian Development Bank (ADB), GIZ from Germany, AFD from France, Indian Renewable Energy Development Agency Limited (IREDA), State Bank of India (SBI), Punjab National Bank (PNB) as well as leading renewable energy organizations such as Softbank Energy, L&T, Renew Power, Sembcorp, Amplus Solar, SunEdison and Gensol. They shared their expectations of being partners in the journey of renewable energy of Indian Railways.

The investors acknowledged the efforts of Indian Railways in leading the development of renewable energy in the country and expressed strong support to Indian Railways on the path of going green and achieving the net zero carbon emissions target by 2030.

The meet was chaired by Member Traction, Railway Board, Shri Rajesh Tiwari and also attended by Chairman, REMCL, CEO and senior officials of Railway Board. In the meet, Shri Tiwari gave an overview of Railways' power scenario and the opportunities for various stake holders in the renewable energy sector.

He mentioned about the steps being undertaken by Indian Railways to reduce the cost of power procurement and the benefits of signing PPAs with Indian Railways such as low off take risk and clarity on roof rights.

Indian Railways has recently invited bids for 47 MW rooftop solar projects and 249 MW of wind solar hybrid projects. This meet was supported under the Power Sector Reforms Programme, as a part of cooperation agreed in the MoU signed between UK's DFID and Indian Railways on 2nd December 2019. ✻

RPF /RPSF Personnel Awarded Police Medal for Gallantry (PMG), President's Police Medal (PPM) for Distinguished Services and Police Medal (PM) for Meritorious Services

On the occasion of Republic Day 2020, the President of India has awarded Police Medal for Gallantry (PMG), President's Police Medal (PPM) for Distinguished Services and Police Medal (PM) for Meritorious Services to the following Railway Protection Force (RPF)/ Railway Protection Special Force (RPSF) personnel:

Police Medal for Gallantry (PMG):

- Late Shri Jagbir Singh Rana, Constable/ Northern Railway (posthumously)

President's Police Medal (PPM) for Distinguished Service

Shri Ambika Nath Mishra, Principal Chief Security Commissioner/Eastern Railway, **Shri Bharat Singh Meena,** Commandant, 8 BN/RPSF.

Police Medal (PM) for Meritorious Service

Shri Yugal Kishore Joshi, DIG/ RPF, **Shri Anil Kumar Sharma,** Assistant Commandant/ RPSF, **Shri P. P. Joy,** Assistant Security Commissioner/ Konkan Railway, **Shri Deep Chandra Arya,** Assistant Security Commissioner/ Northern Railway, **Shri T. Chandrasekhar Reddy,** Inspector/South Central Railway, **Shri K. Chakravarthi,** Inspector/ South Central Railway, **Shri Satish Ingle,** Head Constable/ South East Central Railway, **Shri Deo Kumar Gond,** Sub-Inspector/Konkan Railway, **Shri G. S. Vijaykumar,** Sub-Inspector/ Central Railway, **Shri D. Balasubrahmanyam,** Sub-Inspector/Training Centre, Moula Ali, **Shri Mahfajul Haque,** Inspector/4 BN RPSF, **Shri Darshan Lal,** Sub-Inspector/ 6 BN RPSF, **Shri Nemee Chand Saini,** Assistant Sub-Inspector/ North Western Railway, **Shri Alok Kumar Chatterjee,** Assistant Sub-Inspector/Eastern Railway, **Shri Ashok Kumar Yadav,** Inspector/ Western Railway. ✻





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CENTRAL RAILWAY : Annual Inspection of DAUND-SOLAPUR SECTION by GM

Shri Sanjeev Mittal, General Manager, Central Railway conducted the annual inspection of Daund-Solapur section on Solapur Division on 10 January, 2020. Shri A.K. Jain, Commissioner of Railway Safety, Central Circle, Principal Heads of Departments, Shri Shailesh Gupta, Divisional Railway Manager, Solapur Division were also present during the inspection.

Shri Mittal inspected the Daund station, followed by waiting hall, VIP lounge, Crew-lobby and station complex, Gang Hut, railway colony, running room, tower wagon shed etc. At Kurduwadi railway station, he inspected the water re-cycling plant, Bhima bridge, level crossing gate, curve on Washimbe-Pophlaj section, turn out at Madha, railway colony at Mohol, etc.

Shri Mittal also inspected Satellite Depot & Health Kiosk at Solapur. He also met with public representatives and discussed rail related issues.

Appreciating the diverse work done by various departments during this annual inspection, the General Manager presented the staff with on the spot awards.

Shri Sanjeev Mittal, General Manager also addressed a press conference in Divisional Railway Manager's office at Solapur. Addressing the meeting, he said that the passenger amenities on the section were reviewed which were satisfactory. The General Manager held a meeting and discussed various issues with members of recognised unions in Solapur.

Shri A.K. Jain, Commissioner of Railway Safety (Central Circle) and other senior officers were also present. ✲



Shri Mittal, GM, presents spot awards to the staff of Central Railway



The Chhatrapati Shivaji Maharaj Terminus Station

CSMT Station Conferred with FIVE-STAR RATING by the Food Safety and Standards Authority of India

Chhatrapati Shivaji Maharaj Terminus (CSMT) station of Central Railway has been conferred with 'Eat Right Station' certification with five-star rating by the Food Safety and Standards Authority of India (FSSAI).

Eat Right Station is a part of the 'Eat Right India' movement launched by FSSAI and Hindustan Uniliver Limited (HUL) aimed at promoting food safety and hygiene at the static catering units at Railway Stations.

The food quality regulator of FSSAI and HUL along with Officers of Central Railways (CR) and Indian Railway Catering & Tourism Corporation (IRCTC), and food auditors inspected Food Plaza, Jan – Ahaar, Base Kitchen, Retail Catering stalls and other catering establishments at the CSMT station and certified & rated the standard of food. CSMT has been judged on the basis of compliance of food safety and hygiene, availability of healthy diet, food handling at preparation, transhipment and retail/serving point, food waste management, promotion of local & seasonal food and creating awareness on food safety and healthy diet.

After the final audit the FSSAI awarded five-star rating with 88% scope to CSMT Station. This is the first station on Central Railway to have been given this certification.

'Eat Right India' movement is built on two broad pillars of 'Eat healthy' and 'Eat Safe'. The "Eat Healthy" pillar of the movement is about nudging citizens to make healthy food choices and building healthy food habits. It encourages them to choose nutritious and fortified foods in the right proportion and limit foods that are high in salt, sugar and fat. The 'Eat Safe' pillar is about ensuring food safety to prevent food borne diseases. It includes maintaining hygiene and sanitation, both personal and environmental, proper waste disposal, following safe food practices and combating adulteration.

This concept has been promoted and supported by the Railways to help passengers make healthy and right food choice. The food business at stations is a major attraction for passengers and Central Railway and IRCTC have joined hands to ensure that healthy and tasty food in a hygienic manner is sold at the catering units. The behavioral change in the catering staff in preparation, storage and distribution of food has been emphasized in the training given to the licensees of the catering units which will go a long way in inculcating the culture of health and hygiene in food business on Railways. ✲

Central Railway Observes NATIONAL ENERGY CONSERVATION DAY



General Manager, Central Railway releasing a pamphlet on Energy Conservation

Central Railway (CR) observed National Energy Conservation Day with a Seminar on Energy Conservation on the concluding day of the Energy Conservation Week on 23th December, 2019.

Shri Sanjeev Mittal, General Manager, CR presided over the Seminar and released a pamphlet on Energy Conservation on the occasion.

Shri S P Vavre, Principal Chief Electrical Engineer and other officers in the Seminar.

Energy Conservation Week was observed by all the Divisions and Workshops on CR to mark the National Energy Conservation Day. In the seminar, the trend of energy consumption was reviewed critically and, the ways and means to minimize both the consumption and the bill in the face of ever increasing traffic on electric traction and passenger amenities like passenger lifts and escalators, improvement in illumination level of stations and, ever increasing electricity tariff. On the Traction front, CR has managed to contain the energy consumption despite having taken over several trains on Electric Traction after electrification of Miraj-Kolhapur and Pune-Shindawane sections and replacing Power Cars by Head On Generation (HOG). On non-traction front, CR has managed to bring down energy consumption from 77.8 Million Units in 2017-18 (Apr-Oct) to 71.2 MUs in 2019-20.

On renewable energy front, CR has commissioned rooftop solar plants aggregating 3.7 MW so far and, has entered into power purchase agreement for 9.9 MW in June this year. Land Based Solar Plants totalling 40 MW have been proposed on Nagpur & Solapur Divisions. CR has gone for Wind Power through Open Access in a big way and, 50.4 MW & 6 MW Wind Mills have been installed in Sangli.

The Regenerative Braking in 3-Phase Locos has yielded a saving of 52 MUs during 2018-19 and 73 MUs in 2019-20. Likewise, the 3-Phase Electric Multiple Units have been regenerating energy during braking and yielding a saving as high as 16 MUs a month, ie, ~112 MUs this year. The energy regenerated as such is equivalent to a saving of 130795 Tonnes of CO_2, i.e., Greenhouse Gases or Carbon Footprint. The HOG which has been introduced in 31 trains has yielded a saving of about 295 kilo-Litres of Diesel.

In order to reduce the consumption of electricity on Non-Traction front, energy efficient equipment like LED luminaires have been used in all the 2650 service buildings, 432 stations and 31786 staff quarters. Likewise, in all 1424 energy extravagant conventional air-conditioners have been replaced by the energy efficient ACs including 499 ACs supplied by M/s EESL. Also, ~3000 old ceiling fans have been replaced by energy efficient, BEE Star Rated fans.

In addition to the Seminar, an exhibition of energy efficient appliances was also organised in which some market leaders participated with their latest products such as LED lamps, inverter ACs, geysers etc. ✻

GM Awards Winners of All India RAILWAY CUE SPORTS CHAMPIONSHIP 2019-20

Shri Sanjeev Mittal, General Manager, Central Railway gave away awards to winners of the All India Railway Cue Sports Championship 2019-20 at the closing function held at the Central Railway Sports Complex, Parel, Mumbai on 23 December, 2019.

Organised by the Central Railway Sports Association (CRSA) the event also featured a Ladies Box Cricket match between GM XI and DRM XI and Exhibition of trick Snooker / Billiards shots by renowned players.

The Central Railway team having won the Championship was awarded the Gold Medal which was received by Arjuna awardee, Shri Ashok Shandilya, Senior Sports Officer, Central Railway

Shri S P Vavre, President, CRSA and Principal Chief Electrical Engineer, Shri Dhruvjyoti Sengupta, General Secretary , CRSA and FA&CAO(S&W), Central Railway were also present during the occasion. ✻



GM Releases Pension Booklet of GUIDELINES ON RETIREMENT BENEFITS

Shri Sanjeev Mittal, General Manager, Central Railway released a handbook on retirement benefits for employees of Central Railway during a meeting with one of the recognised unions.

Dr. R. Badri Narayan, Additional General Manager, Dr. A.K. Sinha , Principal Chief Personn`el Officer, Principal Heads of Departments and Senior officers of Central Railway were also present on the occasion. The Pension booklet contains information regarding the benefits provided to pensioners and all relevant rules pertaining to settlement. ✻



Shri Sanjeev Mittal releasing a handbook on retirement benefits for employees of Central Railway



EASTERN RAILWAY : GM Honours ALERT STAFF of Malda Division

Shri Suneet Sharma, General Manager, Eastern Railway in a function held at ER headquarters on 14 January, 2020 honoured Shri Sanjay Kumar Mandal, Technician, C&W, Malda for his dedication and alertness. While discharging duties, Shri Mandal spotted some defect in a coach of an Express train and immediately informed his superiors which averted a possible untoward incident. ✻

EAST COAST RAILWAY : All India Railway HINDI DRAMA Competition Concluded



The General Manager of East Coast Railway distributing the prizes of the All India Hindi Drama competition

The three-day-long All India Railway Hindi Drama competition organised at Railway Auditorium, Bhubaneswar has been concluded on 10 January, 2020. Gracing the occasion, East Coast Railway General Manager, Shri Vidya Bhushan handed over the prizes to the outstanding teams in the presence of ECoR Addl. General Manager Shri Sudhir Kumar, Railway Board Executive Director (Establishment) Shri S. P. Mahi and ECoR Mukhya Rajbhasha Adhikari Shri S. P. Singh.

Total 18 teams from various Zonal Railways and Production Units including East Coast Railway participated in this three day long Hindi Drama Competition.

During the competition, participating teams performed their Drama and displayed their skills in various categories.

Eminent Drama artists judged the performance.

Raipur Division's (South East Central Railway) Drama "Ek Natak Aisa Bhi" was judged the best Drama. "Muktidham" of Mumbai Division, Central Railway and "Abu Hasan" of Lucknow Division, North Eastern Railway were awarded the second and the third prize, respectively.

Consolation prizes were given to East Coast Railway for Drama 'Bade Bhai Saheb', at Vijayawada Division of South Central Railway for "Satyam Shivam Sundaram'.

Other consolation prizes were given to West Central Railway, Jabalpur; Metro Railway, Kolkata and NF Railway, Maligaon. ✻

NORTH CENTRAL RAILWAY : Video Conference on Safety, Infrastructure Creation, and other Important Issues Conducted in NCR Headquarters

North Central railway Headquarters reviewed safety, infrastructure creation and other important issues in video conference with divisions. In the video conference chaired by General Manager North Central Railway Shri Rajiv Chaudhry , safety in train operations was taken up as first item for review.

Despite substantial technological advancement in maintenance of rolling stock bearing, hot axle do occurs at times in runningtrains. Conventional methods of identifying hot bearing in trains are through vigilant Railway staff entrusted with train passing at stations, rolling in examination points, gates etc. Besides this conventional system Indian Railways is also introducing automated wayside rolling stock monitoring system like Hot box detector, Online Rolling stock monitoring system etc and NCR is pioneer in installation of such system. To further strengthen our system and reduce response time in hot axlecases, GM Shri Chaudhry instructed that handheld VHF sets be given to station staff to inform guard of train to stop immediately in case defective bearing is noticed by train passing staff at stations. Conventionally stations are equipped with high capacity VHF set which is fixed inside ASM's room. Providing small handheld VHF set will save time as train passing staff can immediately communicate with crew of the train without need of going back inside ASM room.



Shri Rajiv Chaudhary addressing the review meeting through video conference

Safe train operation during foggy weather is always accorded highest priority on North Central Railway. Correct calling out of signal by both crew members i.e. loco pilot and assistant loco pilot is one of the most important time tested and established safety system on Indian Railways which mitigate any possibility of missing any signal or misreading correct aspect of any signal. Compliance of calling out of signal by crew is regularly checked by officials going on footplate inspections and crew iscounseledperiodically for calling out signal loudly. To check100% compliance on correct and loud calling out of signal by crew, NCR has planned to provide voice recorder on locomotives and trial scale provision has already started on Allahabad division.

Reviewing infrastructure GM advised that after opening of Bhaupur connectivity in Bhaupur–Khurja section of DFC, we shall have to target Rly connectivity works in Kanpur-Pt. DeenDayal Upadhyay Jn. as DFC line in this section is targeted for commissioning in next one year. NCR is also providing seamless operation theatre at central hospital Prayagraj. Seamless OT is a completely sterilized and controlled environment for providing complete hygienic condition for doing critical surgeries. This facility will be beneficial for 60000 railwaymen and their families.

GM also desired that necessary works required towards up-gradation of good sheds needs to be identified and requisite inputs are given on priority. GM said that works in Goods shed should include works related to pollution control. ✻

SPECIAL FOCUS ISSUE
for the year 2020 & 2021
ZONES ! COME AHEAD
Zones & Divisions who are yet to bring out a special focus about them are requested to send special articles from all departments neatly typed in double space about 1000 words each article along with relevant original photographs duly captioned through Pendrive and hard copies also. Please send payment for the advertisements by cash or through D.D. only. In this connection, the Chief Public Relations Officers have already been separately communicated.
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NORTHEAST FRONTIER RAILWAY : 94th ZRUCC Meeting Held at Maligaon to Provide IMPROVED SERVICES TO RAIL USERS

The 94th meeting of the ZRUCC (Zonal Railway Users Consultative Committee) was held on 21st January, 2020 at the Nambari officer's club, Maligaon. The main objective of the meeting was to have direct interaction with representatives from various sections of the society and railway users for further improvement in all sectors of railway related services.

Shri Sanjive Roy, General Manager, N.F. Railway while welcoming all members of the committee asked them to put forward their valuable suggestions on each and every field of railway related services. He also assured them that their valuable suggestions will be given due importance by the railway authorities. He also highlighted various steps already taken to improve services in the region and various major projects undertaken for rail infrastructure development in the region. General Manager informed the members that at present 253 no of works related to development of Passenger Amenities are being going on at an estimated cost of ₹1319.39 Cr. Important stations are being provided with facilities like Escalators, Lifts, WiFi, Digital Museums etc. 100% LED fittings and Divyang Toilet facility are being provided at all nominated stations of NFR. To improve cleanliness, 371 stations are presently being cleaned by mechanized cleaning procedure. Overall improvement already resulted into 22 stations of NFR already getting ISO 140001: 2015 Certification. General Manager also informed that during the current financial year, 5 new trains have been introduced; 23 special trains were run and 10 trains with ICF coaches replaced with modern LHB coaches. General Manager informed that doubling work beyond Guwahati is going on for capacity enhancement. Once this project is completed, introduction of more services may be possible.

All the honourable members of the committee had very fruitful interactive session with the high railway officials. Senior railway official noted down all the suggestions and demands put forward by the members. They also replied to various queries from the members on different fields.

Members present thanked N.F. Railway officials for organising the meeting and listening to various issues pertaining to rail users of this region.

It can be mentioned here that Indian Railway has systems in place like DRUCC (Divisional Railway Users Consultative Committee) and ZRUCC (Zonal Railway Users Consultative Committee) which meet regularly for deliberations and exchange of views on various issues pertaining to passenger amenities, cleanliness, catering, punctuality etc. ✻

NORTH WESTERN RAILWAY : Blood Donation Camps Organised – 200 People Contributed to Humanity by Donating Blood

Blood donation camps were organized on 18 January, 2020 at Central Hospital-Jaipur and Divisional Hospitals at Jodhpur, Ajmer and Bikaner on North Western Railway.

About 200 people including Railway employees, their family members and general public participated with great enthusiasm and donated blood in this camp.

Shri Anand Prakash, General Manager, North Western Railway, who inaugurated the camp, said on the occasion that every healthy person should donate blood and others should also be encouraged for this sacred service to humanity. The importance of blood donation is immense.

Blood donation made by us can give life to someone. Donating blood gives us self satisfaction and happiness.

Rajasthan is the state of "Bhamashahs" and the people of this place are forerunners in service of humankind .

Shri S.K. Agarwal, Additional General Manager, North Western Railway, Dr. K. L. Das, Principal Chief Medical Director, Mrs. Manjusha Jain, Divisional Railway Manager, Jaipur, other Railway Officers and staff were also present at blood donation camp. ✻

Meeting Held on Increasing Non-Fare REVENUE & PASSENGER AMENITIES



GM/NWR conducts meeting with commercial and operations managers

To increase non-fare revenue and passenger amenities over North Western Railway, A meeting was held with senior commercial and operations managers of all the four divisions at NWR Headquarter with General Manager, NWR and other PHODs.

A meeting of Senior Divisional Commercial Managers & Senior Divisional Operations Managers of all the four divisions of North Western Railway - Jaipur, Jodhpur, Bikaner and Ajmer was held with all PHODs and other senior officials of Commercial and Operations. The meeting was headed by General Manager, Shri Anand Prakash.

General Manager Shri Anand Prakash gave special emphasis to divisional officers to provide better services to travelling public. He said that in relation to passenger amenities and other works, the officials should ensure after completion of work that the work fulfils the purpose and provides intended facilities to the passengers. The General Manager emphasized the need for "Queue time monitoring" to ensure passengers take less time while booking tickets at the station.

"To provide better catering services, there is a need to monitor quality improvement", said Shri Anand Prakash. The divisional officials were instructed to analyze ticket sales at various railway sections and strengthen ticket checking. On various issues, the divisional officers had direct interaction with the concerned Principal Heads of Department for the problems arising, so that prompt resolution could be possible.

General Manager Shri Anand Prakash directed the Principal Heads of Departments as well as the Divisional Officers to increase the non-fare revenue and stressed on ensuring the punctuality of the trains. Every effort should be taken to increase Freight earnings also. ✻

SOUTHERN RAILWAY : Chennai Chapter of Indian Railway Signal & Telecom Wing Holds SEMINAR ON EVOLVING TECHNOLOGIES



View of the Seminar

A National Seminar on "Evolving Technologies in Signal & Telecommunication to meet Indian Railway challenges" was held on 27 December, 2019 in Chennai. Shri John Thomas, General Manager, Shri S. K. Goel, Principal Chief Signal & Telecommunications Engineer, Southern Railway and Shri Anshul Gupta, Principal Executive Director, Railway Board participated in the seminar along with AGM and PHODs of Southern Railway. Experts from Telecommunication Industry also graced the event and offered valuable insights on evolving technologies in Signalling arena. ✻

Southern Railway Pavilion at the 46th All India Tourist and Industrial Trade Fair in Chennai

Southern Railway has been participating in the All India Tourist and Industrial Trade Fair being held at Island Grounds, Chennai, for the past several years as this provides an opportunity to showcase the universal appeal of Railways through conventional publicity and to promote public awareness.



View of the Pavilion

The centre piece of the pavilion is a model of the existing Pamban Bridge. This working model primarily shows the working of the schezher span of the Pamban Bridge – which allows the train to pass the viaduct and later lifts the spans to allow ships to pass. A replica of the father of the Nation Spinning the Wheel (Chakra) is displayed at the entrance, followed by a working miniature model of WAP4 made by the Basic Training Centre of Carriage and Wagon Workshops, Perambur, the miniature working models of Nilgiri Mountain Railway's X Class Locomotive, Train passing by Pamban Bridge, and a miniature working model of WAP 7 locomotive made by Golden Rock Workshop, attracts children and elders alike.

Static Models of Fairy Queen Steam Locomotive and Electric Engine by Locomotive Workshops, Various Safety related Signal & Telecommunication Equipments by Signal and Telecommunication workshop, Podanur, are also on display apart from a Bio Toilet Model and Plastic Bottle Crushing Machine on display by the Basin Bridge Coaching Depot. Apart from various informative wall displays showing the various improvements in Railways, the stall also features a Selfie Point with a scenic Nilgiri Mountain Railway as the backdrop, a welcome addition this year.

Outside, a replica of the Eiffel Tower, Nilgiri Mountain Railway Steam Loco and a bull, all made from scrap are placed to welcome the visitors to the pavilion. ✻

Valedictory Function of the Inter-Divisional SPORTS AND CULTURAL MEET 2020



The winner of the overall championship, the Headquarter One team with General Manager, Southern Railway

The valedictory function of the 8th Inter-Divisional Sports and Cultural Meet 2020 was held on 12 January, 2020 at Sterling Club Lawns, Nungambakkam. Jointly Organised by the Southern Railway Officer's Association (SROA) and Southern Railway Promotee Officers' Association (SRPOA), the Inter-Divisional Sports and Cultural Meet had nearly 400 participants from Railway Officers and their families of Southern Railway participating in various events. The six teams of Chennai, Tiruchchirappalli, Madurai, Trivandrum, Palakkad and Salem Divisions and two teams from Southern Railway Headquarters were competing in the three day events from 10th to 12th January 2020.The event inaugurated on 10th January by Dr (Mrs) Bina John, President of Southern Railway Women's Welfare Headquarters Organisation, had music/dance competitions and indoor and outdoor games. The annual competitions are held to foster a spirit of friendship and fraternity among the Railway families spread across the zone.

During the Valedictory function, Shri John Thomas, General Manager, Southern Railway, distributed the prizes to the winners in the presence of Dr(Mrs) Bina John, President of the Southern Railway Women's Welfare Headquarters Organisation, Other Railway Officers and Sports Officials.

The overall championship in the competitions was won by Team Headquarters One, and the overall runners up of the competitions, byTeam Headquarters Two. Shri John Thomas, General Manager, Southern Railway, gave away the trophy to the team leader, Smt Priamvada Viswanathan, Prinicipal Chief Commercial Manager, Southern Railway. ✻

Southern Railway Bags Championships in the 55th All India INTER-RAILWAY BADMINTON Tournament

The 55th All India Inter-Railway Badminton Championship was held at Railway Stadium, Perambur, Chennai. Six teams from various Zonal Railways participated in the tournament. Southern Railway won the Overall Championship. South Central Railway were the Runners up followed by Integral Coach Factory (ICF). Shri John Thomas, General Manager, Southern Railway presented the trophies and Merit Certificates to the winning team. ✻



Shri John Thomas with the winning Southern Railway Team

Valedictory Function of ANNUAL CIVIL DEFENCE DAY Held

Southern Railway organized the valedictory function of 54th Civil Defence Week , the 17th of December, 2019 at Railway Institute, Perambur, Chennai. Shri John Thomas, General Manager, Southern Railway graced the occasion as Chief Guest. Over 70 Volunteers from the Civil Defence wing of Southern Railway participated in the event and showcased their skills. A bulletin for Civil Defence Organisation was released during the function. A demonstration on fire rescue was conducted.



Shri John Thomas releasing a bulletin for Civil Defence Organisation during the function

The Civil Defence Organisation of Southern Railway was formed in the year 1964.

It has rendered a helping hand in the rescue operations in many a natural calamities such as Lattur Earthquake (1993), Bhuj Earthquake (2001), Tsunami (2004) and Kerala Floods (2018). ✻

SOUTH CENTRAL RAILWAY : MoU Signed with SBI for DOORSTEP BANKING

A Memorandum of Understanding was signed between South Central Zone of Indian Railways and State Bank of India for Doorstep Banking for direct pickup of earnings covering all 585 Railway stations over SCR Zone. The direct pick up of cash from all the railway stations on SCR as per the MoU dispenses with the tedious and complex activity of movement of cash earnings through "Cash Safes" by trains, earnings being manually sent with the Guard of nominated trains or being remitted by the concerned commercial supervisor at the nominated nearest banks.

The new system will enable hassle free collection of traffic earnings by SBI and remittance into Government account avoiding delay in transmission of traffic cash earnings.

Major benefits from the MoU signed by authorized representatives of South Central Railway and Digital and Transanction Banking Unit, SBI, Hyderabad circle are as follows:

- All the railway stations will have uniform cash remittance mechanism.
- Real time information about the cash being deposited by different stations which will help in better supervision and accountability.
- Avoidance of unwanted accumulation of cash at railway stations.
- Smart way of remittance of station earnings.

Speaking on the occasion, General Manager, South Central Railway, Shri Gajanan Mallya expressed happiness with the tie-up and opined that such understandings will go a long way in streamlining financial transactions accounting.

The existing procedure held scope for delay in remittances of cash owing to various factors such as holidays, non-availability of man power etc. The newly introduced facility of door step banking as per the MoU will do away with the difficulties faced earlier, besides increasing the pace of financial transactions and digitization of remittance of cash earnings of the Railways. ✻

GM, SCR Inaugurates ADVANCED VIDEO SURVEILLANCE SYSTEM (VSS) at Dharmabad Railway Station



Shri Gajanan Mallya inspecting the advanced video surveillance system

Shri Gajanan Mallya, General Manager, South Central Railway inaugurated Advanced Video Surveillance System (VSS) at Dharmabad Railway Station of Nanded District on 27th December, 2019. Shri N.S.R. Prasad, Divisional Railway Manager, Hyderabad Division was also present. The IP based VSS has been installed by RailTel Corporation to strengthen the security measures for passengers at Dharmabad Railway station. The work has been done utilizing the Nirbhaya fund for ensuring better safety.

A total of 10 Full HD IP based Close Circuit Television Cameras (CCTV cameras) have been installed at Dharmabad railway station premises keeping tab of all the activities at station premises 24X7. The CCTV cameras are connected through internet and live feeds are displayed on multiple screen at the Railway Protection Force (RPF) control room for monitoring.

Shri Gajanan Mallya complimented the RailTel for enhancing the security of this station and said that it will be beneficial also for RPF in their surveillance mechanisms to ensure stricter security. This VSS is expected to ensure better security of passengers especially women and children at railway stations and will safeguard railway property also. Talking about the feature of this new Video Surveillance System, Shri Puneet Chawla, Chairman and Managing Director, RailTel said 'We have started the work of providing VSS at Railway stations. Currently, in the first phase, we are working on 200 stations out of which works at 35 stations have already been completed'.

The recording of the video feeds form CCTV cameras will be stored for 30 days for playback, post event analysis and for investigation purposes. Important videos can be stored for longer duration. Railway Board has entrusted RailTel with the work of providing IP based VSS with video analytics and facial recognition system at all the railway stations in premium and EMU coaches. RailTel will provide Video Surveillance System to stations of A1, A, B, C, D and E category, in coaches of premium trains and in suburban EMU coaches. ❊

General Manager, SCR Conducts ANNUAL INSPECTION of Hyderabad Division

Shri Gajanan Mallya, General Manager, South Central Railway, accompanied by DRM/ Hyderabad undertook Annual Inspection of Mudkhed – Kacheguda section of Hyderabad Division on 27th December, 2019.

Starting from Umri railway station Shri Gajanan Mallya went to Dharmabad, where he inaugurated IP based Video Surveillance System and CCTV Room in the station and met local representatives.

Shri Mallya inspected station premises, platforms, passenger amenities, CCTV rooms at Basar, a major bridge on Godavari River between Basar and Navipet station and Level Crossing between Jankampet and Nizamabad station. He inaugurated Solar Pump at the level crossing. He presented ISO 14001 Certification to Basar Railway Station.

At Nizamabad, the General Manager had a detailed inspection of station premises, passenger amenities, renovated RPF Barrack, Running Room, Colony and Health Unit. Shri Gajanan Mallya presented the ISO 14001 Certification to Nizamabad Railway Station.

At Kamareddi, the General Manager inspected the entire station and railway colony, newly extended FOB and newly developed circulating area.

He inaugurated RO Plant in the colony and new ATVM facility with integrated solar roof arrangement. He also conducted a speed test between Bhiknur – Akanapet - Mirzaplli stations. He inaugurated the 100 feet monumental National flag, SBI ATM centre, a Kiosk for health check and Children Park in the colony. ❊



Shri Gajanan Mallya inspecting Dharmabad Railway Station

General Manager, SCR Undertakes INSPECTION OF CARRIAGE REPAIR SHOP, Tirupati and Rayanapadu Wagon Workshop



Shri Gajanan Mallya Inspecting CRS Tirupati

Inspection of Tirupati Workshop

Shri Gajanan Mallya, General Manager, South Central Railway undertook the inspection of the Carriage Repair Shop, Tirupati on 4th January, 2020. He declared the work shop as first scrap free work shop on South Central Railway. He was accompanied by Shri J.K. Jain, Principal Chief Mechanical Engineer, SCR, Shri S. Srinivas, Carriage Work Shop Manager, CRS, Tirupati and Shri Alok Towari, Divisional Railway Manager and other Officials of Guntakal Division.

Shri Mallya carried out detailed inspection of Carriage Repair Workshop, Tirupati. He inaugurated Stores Annexe, Wheel Lathe shop and Bogie load Testing Machine etc. Later he inspected Carriage Body Repair Shop, Canteen amenities, Corrosion Shop, Fiat Bogie Overhauling shop, Open Gantry and Wheel Shop staff amenities, Shot blasting Plant and Bogie Component, Bio toilet section and Train Lighting shop Air Break Assembly room, Paint shop and Outgoing coaches. He laid a foundation stone for new incoming shop and planted Sapling in the work shop premises. He also inspected safety equipment available at workshop and interacted with workshop employees and enquired about the safety precautions taken by them.

The General Manager announced a group cash award of ₹2 lakh for the excellent work done in improving productivity, quality, over all house-keeping, untiring efforts to adopt changes with technological up gradation initiatives to enhance passenger safety.

Inspection of Rayanapadu Wagon Workshop

Shri Gajanan Mallya, General Manager, South Central Railway undertook extensive inspection of Rayanapadu Wagon Workshop and reviewed the performance of Vijayawada Division, progress of ongoing development works etc. on 9th January, 2020. He was accompanied by Shri P. Srinivas, Divisional Railway Manager, Vijayawada Division.



Shri Gajanan Mallya Inspecting Rayanapadu Wagon Workshop

General Manager inspected Body Shop, Mechanical and Goods Stores Depot, Stripping and Component shop & Staff Canteen at Wagon Workshop, Rayanapadu and also interacted with staff. General Manager inaugurated Electrical Mill Wright Stores, Surface Traverse machine.

He also inaugurated 50.7KwP Solar Plant, Electrical substation with a backup of 500 KVA DG set for feeding electrical energy to Body Shop and participated in plantation drive. Later, he inspected the working of newly installed Robotic Cleaning Distributor Valve machine, portable air cnc plasma cutting machines and surface traverse machines, Basic training centre, new bogie repair bay, Paint shop and Administrative building and inaugurated the roof top solar plant. He also inspected the newly renovated 25 bed capacity Railway Hospital at Rayanapadu.

Earlier Shri Gajanan Mallya reviewed Wagon Workshop performance for the current financial year. Shri Birendra Sinku, Chief Workshop Manager gave detailed presentation and appraised the General Manager on the latest initiatives and innovative techniques deployed to reduce the work pressure on staff.

Later, Shri Gajanan Mallya inspected the third line works, Central Railway Goods line and proposed modification of bulb line works at New West Block cabin and Vijayawada yard. He reviewed the Vijayawada Division performance and advised the officials to expedite the ongoing station redevelopment works at Vijayawada, Branch line doubling and other infrastructural works in stipulated time.

Shri J.K. Jain, Principal Chief Mechanical Engineer, Shri Rajiv Kishore, Principal Chief Personnel Officer, Shri V.R. Mishra, Principal Chief Material Manager and Shri Birendra Sinku, Chief Workshop Manager, Rayanapadu were also present during the inspection. ✻

INNOVATIVE SOLAR ROOF Provided for the New Booking Office Building at Kamareddi Railway Station

A new Booking Office has been constructed at Kamareddi Railway station in the second entry side with innovative concept of building Roof made with Solar Panels. South Central Railway has always pioneered in adopting Energy conservation measures at its work places establishments, stations and other areas. In recognition of its initiatives, each year SCR has been receiving several awards and accolades from both Central and state Ministries.

In continuation of these pioneering efforts, a first of its kind innovative concept of integrating solar roof with pre-fabricated concrete walls has been introduced at newly constructed Booking Office Building at Kamareddi Railway Station. As part of this, the roof has been completely



made of solar panels, which has also proved to be economical compared to conventional RCC roof.

The Roof of the building is a pre-fabricated structure with Poly Crystalline Silicon Solar Photo Voltaic (SPV) Panels fitted on M.S.(Mild Steel) structure instead of constructing conventional RCC structure. The average cost per Sq. meter of a Pre-fabricated roof is ₹13,750 whereas the cost per sq. meter for RCC structure is around ₹25, 000.

A total of 18 SPV panels each with capacity of 320Wp totaling to 5.76 kWp are incorporated as the roof of the building. 5 kWp inverter is made operational for converting solar power into 3 phase AC supply. Switch gears with necessary protections such as Surge protection device and Lightning arresters have been arranged along with earthing provisions. Approximate energy generation from this structure is around 6000 Electrical units per annum resulting in saving of ₹0.6 lakhs.

This concept of prefabricated structure with SPV panels can be constructed within the reasonable time and cost covering more plinth area as compare to regular RCC structures. The roof assembly is light weight and given the flexibility of dismantling and shifting to some other place on need basis.

Shri Gajanan Mallya appreciated the efforts of Officers & staff of Hyderabad Division for adopting this innovative concept to conserve the energy while promoting green environment. He also opined that, these types of structures are very much useful for small establishments and way side railway stations in terms of both energy and revenue savings, while ensuring uninterrupted power supply.*

SOUTH EASTERN RAILWAY : GM Holds High Level Meeting for Giving More Emphasis on MAINTENANCE OF RAILWAY INSTALLATIONS & RAILWAY TRACK



Shri Mohanty holding a high level meeting with Principal Head of Departments at SER Headquarters, Garden Reach

Shri Sanjay Kumar Mohanty, General Manager, South Eastern Railway held a high level meeting with Principal Head of Departments at SER Headquarters, Garden Reach on 6 January, 2020 to critically review the maintenance of Railway Installations and Railway Track. Divisional Railway Managers of Kharagpur, Adra, Chakradharpur and Ranchi also attended the meeting through Video Conferencing.

Elaborate discussions were held for maintenance of railway buildings, major and minor bridges, track renewals etc. Shri Mohanty laid stress on keeping a close watch and continuous maintenance of railway assets.

General Manager advised all Divisional Railway Managers and concerned Engineering Departments to make out an audit of quality of all under construction structures as well as stability and strength of structures constructed in the last three years and very old structures.

The main objective of this meeting is to lay more emphasis on maintenance of railway installations in good operating and habitable condition for ensuring safety of the occupants, rail users and public. *

General Manager Inspects Mohuda-Bhaga-Bhojudih-Adra-Bankura Section of Adra Division During ANNUAL INSPECTION



The General Manager inspecting Level Crossing Gate between Bhojudih-Santaldih Section during Annual Inspection of Adra Division

Shri Sanjay Kumar Mohanty, General Manager, South Eastern Railway inspected Mohuda-Bhaga-Bhojudih-Adra-Bankura section of Adra Division along with all Principal Officers from SER Headquarters and Divisional Railway Manager, Adra, on 13-12-2019. During his day-long inspection, General Manager inaugurated various works in this section viz. Crew and Guard Rest Room and Lobby at Mohuda, Reserved Lounge at Bankura, X-Ray Machine at Railway Hospital, Adra etc.

Shri Mohanty, during his visit, inspected major & minor Railway Bridges, level crossings, Running Room, Track Machine, Railway Colony etc. He also inspected the different passenger amenity works at various Railway Stations. General Manager has given priority to the facilities provided to the passengers, and above all, cleanliness at station premises and explored the possibility of further improvement.

While conducting the inspection, Shri Mohanty urged all officers and staff to be more careful on safety of train operations and ensure utmost safety. General Manager thoroughly inspected cabins, Station Managers' room, booking offices and spoke to the concerned staff on duty. General Manager stressed on passenger comfort, better facility, punctuality, safety and security. A speed trial at 120 kmph was conducted between Adra East Cabin and Bankura to assess the condition of the railway track. ✻

General Manager Inspects KHARAGPUR - BANGRIPOSI-KHARAGPUR SECTION

Shri Sanjay Kumar Mohanty, General Manager, South Eastern Railway conducted a detailed inspection of Kharagpur-Bangriposi-Kharagpur Section of Kharagpur Division along with all Principal Officers from SER Headquarters and Divisional Railway Manager, Kharagpur on 10 January, 2020.

During his day-long inspection, General Manager inspected stations, level crossing gates, bridges, various railway joints, panels, cabins, yards, track machines, gangs, crew lobbies, railway colonies and traction sub-stations of this section.

After the inspection, General Manager met and interacted with the public representatives, passengers and local people at Baripada, Jaleswar and Kharagpur to assure them to provide better services in respect of passenger amenities at stations and in trains and safety and security of the rail users.

Shri Mohanty during his inspection, thoroughly inspected major railway bridge on River Subarnarekha and other minor bridges over the section.

GM's inspection also included window trailing and railway stations viz. Bangriposi, Bhanjpur, Baripada, Betnoti, Rupsa, Basta, Amarda Road, Jaleswar, Khargpur etc. along with railway colonies at various stations.

Shri Mohanty also inspected Heritage Locomotive at Baripada Station.

General Manager inaugurated TTE Rest Room while inspecting Kharagpur Station. During the day long inspection, Shri Mohanty urged all officers and staff to be more careful on safety of train operations. A speed trial at 120 kmph was conducted between Jaleswar and Hijli to assess the condition of the railway track. ✻



Shri Mohanty inspecting Jaleswar Station during Annual Inspection of Kharagpur Division

SOUTH EAST CENTRAL RAILWAY Organized "Theme Run" as part of National Energy Conservation Week

The aim of organising National Energy Conservation Week is to make citizens aware of the importance of energy as well as energy saving and its optimum use to promote energy conservation. It is very important to consume energy very wisely while using it. Every citizen should conserve energy in practical way to get more effective results towards energy conservation plan. On the occasion of National Energy Conservation Week, several programs were organized from 08 to 14 December 2019 to create public awareness in South East Central Railway headquarters and at all the three divisions viz. Bilaspur, Raipur and Nagpur.



On this occasion, a theme run was organized on 07 December, 2019 at 07.30 am, in which a large number of officers and employees of South East Central Railway headquarters and Bilaspur division participated. The theme run was inaugurated and flagged off by Shri Goutam Banerjee, General Manager, South East Central Railway from N.E. Institute. Shri S.N. Dubey, Principal Chief Electrical Engineer, other PHODs and DRM, Bilaspur participated in the theme run along with officials and employees of Headquarters and Bilaspur Division.

Speeking on this occasion, Shri Goutam Banerjee, General Manager, appreciated all the officials and employees for taking part in this "Theme Run". In his address, he said that National Energy Conservation week being organized every year with a special purpose and aim so as to be more impactful among the people. Shri Goutam Benerjee, General Manager apprised about the need for energy conservation and its requirement in the present context. He gave prizes to the winners of the theme run.

During the National Energy Conservation Week several awareness campaigns on the subject of energy conservation were conducted by the headquarters as well as all the three divisions and workshops. ✻

RDSO Designed & Developed New LVPH Coach (High Capacity Parcel Van Coach)

RDSO has for the first time designed a high capacity parcel van coach (LVPH) on LHB platform. There has been pressing demand for LHB parcel van from customers. To cater to requirements for carrying parcel traffic in passenger trains, this coach has been designed with state of the art technology having FIAT bogies fitted with air-spring suspension, Disc Brakes, CBC coupling and compatibility with End-on-generation / Head-on-generation (EOG/HOG) power schemes. Collapsible shutters have been provided inside the coach for parcel segregation. The coach has a carrying capacity of 24 tonnes and is capable of operating at 130 kmph.



Oscillation trials of the first LVPH coach manufactured by Rail Coach Factory / Kapurthala were conducted by RDSO in November 2019 in Bareilly-Moradabad-Saharanpur section of Northern Railway upto a speed of 115 kmph and in Sawai Madhopur-Kota-Nagda section of West Central Railway at a test speed of 145 kmph. During these trials, the coach met all the requirements for ride stability. Statutory inspection of the coach has been conducted by the Chief Commissioner of Railway Safety / Ministry of Civil Aviation on 13 Dec. 2019. Indian Railways has planned for rapid proliferation of these coaches with a production target of 200 coaches by March 2020 itself and regular production thereafter. ✻

KOLKOTA METRO : Extends Service on NEW YEAR'S EVE for the Convenience of the Passengers

Anticipating heavy rush of commuters at night, Metro Railway extended its services on 31 December 2019, New Year's Eve. That day, last services from both Dum Dum and Kavi Subhash Stations started at 22.45 hrs. instead of 21.55 hrs. as on other weekdays.

Total 296 (148 UP + 148 DN) services were run on that day which were 8 services more in comparison to 288 services as run on weekdays. ✻



METRO RPF Rescues a Lost Child and Hands Him Over to his Parents

On 25 December, 2019 a 13-year old boy could not deboard a Metro at Park Street station. After sometime, the minor boy was rescued at Maidan Metro station by the on-duty RPF staff and after proper verification, the rescued boy was handed over to his mother who thanked Metro Railway authorities for getting back his lost son. ✻

METRO STAFF Extends Helping Hand to an Ailing Lady Commuter

On 2 December, 2019 a lady commuter aged about 25 years suddenly fainted at Esplanade Metro station. On-duty RPF and other station staff immediately attended to her and she was given immediate medical attention after which she felt better. Thereafter, she was sent to SSKM Hospital in an ambulance accompanied by Metro staff. ✻

IRCON Distributed Aids & Appliance to Divyangs under IRCON CSR Initiative

IRCON International Limited (IRCON) in association with ALIMCO distributed aids and appliances to various divyangs at Muzaffarnagar, Uttar Pradesh on 28 December, 2019. Shri S. K. Chaudhary, Chairman & Managing Director (CMD) IRCON and Mrs. Seema Chaudhary, inaugurated the camp by lighting of lamps in presence of senior officers of IRCON and officers of ALIMCO. Under this camp 177 beneficiaries were distributed aids and appliances like Wheel Chair, Hearing Aids, Motorized Tricycle, Crutches, MSIED Kit, Rollator, Walking Sticks and CP Chair.

During the camp, Shri Chaudhary and others distributed the aid and appliances to specially abled people. The beneficiaries were happy to get these appliances as these appliances would help them to face challenges of their lives



in a better way. The beneficiaries expressed their gratitude towards CMD/IRCON for the aid and appliances.

IRCON continues to bring social change for the beneficiaries and society in large through its CSR activities in the future as well. ✻

Konkan Railway Held Meeting with MEMBERS OF PARLIAMENT

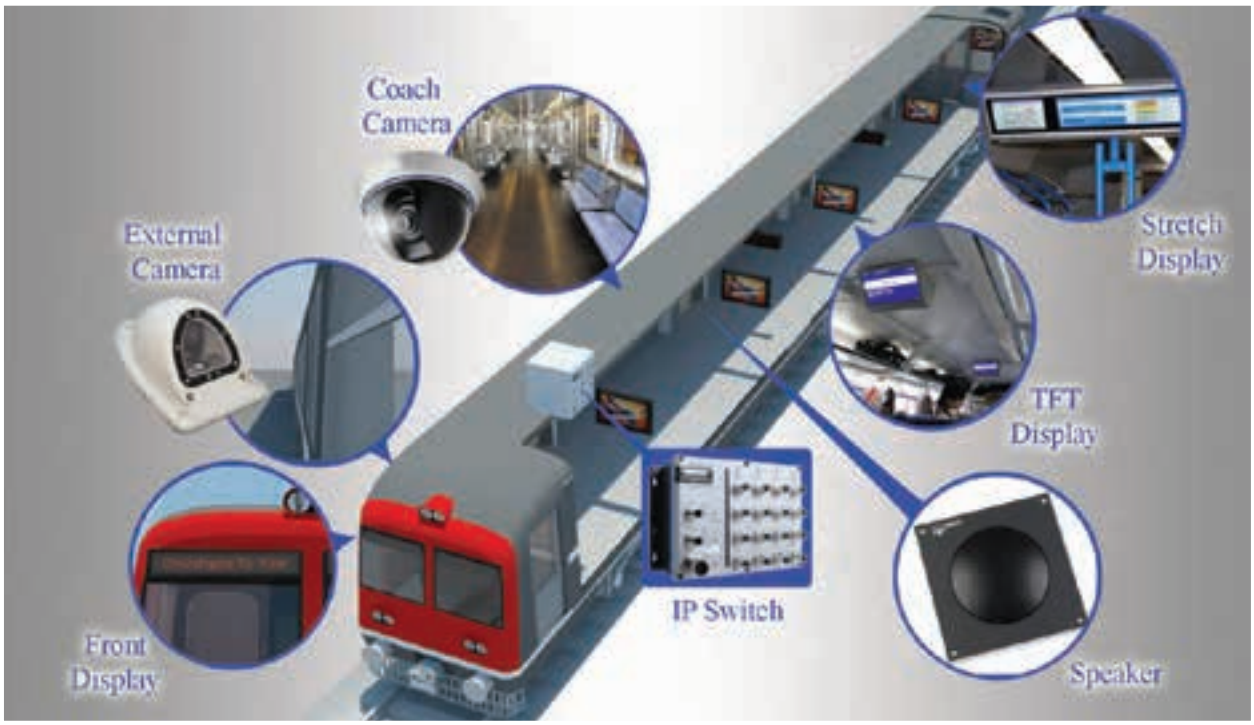




Konkan Railway held a meeting with Members of Parliament Shri Vinayak Raut, Shri Sunil Tatkare and Shri Narayan Rane representing the constituencies along Konkan Railway route in Maharashtra to discuss the issues pertaining to Konkan Railway. Shri Sanjay Gupta, Chairman and Managing Director and other Konkan Railway Officials were also present at this meet. ✻

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Indian Railways Rationalises PASSENGER FARES

Measure to boost modernization and state of the art facilities to passengers of Indian Railways

Indian Railways has continuously endeavoured to augment passenger experience through modernization and provision of improved facilities over trains and stations. The last fare revision over Indian Railways was done in 2014-15. In order to expand passenger amenities and facilities at railway stations and trains, it has become imperative to increase the fare marginally without overburdening any class of passengers. Further, the burden of 7th Pay Commission on Indian Railway has necessitated rationalization of fares. Fare revision will help in channelising the fast modernization of Indian Railways.

Accordingly, Railways has decided to marginally effect an increase in fare. Keeping the affordability concerns of daily commuters, there shall be no fare hike for passengers over suburban sections and season ticket holders. This class constitutes 66% of total passenger segment of Indian Railways. Even for the passengers traveling in Ordinary Non AC Classes, there shall be a marginal increase of 1 paise/PKM (Passenger Kilometer). The increase in fare will be on tickets bought on or after 1st January 2020 and no excess fare (difference of fare) will be charged from passengers who have booked tickets before 1st January 2020. The fare revision is as below:

1. Ordinary Non-AC classes(Non-suburban): Fare increase by 01 paise/PKM
2. Mail/Exp Non-AC classes : Fare increase by 02 paise/PKM
3. AC classes- Fare increase by 04 paise/PKM
4. Suburban fare and Season tickets: No increase

Existing fares of train services like Rajdhani, Shatabdi, Duronto, Vande Bharat, Tejas, Humsafar, Mahamana, Gatiman, Antyodaya, Garib Rath, Jan Shatabdi, Rajya Rani, Yuva Expresses, Suvidha and special trains on special charges, AC MEMU (non-suburban), AC DEMU (non-suburban) etc shall similarly be revised to the extent of the above proposed increase in class-wise fares.

There shall be no change in charges for reservation fee, superfast surcharge etc. Such charges, wherever applicable, shall continue to be levied additionally. GST as applicable shall be levied, as per instructions issued from time to time.

Indian Railways is constantly striving for up-gradation of amenities to passengers, modernising railway stations and providing state-of-the-art facilities on board and off -board. Rationalisation of passenger fares will boost the endeavours of Indian Railways in the same direction. ✻

Indian Railways has Created 72,000+E-FILE over 58 Establishments Replacing Manual Files

NIC e-Office implemented by RailTel is helping Indian Railways go Paperless

E-Office has been implemented over 58 establishments of Indian Railways to provide reliable, efficient, and effective way to handle office files & documents. Quick disposal of files and systematic, timely monitoring of pending files has been the other immediate advantage of NIC e-Office.

72000+Digital Files have been created in a mere 6 months' time over 58 establishments of Indian Railways replacing manual file. The NIC e-office, implemented by RailTel for Indian Railways is helping Indian Railways to adopt paperless work culture saving tons of paper every day. In the phase I of the project RailTel has created 50000+ users in these 58 establishments of Indian Railways and trained executives to handle the platform.NIC e-Office is a cloud enabled software developed by National Informatics centre (NIC) that is being deployed/ hosted from RailTel Tier III certified data centres at Secundrabad and Gurgaon. It is based on Central Secretariat Manual of e-Office Procedure (CSMeOP). e-Office fosters paper-less culture which not only saves operational cost but also reduces the carbon foot print.

Talking about the project, Shri Puneet Chawla, CMD/RailTel, said –'Implementation of e-Office has not only helped in saving paper but also increased pace and efficiency of the users. More than 2,50,000 receipts have been created in the past few months. After the success of phase I, we have started working on Phase 2 of the project in which 39 more establishments of Indian Railways will be converted into Digital workspace through NIC e-office.'

It is a big challenge to transfer the entire manual filing system of Indian Railways on to one digital platform. However, the bigger challenge is to condition the users to give up the habit of using manual file system and adapt the new system of paperless working. RailTel team has managed to complete the implementation before the deadline and also managed people by retraining and handholding for roll out. ✻

RPF Ushers in a Number of ADMINISTRATIVE REFORMS to Improve its Functioning



Railway Protection Force (RPF) of Indian Railways has taken various steps for administrative reforms in the year 2019. Following are the major reforms ushered in to improve the working of RPF:-

Consequent upon grant of Organized Group 'A' status (OGAS) to the Group 'A' officer cadre in Railway Protection Force (RPF), the Ministry of Railways has notified the name of the Group 'A' cadre mentioned above as Indian Railway Protection Force Service (IRPFS). The nomenclature of Group 'A' gazetted cadre of RPF as IRPFS does not, in any way, change the name of the force (RPF). The character of the force constituted under RPF (Amendment) Act 1985 (an Act of Parliament) as a statutory Armed Force of the Union remains unchanged.

Constables having received the benefit of 1st MACP/2nd MACP will wear ribbons (V) One Stripe /Two Stripes respectively on the right upper arm of their uniform. This will boost the morale of RPF personnel who remain in the rank of Constables for substantial period as they will look forward to addition of stripes in their uniform without waiting for their promotion to the rank of Head Constables.

The rules and guidelines for functioning of RPF have been compiled as Establishment Manual and Crime Manual superseding all guidelines in force. Soft copies of these manuals have been uploaded in the RPF webpage to make them easily accessible to all RPF personnel. This will streamline the functioning of RPF.

With ever increasing threat to railway system from Left Wing Extremists, terrorist/subversive elements, it is imperative that Railway Protection Force remains better trained and prepared to face growing challenges to railway security. For this very objective, setting up of a separate Commando unit, known as CORAS (Commandos for Railway Security), was announced by Minister of Railways and Commerce & Industry, Shri Piyush Goyal on 14th August 2019.

Vision of CORAS is to develop world level capabilities of specialized response for any situation pertaining to damage, disturbance, disruption of train operations, attack/hostage/ hijack/disaster situations in railway areas. The training of RPF commandos includes training in physical endurance, Unarmed Combat, Latest weapons training, Disaster management, Anti Terrorist Operations among others. RPF commandos are being utilised for securing railway stations, escorting trains and railway area protection in highly vulnerable areas.

The benefits available to RPF personnel from Rail Suraksha Kalyan Nidhi were enhanced substantially during 2019. In case of death attributable to death during discharge of duty, the benefit was enhanced from lump-sum grant of ₹5 Lakhs to ₹15 lakhs. The vipatti sahayata was also doubled to ₹4 lakhs for self treatment and ₹2 lakhs for treatment of family members. Numbers of merit scholarships were enhanced from 1200 to 1500 and enhanced scholarship was started for polytechnic and post graduate courses. Education assistance to handicapped wards was also doubled to ₹1000 per month.

Promotion to Gazetted Rank: The long pending matter of regularisation of ASCs was resolved in 2019 with regularisation of 97 ASCs in Group A against the vacancies of last 4 years. In addition, a total of 95 officers i.e. 44, 41, 03, 04 and 03 officers were promoted to the rank of ASC, DSC, Sr.DSC, DIG and IG respectively during 2019.

Promotion in Non-gazetted ranks: During the year 2019, 364 Sub Inspectors were promoted to the rank of Inspectors and 2303 Constables were promoted to the rank of Head Constables. Selection of 388 posts of Sub-Inspectors from the rank of Asstt. Sub Inspectors is presently underway and the promotion process of Asstt. inspectors from the rank of Head Constables has been set in motion.

A total of 1121 candidates (male 823 and female 298) were empanelled for recruitment to the post of Sub Inspectors in RPF, out of which initial training of 929 (male 682, female 247) Sub-inspector cadets has already started. Similarly, 8543 candidates (male 4465 and female 4078) were empanelled for recruitment as Constable in RPF, out of which initial training of 5850 (male 3350 and female 2500) constable recruits has already started. The recruitment of 798 Constables (ancillary) and 246 Constables (band) is underway. ✻

First Trial Run of DOUBLE STACK TRAIN Conducted on Newly Built Rewari-Madar Section of Western Dedicated Freight Corridor (WDFC)

An inaugural Trial-Run of Indian Railways (IR) freight train on the newly built Rewari-Madar section of Western Dedicated Freight Corridor (WDFC), covering a distance of about 306 kms (Total 663 track km) was conducted on 27 December, 2019. The trial run was flagged off from New Kishangarh Station by Station Sr. Executive Shri Ravindra Sharma in the presence of Shri Anurag Sachan, Managing Director, Dedicated Freight Corridor Corporation India Limited (DFCCIL).

The Rewari-Madar section is in Haryana State (for approximately 79 Km in Mahendragarh & Rewari districts) and Rajasthan State (for approximately 227 Km in Jaipur, Ajmer, Sikar, Nagaur & Alwar districts). This section contains 16 major bridges and viaduct (1 viaduct & 15 major bridges), 270 minor bridges, 4 Rail Fly Overs, 19 Road Over Bridges (11 completed and 8 under construction) & 178 Road Under Bridges eliminating 148 Level crossings. There are 9 newly built DFC stations in this section, six crossing stations (i.e. New Dabla, New Bhagega, New Shri Madhopur, New Pachar Malikpur, New Sakun and New Kishangarh) and three junction stations (i.e. New Rewari, New Ateli and New Phulera).

DFCCIL will run freight trains at the maximum speed of 100 Kmph hour as against the current maximum speed of 75 kmph on Indian Railway tracks whereas the average speed of freight trains will also be increased from existing speed of 26 kmph on Indian Railways lines to 70 kmph on Dedicated Freight Corridors (DFC).

Cost

Total cost of works on this section is ₹3918 crore, excluding land.

Industrial Areas likely to benefit

The opening of this stretch will benefit various industries in Rewari – Manesar, Narnaul, Phulera & Kishangarh areas of Rajasthan & Haryana. In addition to this, the container depot of CONCOR at Kathwas will also come on DFC map and get advantage in terms of faster throughput.

Highpoints

- Heavy haul train operation with 32.5 Ton axle load has been envisaged for the first time in India (currently practiced only in USA, Canada, Brazil, Australia, China, Russia South-Africa and Sweden-Norway)
- Double stack containers
- Double line electric (2 X 25 KV) track to undertake higher haulage at higher speeds
- Automated New Track Construction (NTC) machine with record single day track laying of more than 3 km.
- More Powerful Locomotives 7000 kW (9000 HP) CO-CO 6 axles
- High rise Over Head Equipment (OHE) of 7.4 meter height (existing IR OHE 5.5 m) for double stack container movement on flat wagons
- Train Protection and Warning System (TPWS) for safe and efficient operation
- Elimination of road crossing
- Connecting Multi Modal Logistic Hubs and Delhi-Mumbai Industrial Corridor
- Water Conservation through Rainwater harvesting in all the stations and RUBs (road under bridge)
- Reduced Energy Consumption using latest technology
- Recycling and Re-use of Construction materials and Waste management
- Green Initiatives - developed as "Low Carbon & Energy Efficient Green Transportation" with reduced GHG emissions w.r.t. freight transportation by existing rail and road system
- Exclusive operation for freight trains.

After having successfully run Track Recording Car of RDSO on 20th and 22nd October, 2019 and Oscillation trials of BOXNS Wagons at 110 Kmph, trial runs are being conducted on the DFCCIL tracks. These wagons have a Tare weight i.e. own weight of 19.85 ton and a carrying capacity of 80.15 ton. These wagons have 14% more weight carrying capacity than the wagons being currently used on Indian Railways. The DFCCIL infrastructure is well placed to utilise the carrying capacity of these wagons. Currently, Indian Railways freight trains can carry 61 -71 ton weight per wagon at an approximate speed of 60 kmph. The newer, advanced wagons can carry weights upto 81 ton per wagon at an approximate speed of 100 kmph. The newer wagons are safer and modern too.

Trial runs of BLCS-A and BLCS-B wagon prototype have also ensued. These wagons have enhanced axle load of 25 ton and been designed for DFCCIL by RDSO's wagon department. The design will maximize capacity utilization and uniform distribution and point loading. These wagons on a long-haul double stack container train on the WDFC can carry 4 times in terms of container units compared to the current traffic on Indian Railways. ✻

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IP BASED VIDEO SURVEILLANCE SYSTEM being Installed by Indian Railways at Railway Stations to Enhance Security

In order to enhance security at Railway stations which are major hubs of transportation, Indian Railways is in the process of installing Internet Protocol (IP) based Video Surveillance System (VSS) at stations, that is, waiting halls, reservation counters, parking areas, main entrance/ exit, platforms, foot over bridges, booking offices etc. Railway Board has approved works for provision of Video Surveillance System covering 983 stations over Indian Railways under Nirbhaya funds. This year a budget of ₹250 crore was allotted to Indian Railways from Nirbhaya fund for installation of video surveillance system.

RailTel, a Miniratna PSU under Ministry of Railways, has been entrusted with the work of providing IP based VSS with video analytics and facial recognition system. CCTV camera live feeds are displayed on multiple screens at the Railway Protection Force (RPF) control room for monitoring. Each HD camera at the station consumes approximately 1TB of data and 4k camera consumes 4 TB data per month. The recording of the video feeds from CCTV cameras will be stored for 30 days for playback, post event analysis and for investigation purposes. Important videos can be stored for longer duration.

Talking about the project of providing Video Surveillance System, Shri Puneet Chawla, Chairman and Managing Director, RailTel said that in the first phase, VSS is being



installed at 200 stations Pan India and as on date work has been completed at 81 stations across India. The Video Surveillance System will be extended to other stations and coaches soon. The work is being done utilizing the Nirbhaya fund for ensuring better safety for women.

In phase-I that is targeted for this year, South Western Railway (SWR) has recently commissioned Video Surveillance system VSS at 6 major stations - Ballari by providing 33 Cameras, Belagavi with 36 Cameras, Vasco-Da Gama with 36 Cameras, Bengaluru Cantt with 21 Cameras, Bangarpet with 36 Cameras, Hassan with 36 Camera and at 3 Stations at Hassan, Shivamogga Town & Sathya Sai Prasanthi Nilayam, work is under progress and will be commissioned shortly. Integrated security systems comprising CCTV have already been installed at 11 stations including Bengaluru with 71 Cameras, Yesvantpur with 35 Cameras, and Mysuru with 34 Cameras. With this SWR has functional CCTV at 17 locations and will complete the work in Phase-I by having CCTV functional at total 20 railway stations by end of January 2020. Security personnel can monitor these cameras not only from station control rooms but also from Central Security Control Rooms located at Divisional HQ, i.e, Hubballi, Mysuru and Bengaluru.

Railway Board has approved works for provision of Video Surveillance System covering 983 stations under Nirbhaya funds

RailTel has been entrusted with the work of providing IP based VSS with video analytics and facial recognition system

Internet Protocol (IP) based Video Surveillance System (VSS) has also been installed at 10 Railway stations of Western Railway namely Bhavnagar Terminus, Udhna, Valsad, Veraval, Nagda, Navsari, Vapi, Viragam, Rajkot, Gandhidham. This Video Surveillance System is expected to ensure better security of passengers at railway stations and railway property.✻

Nandyal–Yerraguntla Section Declared as the FIRST SOLAR SECTION in SC Railway

Indian Railways has planned to source about 1000 Mega Watt (MW) Solar Power and about 200 MW of wind power progressively by 2021-22 across Zonal Railways & Production Units. Of this, 500 Mega Watt (MW) solar plants are to be installed on the roof top of Railway buildings which will be used to meet non-traction loads at Railway Stations, etc. About 500 MW land based solar plants will be used to meet both traction & non-traction requirements.

South Central Railway is one of the zones actively implementing several measures aimed at energy conservation by harnessing renewable energy. One of the significant actions taken in this direction has been the installation of solar panels at stations, service buildings, LC gates etc. across the zone. Taking this step to the next level, for the first time all the stations in a particular section of the South

Central Railway have been provided with solar panels at one stretch to tap the natural energy. This will not only help in meeting power needs of all the stations in the section but also save expenditure for the Railways.

The Nandyal – Yerraguntla section in Guntakal Division has been declared as the first solar section in South Central Railway. Nandyal – Yerraguntla section is a new railway line laid by Railways and opened for passenger traffic in the year 2016 to bring the hinterland areas into rail map by providing rail connectivity. All the 08 stations in the section – Madduru, Banaganapalle, Koilakuntla, Sanjamala, Nossam, S.Uppalapadu, Jammalamadugu and Proddutur – have been provided with solar panels capable of meeting all the power needs at these railway stations.

In order to make use of solar power, 37 kWp off Grid Roof Top Solar plants along with 250/125 Wp solar panels have been installed in each station. In addition, Inverters and 12V 150 AH Battery banks are also installed at all these stations. The total connected load on solar plants is on an average 30 kWp. In total, 152 solar panels have been installed at these stations. With an average exposure of 8 sunny hours per day, 148 KWh energy units can be generated throughout the year resulting in energy generation of 54,020 units. Anticipated savings in terms of revenue is around ₹5 lakh per annum. Significantly, it also helps in reducing carbon footprint to the tune of 49 metric tonnes per annum thus contributing towards greener environs.

All 8 stations in the section provided with solar panels at one stretch; capable of meeting all the power needs of these railway stations

16 stations have already been declared Green Railway stations across Indian Railways, which are meeting energy needs completely either through solar or wind power. These stations are Roha, Pen, Apta in Central Railway, Niamatpur halt, Kanhaipur halt, Teka Bigha halt, Mai halt, Garsanda halt, Niyazipur halt, Dhamaraghat in East Central Railway, Shri Mata Vaisno Devi, Shimla in Northern Railway, Unhel, Khanderi, Bajud, Ambli Road, Sadanapura & Sachin in Western Railway – are 100% Green Powered stations. ❊

Self Propelled Accident Relief Medical Vans to Improve Disaster Response of Railways; 175 Tonnes Cranes Under Procurement to Improve Capacity During Restoration



Indian Railways is gradually replacing locomotive hauled Accident Relief Medical Vans (ARMVs) with Self Propelled Accident Relief Medical Vans (SPARMVs) to improve response during disaster. Specification of high speed Self Propelled Accident Relief Trains (HS-SPARTs) with speed of 160 kmph has been finalized and it is planned to be procured in addition to existing 110 kmph SPART.

The main areas of focus on disaster management are:-

- Faster Response
- Better facilities and equipment
- Expanding resources to meet requirements in major accidents
- Coordination with other agencies of central and state governments
- Training and Preparedness

Indian Railways has more than 6000 trained breakdown staff, 176 ARTs, 86 ARMVs & 90 Break down Cranes for disaster relief

Further, to improve the capacity during restoration, 175 Tonnes cranes are under procurement which is an upgradation over existing 140 T cranes available with Indian Railways. The concept of golden hour has also been recognised to expedite response time during disaster.

Indian Railways has an organized system of relief for managing accidents with its own resources. It consists of more than 6 thousand trained break-down staff, 176 Accident Relief Trains (ARTs) and 86 Accident Relief Medical Vans (ARMVs) made using passenger coaches.

All Accident Relief Trains and Accident Relief Medical Vans have pre-defined beats, inspection schedules and response time. In addition, there are 90 Break down Cranes of various capacities over Indian Railway system.

All equipments in Accident Relief Trains and Accident Relief Medical Equipments have been standardized based on High Level Committee recommendations. Some of the items being imported for rescue, relief and restoration are as follows:

- Medical equipments like Augmented first aid box, body bags, foldable chairs, portable fire extinguishers, operation theatre equipments, etc.
- Hydraulic Re-railing equipments (HRE)
- Emergency Pneumatic air bags for lifting
- Generators & Electrical equipment
- Hydraulic rescue device (HRD)
- Wire rope sling & shackles
- Fire fighting equipments
- Abrasive cutting tools
- Signaling & communication equipments
- Indian Railways also conducts periodic mock drills with National Disaster Response Force (NDRF) for training and ensuring preparedness during disaster.

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Asansol Division : Eastern Railway FULLY AUTOMATIC APP BASED VALVE SYSTEM





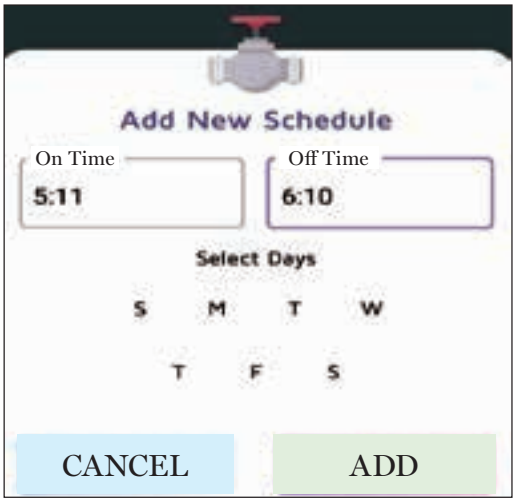
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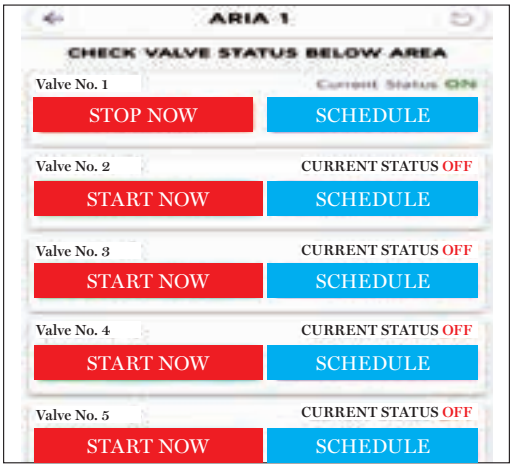
To scrap the requirements of valve man for valve operation and water distribution in colonies and stations, the concept of APP based automatic valve operation system has been developed. In this system, sensor based valve are installed on each pipe going to specific railway colony and station which will be operated through app and opening/closing time of valve can also be fixed through app.

WORKING TECHNOLOGY

This system has been installed at Jamtara railway station & colony in which 6 valves are installed for different water pipe lines for water distibution in addition to conventional type valves. All valves are connected through one software based main control board which can be operated through GSM based signals or through any internet service. The system is connected through inverter (10 W batteries) for 24 hr uninterrupted power supply.

Valve operation could be done through app far from the location at any time or a fixed time could be set.





ADVANTAGE OF THE SYSTEM

- Savings of manpower (valve man): 2 Valveman for day night duty at Jamatara station and colony.
- Saving of money (in terms of valve Man expenses borne by railway) and time.
- Minimize the water loss which occur through manual valve operation
- It can be operated through GSM mobile signals and through internet from anytime and anywhere.
- Current valve status can be checked through app at any time.

INSTALLATION COST

Approx ₹3.5 lakh for Jamtara (6 valves + control board+ inverter)

INSTALLATION LOCATION

Jamtara railway station & colony. ❊

S & T Systems Overview on Bhaupur - Khurja Section of Eastern Dedicated Freight Corridor





Mahesh C. Yadav
Dy CSTE/RE/Ambala(Rtd) IRSSE
Chartered Engineer (I)
IE, MIRSTE, MIRT, MIUT, MIMA

Ministry of Railways (MOR), Government of India has planned to construct a Dedicated Freight Corridor (DFC) covering about 3330 route kilometers on Eastern and Western Corridors. The coverage of Eastern Corridor is from Ludhiana to Dankuni and Western Corridor from Jawaharlal Nehru Port, Mumbai to Rewari / Tughlakabad / Dadri near Delhi. There will be a linkage between two corridors at Dadri.

Dedicated Freight Corridor Corporation of India (DFCCIL) is a Special Purpose Vehicle set up under the administrative control of Ministry of Railways to undertake planning & development, mobilization of financial resources and construction, maintenance and operation of the Dedicated Freight Corridors. DFCCIL was incorporated in October 2006 under Indian Companies Act 1956.

The plan to construct dedicated freight corridors across the country marks a strategic inflexion point in the history of Indian Railways that has essentially run mixed traffic across its network. Once completed, the dedicated freight corridors will enable Indian Railways to improve its customer orientation and meet market needs more effectively. Creation of rail infrastructure on such a scale - unprecedented in independent India – is also expected to drive the establishment of industrial corridors and logistic parks along its alignment.

The DFC project entails construction of mostly double-track electrified railway lines. The bridges and formation will be designed to allow movement of 32.5 ton axle load while the track structure will be designed for 25 ton axle load operating at maximum speed of 100 Kmph. The Eastern Corridor will handle single stack containers whereas Western Corridor is planned to cater to double stack containers. Upgradation of transportation technology, increase in productivity and reduction in unit transportation costs have been taken as guiding principles for formulating the project. Various operating systems, motive powers, signaling and work processes are required to conform to these broad perspectives.

Eastern DFC Route will be approximately 1839 Km long from Dankuni to Ludhiana via Dankuni– Asansole – Dhanbad – Gaya – Sonnagar - Mughalsarai - Allahabad- Kanpur Tundla - Aligarh- Khurja - Bulandshahr – Meerut – Saharanpur – Ambala - Ludhiana. Proposed alignment of DFC in Bhaupur – Khurja junction section has, generally been kept parallel to existing Indian Railway line except provision of detours at Etawah, Tundla, Hathras, Aligarh and Hapur.

The design and build contract in Bhaupur – Khurja section (343 Kms) of Eastern Dedicated Freight Corridor (EDFC) is being financed by the World Bank.

Signaling System over view

Entire stretch from New Bhaupur to New Khurja will be provided with automatic signaling system. Automatic Signalling is provided in the block sections and main lines of the stations. Trains will run observing automatic/ semi-automatic signals

en-route- which in normal conditions will be set for a through and uninterrupted run.

The Single line tracks connecting DFCCIL Junction stations and IR stations is provided with Absolute block signaling with block/slot working, interfacing (UFSBI) with IR station.

The LC gates in the section shall be protected with semi-automatic gate signals. The Gateman shall be provided with audio visual 'Approach Warning' when the train hits the Approach warning track section. Once the gateman has closed the gate and the train has reached the approach locking track section, the LC gate barriers will get 'Approach Locked'. The route will then get automatically set and gate signals get cleared if the relevant track sections ahead are clear. The route will get automatically released after passage of train beyond LC gate. The Signals, Points, LC gates, Track-vacancy detection systems and other signalling equipment at the stations and in the block sections will be controlled/monitored byElectronic Interlocking (EI) located at stations and along the route. The Electronic Interlocking architecture including their size, numbers and locations shall be determined by the contractor's design. The OFC required for communication between the EI is being provided

Digital Axle counter technology is used to provide primary train detection function at the Stations and the Block sections using MSDAC with RDSO specs. The Quad cable is Iaid for communication between the Evaluator and track devices. All trains and vehicles shall be positively detected, whether moving or stationary, under all modes of system operation.

The Power supply for the Signaling system at the Stations and in the Block section is provided using Integrated Power Supply (IPS)/ Uninterrupted Power Supply (UPS) system. A centralized Operational Control Centre (OCC) for entire Eastern Dedicated Freight Corridor (Ludhiana-Khurja-Dadri-Bhaupur-Mughalsarai) sections has been constructed at Allababad along with the Regional Office of Eastern Dedicated Freight Corridor.

The OCC have office of all the controllers such as Traffic Controllers, Track Controller, traction Power Controllers, Signal Fault Controller etc. who will monitor and manage all train operations and associated activities, including maintenance of entire EDFC from the OCC. The OCC have system for the Train Management system (TMS) and the 'Traction Power SCADA Control system'.

The Train Management System (TMS) provided in OCC will collect real time data of important Signaling functions of stations and of block sections and display it in the OCC. For this purpose, the OFC required for data communication is being provided Controller(s) at the OCC is provided with an overview of the railway on a Video Wall, sufficient to supervise and monitor train movements across the whole railway and will control train operations by voice command using the Telecommunications system provided.

While the Traffic controllers at OCC will manage overall train operations, the Railway control at local level will be managed by Station Masters located at the stations along the route. Station Masters will require an appropriate display and sufficient control to support their activity under both normal and abnormal railway operations. The Station Masters will receive train service and management information from the Traffic Controller located at the OCC.

The 'Traction Power SCADA Control system' is provided for remote control of the Traction power substations.

Video wall for display of SCADA system shall, however be provided by the Signalling system A Back up OCC will come up in future at DFCC Corporate Office, Noida.

It will be common to DFCC Eastern and Western Corridor and will take over controls in case of exigencies/breakdown. The work of backup OCC is not included in the present scope of work.It is anticipated that Centralized Traffic Control (CTC) and Train Protection Warning System (TPWS) may be required in the future, therefore system provided under this contract is demonstrable to be "future proofed" for the same.

Electronic Interlocking

EI of ALSTOM is provided with Latest RDSO specification 2011 and capable of interfacing with TMS&TPWS using serial/Ethernet / OFC ports .All interlocking inputs, outputs and associated cables, circuits



are suitable to 2x25KV AC traction. Electronic Interlocking is inter connected with adjacent interlocking on OFC with Protection on redundant path.

EI ensures

- Route locking after route setting
- Route holding when train passes through route set
- Approach locking after route cancellation when train approach the set route including gate & signals

Telecommunication Systems

1. Optical fibre communication System
2. Data Network System
3. Master clock System
4. Telephone System
5. Mobile Train radio communication System
6. VHF Communication system
7. Video surveillance System

1. Optical Fibre Communication System

The highly reliable and available OFC network is designed as two tier network. with both these network First Network-connection (Operation control centre) and stations, including a connection extension from "New Bhaupur" station to the RCIL POP at Bhaupur (IR) as well as from RCIL POP at Subedarganj (Allahabad)IR to OCC and Second Network connecting stations with nearby Auto section Locations {ALH (Auto location Hut)}, GSM-R Locations, RH(Relay Hut), TSS (Traction Substation), SP, SSP, IMD9 integrated maintenance Depot), IMSD (Integrated Maintenance Sub. depot), Staff residential Quarters etc The flexible Access multiplexer 9FAM) network connects with both these network over proven Technology of SDH (Synchronous digital Hierarchy) as per ITU-T Rec G.803 and is used to create Sub 2 MBPS (E1) Channels that can be transported from any location on these networks to any other location on the network.

The provided SDH Topology is constructed in dual ring structure with path diversity .SDH system is created using STM-16 and STM -4 Add/Drop multiplexer units with optical line Terminals connected through OFC cable.

2. Data Network System

An extensive data networking system is provided for meeting the packet data communication requirements of Bhaupur-Khurja section. Data networking system which is a wide Area Network (WAN) inter – alai covers OCC (at Allahabad), TSS (Traction substation), IMD (Integrated maintenance depot), and IMSD (Integrated maintenance sub depot).This WAN shall provide sufficient bandwidth to cater for the packet data communications requirements of Bhaupur–Khurja Section of EDFC for the other applications such as FOIS (Freight operational Information system), CMS (crew management system, & WMS (Wagon management system. WAN shall provide high degree of availability by operating on an independent Optical fibre ring using OFC laid along UP&DN Tracks of EDFC. Bandwidth from RCIL will be hired at Bhaupur RCIL Pop and Subedarganj (IR). Ethernet services as EPL (Ethernet private line), EVPL (Ethernet Virtual private line) and ELAN (Ethernet Local Area Network) can be extended to Auto section locations, GMS-R Locations, LC Gates, SP (Traction power sectioning Post), SSPs using EoS (Ethernet on SDH) of OFC System.For OCC Building at Allahabad, all junction stations & crossing stations, WIFI facility provided for WAN connectivity to users includes drivers of passing trains via wireless enabled devices and equipments.

3. Master clock system

Master clock system is providing "Synchronized time Information 'using GPS (Global positioning system) as time source. Master clock system is based on a 'central master clock 'which is synchronized to UTC (universal time coordinated) by Radio signals transmitted via GPS real time navigation satellites. The time source sent to a central master clock unit which converts it to synchronize pulsed for use of slave master clock units at various locations using NTP by Ethernet interface. Slave clocks may be digital or analog. Each of the systems that requires Synchronized time Information is connected to the OCC or station LANs and obtains the information using NTP from the master clock.

4. Telephone System

In order to provide EDFC-1 with the state of art product in Private telephone Network equipment, ALCATEL designed a solution based ALCATEL OMNI PCX ENTERPRISE (OXE) PBX.

The Telephone system provides voice communication between locations equipped with Telephone console/sets within DFCCIL premises and other defined locations. The Telephone system comprises of Administrative Telephone Network, Direct Line telephone Network, control communication system and Emergency Communication system.

EMERGENCY COMMUNICATION SYSTEM PROVIDES AN OMNIBUS COMMUNICATION CHANNEL BETWEEN OCC AND ALL AUTOMATIC SIGNALS THROUGHOUT THE SECTION

Control communication system is provided to meet omnibus voice communication requirement of Traffic control between OCC and stations.

Emergency communication system provides an omnibus communication channel between OCC and all automatic Signals throughout the section. Telecom quad cable is provided for emergency control communication system.

Administrative communication has been established with IP Video Phones, Digital Telephones,& Analog Phones at OCC, Stations, interfacing IR Stations , GSM-R locations, SPs, SSPs, IMDs

IMSDs staff residential quarters as required. The IP Telephony server is installed at OCC and connected with each PBX using IP Link over WAN on E1 link. The link between the main PBX and satellite PBXs is using digital trunk lines at E1 level. A voice mail system (VMS) is also provided and integrated with PBX Network to enable admin Telephone users to leave, retrieve and broadcast voice messages.

VOIP based telephony network consists of call servers, media gateway, IT Network, IP Phones (IP Voice phones. IP Video phones, NMS etc.

5. Mobile Train radio communication System(MTRC)

Mobile Train Radio communication (MTRC) System is based on GSM-R for wireless voice and data communication to support the operation and maintenance requirement of EDFC. MTRC System is being provided by Indian Railways in Ghaziabad-Kanpur section of IR. As such in sections – where track alignment of Bhaupur–Khurja section of EDFC is running parallel to the existing Ghaziabad-Kanpur section, BSSs (Base station sub-systems) of Indian Railways will be shared by DFCCIL.

However, in sections where track alignment of Bhaupur–Khurja Section is taking a detour and cannot be served by BSSs of Indian Railway, The new BTS (Base Trans receiver station) and BSC (Base station controller) is provided to ensure RF (Radio Frequency) coverage in the detour section.

Also NSSs (Network sub systems) of MTRC System of Indian Railway used for Ghaziabad-Kanpur section will be used for MTRC System of Bhaupur-Khurja section of EDFC.

The GSM-R Voice recording system (VRS) is used in Railway telephony System to record in a safe and redundant way the operational communication, especially between dispatcher, train staff and Railway maintenance workers and shunter.The recording is used later for liability matters & post incident analysis in case of railway accident. The industry proven cab radio, MESA23, has been proposed as a mobile train radio system for voice and data transmission used for railway internal communication between fixed and mobile subscribers or mobile subscribers together. The Hand held (OPH (operational purpose radio hand set) and GPH (general purpose radio handset) sets are intended for use in digital train, construction and shunting application as well as, if applicable, for operational and maintenance radio applications. It is also proposed for industry proven short message Centre for EDFc GSM-R network. It provides enhanced features to get revenue from both person to person (P2P) and application to person (A2P) Messages.

6. VHF communication

VHF communication system is created at stations using 16 channel 25 watts VHF Transreceivers with simplex press to talk working.Omni-directional antenna for 25 watt VHF Transreceiver is mounted on a suitable pole/mast at a height of 15 mtrs from the ground level. The 5 watt multi-channel VHF wakie-Talkie Sets are provided for commination between train driver to station master and maintenance staff working in yard & depot .

Provision of voice recording of conversation taking place on 25 watt VHF Transreceiver will be provided through voice recording equipments. The recording is date and time stamped along with stamping of station identity and VHF channel identity. Storage of voice communi-cation follows FIFO (First–in–first out) methodology with 4 weeks storage capacity, there is also an Ethernet interface port through which recorded voice can be transferred to laptop for replay or taking backup on CD/DVD.

7. Video surveillance System

The Video surveillance system provides effective real time video surveillance of OCC Building complex and all 5 TSSs (Traction sub stations Umari, Sikohabad, Ibrahimpur, Biruni & Itgaon in EDFC. The Video surveillance system is based on non-proprietary open standard Architecture affording interoperability of hardware, software, OS, Networking etc.

Video surveillance system also provides centralized video recording system for post event analysis. Video surveillance system is end to end IP Based system with IP Fixed/PTZ dome Video cameras, video management system & recoding system and LED Monitors. Video recording at HD resolution, 25 FPS for all cameras, is capable of operation for 24 hours Per Day, 365 Days preferably stored for at least 30 days at HDD resolution,12FPS. All equipment of video surveillance system, works on 180-270 V 50hz AC 1 phase supply from UPS. The internal clock for VSS is synchronized to within 1 second of master clock system at all times.

Video surveillance system provides online display of video images on LED monitors located in the Security control room and operation control Theatre in OCC Building complex. For On line monitoring, data network system is installed on OFC by installing 8port Layer-2 switches having 10/100/1000 SFP Port (Fibre port) and 7 Ethernet ports with RJ45 Connectors with PoE (power on Ethernet) in field. L-2 Switches supports Telnet, SNMP(Simple Network Management), v1/v2/v3, NTP (Network time proptocol), SSH (Secure shell), v1/v2 and FTP (File transfer protocol) 7 Consol port RS 232 interface. Ethernet output from the IP Cameras are connected to the nearest field switch through CAT-6 STP cable and field switch is connected to central switch on OFC Cable.24 Port layer-3 switch are provided at TER of OCC with OFC input from the field from field switches installed in field and gives Eaternet connectivity to server and work station. Video surveillance system equipment is installed in TER in OCC. The Security controller and Chief Controller in OCC can simultaneously retrieve recorded videos. All recorded videos are time and date stamped superimposed onto the videos. ✣

Google Mapping of Railway Affecting Tanks in Ongole Sub-Division



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The damage due to breaches and flash floods has been one of the persistent causes of major accidents involving huge casualties and loss to railway assets. These accidents also involve long disruptions due to washout of earthwork and related infrastructure. Tanks are potential source of water streams/ flash floods affecting earthwork and tracks, creating situation leading to washout and possibility of long disruptions, if not accidents.

While as per the codal provisions, an annual inspection is to be carried out with the civil authorities to take measures to avoid such possibilities, the exercise undertaken has been to map the potential danger spots to railway track to create a basic information frame work which can be used to launch mitigation measures along the track alignment.

Exercise Undertaken

Some light on terms utilized and the associated codal provisions are :

The term Railway Affecting Tank means any tank which if not constructed or maintained or operated properly may result in danger to railway line.

As per the IRPWM Para 726 Clause 3 (b) - Assistant Engineer shall jointly inspect with civil authorities (in this case, state irrigation officials) all RAT's before the monsoon every year and arrange for their safe maintenance to avoid any danger to nearby tracks and structures.

During the course of yearly inspection which was conducted in the month of March 2017, following observations were made and instructions were passed on to the state irrigation officials -

- The Existing tanks may be upgraded to latest standards, wherever feasible, in a phased manner.
- The tanks which have not been provided with the adequate holding capacity should be provided with additional weirs to flush out excess water.
- Periodic dredging & maintenance of existing tanks may be ensured.
- River training works may be strengthened for controlled movement of flood water.

Accordingly, the state officials brought to light that under the Neeru Chettu programme, many works were being undertaken and are under progress.

It was difficult to visualize as to how a breach in tank could affect the railway line and what are such spots on railway line and on conversing / interacting with batch mates and seniors colleagues, it was realized that similar challenges are being faced by them. In fact the breach in Guntur Division acted as a catalyst for the work undertaken.

Under this I have tried to identify and locate the railway affecting tanks in Google maps there by making the process of visualization easier. I have outlined the tank boundaries, marked the location of surplus weir and traced the stream path which makes it easier to visualize as to how the breach in tank will result in danger to railway line. The above data has been collected in consultation with state irrigation officials and a certification was also received from them.

In Ongole sub division, 76 nos. of RAT's have been identified, located on Google map, their boundaries were marked, breach point(s) identified, breach stream path identified and marked right up to railway tracks. This has created a basic data/ information frame work of potential danger points along the railway tracks where mitigation measures could be planned and launched to avoid situations of flash floods causing washout or track sinking.

Applications & Future Developments

- With the help of historical data of rain fall and tank breach, breach proneness mapping of each tank can be undertaken to urge civil authorities to prioritize their attention and deployment of resources for repairs to the tanks.
- The historical data as above can also form the basis of prioritizing railways attention and deployment of resources for taking mitigation measures at the potentially dangerous spots along the track.
- In case of any danger or breach, further activities can be planned in a better manner by consulting with the map. In fact a close look at the map would indicate that pivotal tanks which are in line of successive breaching have been identified. The state irrigation officials have taken cognizance of the same and works are on for strengthening of those tanks.
- This data can be shared with agencies like NDRF who can then initiate steps at the local level and can be better prepared in case of any unusual/ breach. This data can be used by NDRF to integrate with their larger disaster relief plans.

This entire exercise was done with a goal of "Bring an activity into the realm of Predictive Framework." ✻

Happy Life After Retirement



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Life shrinks or expands according to one's courage
-Anais Nin

One tends to think that after retirement, one is nearing the end of road. No, it need not be. It could instead be the beginning of the best years of life. The person who retires will have to face two major problems i.e. how to minimise expenses and how to occupy himself. In practice, this change will affect the woman of the house as wife. So planning for a life after retirement is as important as planning for a career or marriage. Retirement does not mean old and inefficient. You are retiring to pave the way for subordinates and younger persons. The positive feeling would elevate you to a higher place.

The retirement in anybody's life does not come as a bolt from the blue and hence it should not give any jolt. It is only an expected, pre-determined and prepared happening. One should not actually feel bad or worry about one's retirement but should take it pleasantly. You should feel proud of your active work life for more than three decades and also feel happy over your contributions. How you should view and perceive the retired life is important, It is more important to know how you are going to make your mindset about your retired life and live well. Now you are free to fly as you like. In the retired life you can do things you like much at your own speed and at your convenience. This freedom, if rightly perceived and used will give enormous happiness. After all many countries have fought for the freedom and got it after a lot of bloodshed. But you are getting it just like that. If this freedom is understood and used well, the retired life can simply be made to brim with joy and ecstasy, since the freed bird can fly freely at the vast expanse of the world and rejoice

Retirement Categories

Mr C. Northcote Parkinson has classified retired people under five categories

- The matured individual. Adaptable and realistic, he takes a constructive view of the situation.
- The rocking chair individual who leans on others and is inclined to take life easy.
- The armoured individual. Highly disciplined, strong willed, he wants to remain active and always The Boss
- The angry individual who keeps blaming everyone for everything
- The self hating individual who withdraws into himself for all his misfortune

If categories 2, 3, 4 and 5 are unprepared for their retirement, they will soon feel a vacuum and end up making themselves and others unhappy. Mature individuals, on the other hand, will take a positive attitude to retirement, lead a happy life and make their family happy, too.

Statutory Senility

Someone called retirement "statutory senility" One sure way to confirm this is for a retiree to promptly join a 'senior citizens' club and sit around among hapless and tired individuals being fed tiresome speeches on spirituality interspersed with tea and biscuits or samosas. And if



they are well behaved, their minders will take them on a picnic where they will throw a plastic ball at one another and be fed more speeches about spirituality – But why must you psyche yourself into thinking that you are getting old and senile? As George Burns said, "you can't help getting older, but you don't have to get old".

As Arthur Morgan remarked, "A life which is empty of purpose until 65 will not suddenly become filled on retirement". If you like teaching, you can teach. You can travel. You can learn music, cooking, carpentary. You can try writing. Some experiments may not always work.

Those who cope with retirement best are those who look upon it as a time of fun and believe that a good time to retire is before it is too late to have a good time.

Concern Over Aging

By 2020 India will be home to one out of every six of the world's older persons and only China will have a large number of elderly people, according to estimates released by the United Nations Population Fund. Thirty years ago there were no aged economics in which consumption by older people surpassed that of youth. By 2040 the aged economics will be 89

Japan is today the only country with more than 30% of its population aged 60 or above. By 2050 there will be 64 countries where older people make up more than 30% of the population. In simple terms within a decade there will be one billion older

persons worldwide. And by 2050 nearly 80% of the world's older persons will live in developing countries, with China and India contributing to over one third of that number. As per the report the number of elderly women is more than that of elderly men. Nearly three out of five single older women are very poor and two out of three rural elderly women are fully dependant. There is also an increasing proportion of elderly at 80-plus ages and this pattern is more pronounced among women

The study undertaken in Kerala, Tamilnadu, Maharashtra, Orissa, West Bengal, Punjab and Himachal Pradesh revealed that one fifth of the elderly live alone. This portion has registered a sharp increase in the past two decades and is more evident in the case of elderly women

Retiring Gracefully
–Tips For Men

- If you are a methodical man, some of this may be old hat or even too obvious but for the majority it may well be news!
- Whatever your age now, start planning the finances or atleast mulling over the alternatives.
- It's never too early you don't have to be too specific but think it over.
- Retiring can be a fun-remember it is only shifting gears and driving at your own speed-not shutting down the engine.
- Develop atleast two new interests that don't strain your budget, not all of us have to go after the club membership.
- Give up some things deliberately, some old habits, some expenses that may have been necessary for the job.
- Learn to enjoy the smaller, every day, cost-free pleasures-walking, reading, listening to music, surfing the net for new interests, bird watching and watching your own relationships with people with a fresh eye.
- Invest in health and make sure you are insured
- Defer to the last possible moment plonking yourself down in front of the TV.

Tips for Women

- If you have yourself retired from full



time work, make sure you do all of these things. If your partner has retired, you must do them anyway
- Find a good reason to go out at least once everyday otherwise you will only get on each other's nerves. So too with I'm!
- Do not make the household the centre stage i.e. cooking, washing and cleaning up, grocery shopping and tidying up. It's true; a mother's work never stops unless you stop it.
- Enjoy being grandma that don't become just a full time unpaid baby-sitter.
- Play a game if at all possible-outdoor preferably, otherwise chess, carom, board games at least.
- Keep in touch with the young, teaching, playing with them-sing, chant, walk, listen to music, keep some new interest coming up all the time-atleast until you are comfortable with the new routine.
- Do not neglect your health and get annual check ups

Conclusion

While in service in the job you would have done higher level jobs. Now is the time when you can give a helping hand to your spouse in his/her activities and reduce the spouse's load. Do not feel the work as a burden. Once you start enjoying your work, work ceases to be work and you won't feel tired so easily. You would not have had much time to devote to your spouse and children. Now all the time you can devote to the family and fulfil their needs. While in service you would have started early and reached late with heavy works in the work place. You would have eaten food hurriedly. Now is the time to enjoy eating leisurely with the family. The families which eat together stay together. Eat every morsel of food enjoying with the family members with smiles, laughter and joy.

Enjoy the company of your grandchildren. Touch them, caress them, take them, fondle them, take them out to a circus or zoo or beach or temple or any important functions where they can enjoy. If you become very close to your children, they will come to your bed to sleep with you. It is a real joy to sleep with them.

If you start doing a selfless service to the poor, to the extent possible, the band width of your happiness will certainly increase. If not independently, you can offer your selfless services to any social organisation doing selfless services to the poor. When you see the poor destitute having a shelter and food, the happiness in their hearts will manifest in their faces and will transmit signals of deep satisfaction and happiness. This will certainly fill in your heart with warmth and you will feel the real superb and supreme happiness in you. You will feel the real worth of life and will sleep better even in the advanced age.

I was asleep and dreaming,
That life was only joy.
I woke up and saw
That life was all service
I served and saw
That service was pure joy
–Ravindranath Tagore

It is in your own hands how you mould your retired self into a purposeful and happy life. ❊

Mumbai Mail : 1870 to 2020



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The Mail train running between Mumbai and Kolkata via Allahabad Chheoki is completing 150 years of her service in 2020. This is one of the oldest train services on Indian Railways. This train was introduced after inauguration of the first rail line between these cities via Jabalpur, Allahabad, Mughal Sarai and Patna on 7th March, 1870.

After operationalising this rail line two important railway companies of that time, East Indian Railway and Great Indian Peninsular Railway, agreed on introducing a through Mail train between these two important cities of Indian subcontinent i.e. Mumbai and then capital of India – Kolkata. After that the first passenger train service connecting Mumbai and Kolkata started running in June 1870 as 'Bombay–Calcutta Mail'. That train is now running as 12322/21 Mumbai–Howrah Mail via Chheoki. Another luxurious Mail train – the 'Imperial Indian Mail' was introduced in 1926 on the same route.

The 'Bombay–Calcutta Mail' was initially considered as a better, faster mode of travel for the British officers who arrived Mumbai from London by ship and heading to the places of their respective postings. The members of the 'Chambers of Commerce' of Mumbai & Bengal were also the regular passengers of this Mail. The postal department was also benefited by this Mail service because it would be easy for it to deliver 'Royal Mail' faster. In those days the 'Bombay–Calcutta Mail' used to cover the distance in 48 hours. But some years later all main customers of this Mail i.e. European commuters, members of Chamber of Commerce and Postal Department started demanding to increase the speed of this train and make suitable changes in the time table of this Mail. In 1897 it was decided that Bombay-Calcutta Mail running via Allahabad should leave Victoria Terminus at 9 A.M. and arrive Howrah at 6 A.M. morning covering the distance in 45 hours. In those days the Bombay-Calcutta Mail's timetable was based on the arrival and departure of the mail ship from London to Mumbai. That mail ship was regularly sailing between London and Mumbai. All reservations, for London to Mumbai Ship as well as Bombay-Calcutta Mail, were made from London. In 1907 Mughal Sarai-Gaya rail line was opened for traffic and this Mail started running via Gaya instead of Patna.

Another rail line between Mumbai and Kolkata via Nagpur was officially opened by the then 'Bengal–Nagpur Railway Company' in 1900. This new rail line had cut the distance between Mumbai and Kolkata by 121 miles. Immediately after opening of this rail line one more Mail train service between Mumbai and Kolkata was introduced via Nagpur.

On the other side high-level British officers were constantly demanding for introduction of a special Mail train service between Mumbai and Kolkata exclusively for them, which would provide them faster and more comfortable journey. Taking this demand in to consideration the 'GIPR' and 'EIR' once again came together and in 1926 they jointly introduced a new luxurious mail train service between Mumbai and Kolkata exclusively for the British officers working at the Government of India service. The train was named as 'Imperial Indian Mail'. Till independence the 'Imperial Indian Mail' was one of the luxurious and prestigious trains running on Indian subcontinent. This new Mail train was also running between Mumbai and Kolkata via Jabalpur, Allahabad and Gaya.

In those days it was rarely seen that different railway companies jointly introducing a train service. It was so because those were private companies and were competing with each other. Every railway company was advertising the facilities provided in its luxurious train to attract more and more passengers. For that reason, every railway company was trying to include state–of–the–art facilities in their services. While doing this, of course, their main target was always

the British and European passengers, who had arrived from Europe and were heading to different parts of India or vice versa. The 'Imperial Indian Mail' was the result of such competition. The Bombay-Calcutta Mail continued running after introduction of the 'Imperial Indian Mail'.

In independent India Bombay-Calcutta Mail changed a lot. Firstly, the 'Imperial Indian Mail' merged into original 'Bombay-Calcutta Mail. Then her name had been changed as 'Mumbai–Howrah Mail'. After independence this Mail lost its special status and started running like other ordinary Mail/Express trains. Her earlier train number (3021-3022) was changed to 2321-2322 and later 12321-12322. From 9th December 2015 the Mail runs via Chheoki Jn. instead of Allahabad Jn. Heavy demand from the passengers made it necessary to increase number of coaches in Mumbai-Howrah Mail. From 2008 Mumbai-Kolkata Mail started running with 23 coaches. Meanwhile her timetable also got revised. Now she departs daily from Chhatrapati Shivaji Maharaj Terminus at 21.30 hrs and from Howrah at 21.55 hrs and covers the distance of about 2156 km in 37 hrs.

Her Pantry Car has now been replaced with a state-of-the-art AC Hot Buffet Car. In her 150th year of service this train started running with state-of-the-art Alstom LHB coaches from 10th December 2019. Now journey with her has become more comfortable and environment friendly due to the state-of-the-art Head-on-Generation system. Her new LHB rake consists of 22 coaches including 1 Coach reserved for Military and Postal Service, two Luggage Brake cum Generator Cars, 2 General class coaches, one AC Hot Buffet Car, 10 Sleeper Class coaches, one First-cum-AC-2 tier coach, one AC–2 tier and 4 AC–3 tier coaches.

Initially the steam locos used to haul the prestigious 'Bombay–Howrah Mail'. But after electrification of Mumbai Igatpuri section the Mail started running with electric and steam tractions. Earlier the electric locos of WCM-5 class used to haul the Mail between Mumbai and Igatpuri. But after conversion of the Mumbai-Igatpuri electric section from 1500v DC to 25 KV AC new class of AC



electric locos are hauling her. Now the state-of-the-art electric and diesel locos are the main work horses of this Mail. Nowadays WAP-7 electric loco hauls the Mail between Mumbai and Jabalpur and between Satna and Howrah. On non-electrified section between Jabalpur and Satna the Mail is hauled by diesel-electric loco. While running from Mumbai the Mail takes assistance of banker locos in the Ghat section between Kasara and Igatpuri.

This legendary Mail was running for some time as 2357/2358 Howrah-Mumbai Mail via Patna Jn from 1stSeptember 2007 once a week. But from 2008 that service was discontinued and Howrah-Mumbai Mail started running daily once again. ❊

MEMORIES

The whistle of the passing trains, the anxious enquires about the late trains
The sick hurry of the daily commuters, the loud noises of the tea-vallas,
The train, the track, the signals, all appear in a flash back in my mind
Everything is fresh in my mind even after many days of retirement.
At night I suddenly get up hearing the haunting whistle of the passing train
And I realize that it is only a dream in my sleep which disturbs my brain
I cherish a mixture of sweet and sour memories of a long service
And I feel proud to have belonged to this large enterprise.
I have myriad memories about the commuters of diverse interests and sentiments
Merchants, employees, job seekers, all huddled together in the compartments
Travelling to reach their destination for solutions according to their belief
For their unending worries that prick them every day in their little life.
The train is a blessing for the ordinary man to make up and down
It is the life-blood of the nation and a necessity of the common man
It is the umbilical cord that connects people with the nation
And the railway station is the meeting place of different culture and notion
I remember the last minute passengers rushing to board the train
With bated breath I stood when someone jumped out of the moving train
And felt relief next moment when he landed on the platform safe
The Railway station is a replica of the fever and fret of daily life.
Life is a tale of our long struggles and aspirations
Our unending toil to reach our goals and ambitions
Like the tall tree that gives shelter to every one underneath
Railway station accommodates all with a caressing touch. ❊

K.J. Thomas
Rtd. Station Master, Southern Railway

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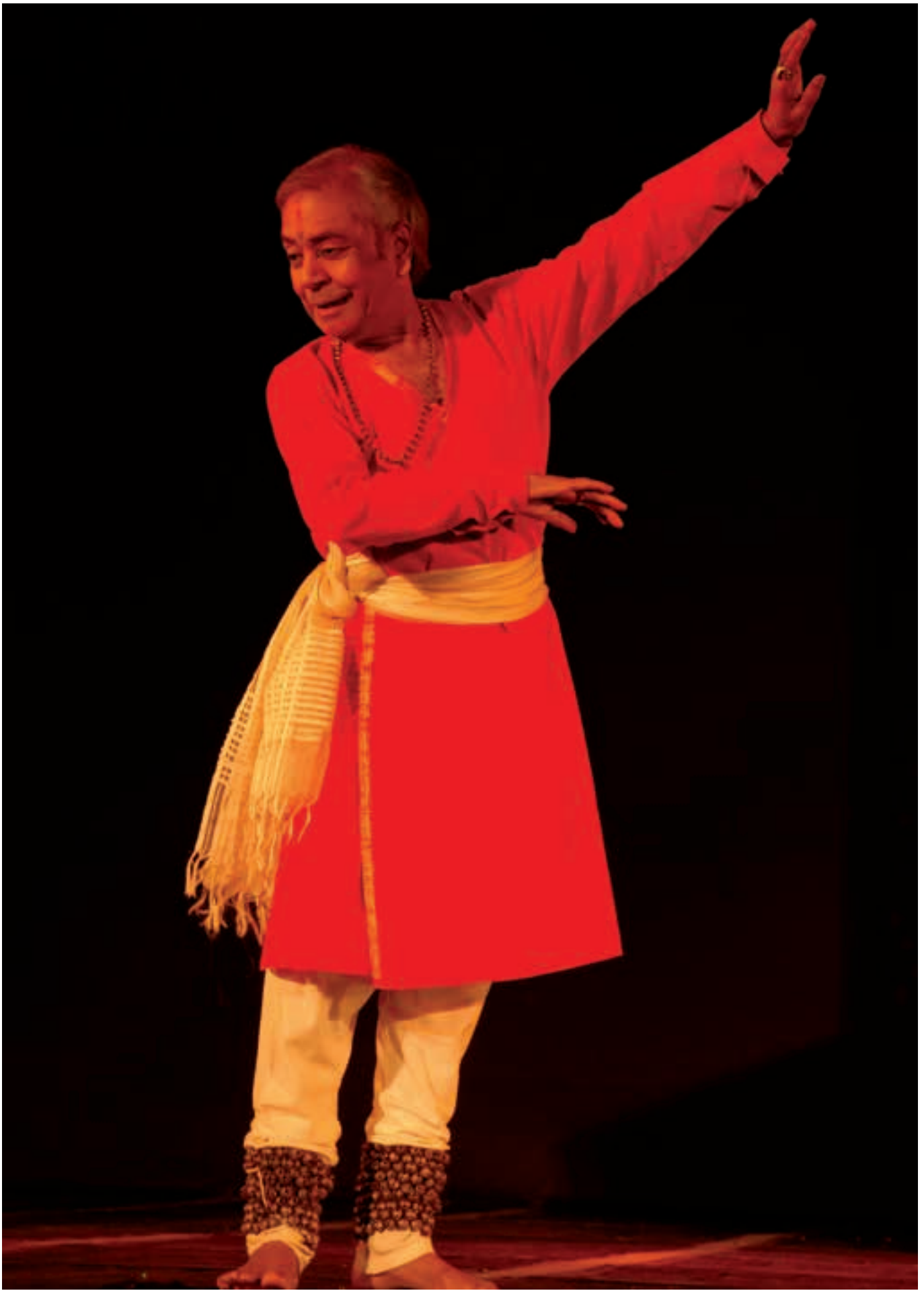


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"I Have Composed Many of My Tunes from the Sound of Trains : Pandit Birju Maharaj"

The Kathak dance icon, Pandit Birju Maharaj is one of the precious jewels of the Indian Classical Dance. A propounder of the Kalka-Bindadin tradition, Pandit Birju Maharaj admits to having been inspired, just like his father, by the various sounds of train-movement and composed music. He still remembers the local food specialties of each and every railway station. Winners of many a national and international awards, the 81 year old Dance maestro talked to ***Shri Yogesh Avasthi, Editor of "Bhartiya Rail"*** *Magazine and shared his experience with Indian Railways.*



Maharaj ji, Please share with us your experience with Indian Railways

I have had a long association with Indian Railways. One must undertake rail journeys to see India in her proper perspective. The joy associated with trains journeys is something very unique. We find tunes in the friction between tracks and wheels:-

" Tak takak, Takak takag,
Tatak tadigh Ta Tak Tadhig
Tatak Tadhika"

Then again, while changing track, you hear tunes like:-

"Tag tigig tatag titig tatag titig".

My father Late Achhan Maharaj ji did not sleep inspite of having a reserved berth. He often used to say that he was preparing new compositions from the rhythm coming out of the track. Similarly, many of my compositions also have been inspired by Railways. But nowadays due to paucity of time I am not being able to undertake train journeys.

The most interesting aspect of a Rail journey is that you come across people like Jhalmuri-vendors, comb-vendors and torch vendos. Then there is another type of vendors selling local wares. All this has a unique appeal of its own that you miss during a flight. However, nowadays due to my tight schedule of programmes criss-crossing the globe, I am forced to take flights only. My last journey was on Durgapur-Berhampur route (Kolkata line).

I still remember my Uncle Late Lachhuji Maharaj used to come to Delhi from Mumbai by "Janta Express". The train used to take 3 days to reach Delhi in those days, still that was my uncle's favourite train. He would often say, "I just slip into my lungi, spread my beddings on the berth and keep relishing my tea, bidis and the whole arrays of food items that are available on train."

How the Teacher-Disciple tradition is being carried on today?

I got my training from my father and my uncle through this Teacher-Disciple tradition only. I also give training to my children (disciples) within the ambit of this tradition only. Our faith is more on this tradition rather than on academic qualifications. Our constant endeavour is to provide quality training and inculcate good ethos in our children. Today about 700 students are being trained up by me.

Have you gone off the beaten track to impart untraditional training to your daughters and grand-daughters?

Our deities like God Shankara and God Krishna were good dancers. In our culture dance used to be a male prerogative. Women were not allowed to dance. In our tradition, daughters are supposed to get married and take care of the home. But I have broken this tradition and given the dance – training to my daughters and even my grand-daughters. I have told them that others may leave you, but Art won't. You will always benefit from this art. Learn this, teach this and write this. Time has changed. My daughters and disciples are carrying forward my conviction.

Please share with us your experience with the Cine world.

Although I have done choreography in films like "Shatranj ke Khiladi", "Devdas", "Der Ishkiya" and "Bajrao Mastani"' but usually I keep away from films. I only agree when I find the lyrics good and the heroine decently clad. Today you find 500 people jumping around together in one song – I don't call that dance. Heroines of yesteryears like Meenakumari, Madhubala and Wahida Rehman could take care of the entire song through their gaits. Most of today's heroines lack this ability. ❊



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