

# INDIAN STEAM RAILWAYS MAGAZINE

**XV National Steam Congress**

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## About ISRS

The Indian Steam Railway Society is a non-profit organisation formed on 23<sup>rd</sup> October, 1999, by railway enthusiasts committed to the preservation of steam and other railway heritage.

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*Cover Photo: WG Locomotive No. 10253 on its arrival at Rewari  
(Courtesy: J. L. Singh)*

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## MESSAGE FROM THE PRESIDENT

The Indian Steam Railway Society will complete nineteen years since registration on the 27th of December this year. In the nineteen years of its existence the Society has conducted fifteen annual conferences, this being the sixteenth. The Society serves as a platform for railwaymen and others who have an interest in the heritage value of steam locomotives.

The nineteenth year of the Society started off with a tragedy. We lost our most revered President Mr. Lalit K. Sinha, on the 15th of February 2018. However, as a tribute to his vision, the Society was determined to take his dream forward, which we succeeded in doing: steam locomotives on pedestals for decades were recovered and restored this year.

Another positive has been that the Indian Railways (IR) finally introduced a time-tabled steam hauled Broad Gauge (BG) passenger train service. Now this steam hauled BG passenger train runs every Sunday between Garhi Harsaru and Farrukhnagar. The first run was on the 23rd of September 2018.

The year also saw the "Express" EIR 21 undertake a commercial run on the 27th of May 2018 between Chennai Egmore and Kodambakkam. Put in service in 1855, this locomotive was preserved on a plinth at Jamalpur Workshop till the 1990s when it was shifted to a plinth at Howrah station. In 2010, 101 years since its last working, the loco was restored by Perambur workshop and undertook a heritage run on the 15th of August that year. It is thus the 'oldest' working steam locomotive in the world, a title officially held by 'Fairy Queen' EIR 22 till date. Another hundred year old MG steam loco, No. X-37384, was restored and put into service on the Nilgiri Mountain Railway by Southern Railway.

The 113 year old Narrow Gauge steam locomotive KC 520 of the Kalka-Shimla line has also been freshly overhauled by Amritsar workshop and put into service on the Kalka-Shimla Railway. At the same time, Kharagpur Workshop has taken up the repair and restoration of the BG Beyer Garrett, the largest and most powerful steam locomotive to run on IR. The year also saw the restoration of the one-in-four scale steam locomotive manufactured by Kraus-Maffei GmbH by Rewari Steam Heritage Shed.

The sole surviving WG – the prolific workhorse of IR for over five decades – which by some providence escaped being auctioned, cut up and sold and was on a pedestal at Bhusaval, has now been moved to the Rewari Steam Centre and is undergoing restoration. We expect to see it in service by the end of the year.

Therefore, overall the 'nineteenth' of ISRS has been a golden year of 'revival of steam' on IR. The direction and leadership given by the current Chairman Railway Board, Ashwani Lohani (our Working President), in this stupendous 'revival' has to be acknowledged. It's just heartbreaking that our ex President is not here to see it all happening. Trust he is somewhere up there – along with our Founder President Mr. R.C. Sethi – applauding the developments.

In the road ahead, the Managing Committee of the Society in its meeting of 13th of May this year had expressed its hopes and desire that isolated sections on IR would be restored and preserved by IR as 'heritage steam railways'. Of the sections identified, the 11-km Patalpani-Kalakund section near Indore in Madhya Pradesh on Western Railway has been taken up for restoration by Ratlam division. The 40-km Mahur-Harangajao Meter Gauge section of Northeast Frontier Railway, when restored, could be a game changer for tourism in Assam.

The potential for 'steam tourism' can be seen from the demand for the 'Joy Rides' that the Darjeeling Himalayan Railway (DHR) runs from Darjeeling to Ghoom. The steam hauled 'Joy ride' of 14 kms is the prime attraction for tourists to Darjeeling and the four daily services are over booked and run packed. DHR is just not able to meet the demand. Similarly, the demand for chartered steam hauled services is immense. It's only a question of setting up the infrastructure and then organising and delivering the services. The relationship between steam and tourism is symbiotic. Steam attracts tourists. And tourists sustain steam.

The Society hopes that IR will set up at least three more Steam Centres on the lines of the one at Rewari in different parts of the country. This will enable introduction of time-tabled BG passenger services with steam traction. The Railways should target at least one regular time-tabled BG steam service in each zone. The most comprehensive road map for the 'revival of steam' was written and published way back in the ISRS Journal of Autumn 2004. It is republished as Chapter 15 in the book 'Steaming On' released last year at the fifteenth National Congress.

Before I end on behalf of the Society, I would like to thank all staff and officers of IR who have helped in the 'Revival of Steam' this year, and sincerely hope that they will continue to do so in the future as well.

**R. S. Virdi**  
*President ISRS*

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## LALIT KUMAR SINHA 2nd President of ISRS



**L. K. Sinha**

Lalit Kumar Sinha took over as the 2nd President of the Indian Steam Railway Society on the sudden passing away of the founding President, Romesh Chandra Sethi, in November 2012.

It was a very gracious and unselfish gesture on his part to accept this onerous responsibility when requested to do so by members of the Society at very short notice.

Without any delay, he took on the challenge wholeheartedly and with full vigour. He ensured that the work of the National Steam Congress, that was due in a few months, went off without a

hitch though he was new to the responsibility.

Subsequently, he immersed himself fully in the requirements of the Society and made himself available for the work needed at all times. He invariably took personal interest on various issues which arose from time to time – organising unscheduled meetings himself, as necessary, even at much personal inconvenience.

During the five years that he was President, the ISRS has grown from strength to strength. The National Steam Congresses have become more wide-ranging and gained greater acceptability and attendance. His attention to detail was quite amazing and helped these Congresses to be the great successes they became.

It will not be out of place to mention that he belongs to the generation of railwaymen who worked virtually full-time with steam locomotives. He retired from railway service as Member (Mechanical Engineering) of the Indian Railways Board. He took up the responsibilities of the ISRS post-retirement.

The Society deeply regrets the untimely demise of Lalit Kumar Sinha on the 15th of February 2018, and wishes to acknowledge and place on record his tremendous services as President of the Society.

## OUR NEW PRESIDENT RANJIT SINGH VIRDI



**R. S. Virdi**  
*President ISRS*

Ranjit Singh Virdi was elected President of the Indian Steam Railway Society by the Managing Committee on the 22<sup>nd</sup> of April 2018. The need to elect a new President arose owing to the sudden, untimely and unexpected death of Lalit Kumar Sinha on the 15<sup>th</sup> of February earlier this year.

A career railway man, he retired in August 2015 from the post of General Manager of the Northeast Frontier Railway zone of Indian Railways. The UNESCO inscribed World Heritage Darjeeling Himalayan Railway (DHR) is part of this zone.

He joined the Indian Railways as a Trainee officer in 1973 at Jamalpur. Steam traction was still a significant part of the traction mix

then. His love for steam developed when posted on Rajkot Division of the Western Railway zone. The Division then had about a hundred Meter Gauge (MG) steam locos based in three sheds, viz. Mehsana (43), Sabarmati (38) and Wankaner (20) and ten Broad Gauge (BG) locos at one BG steam shed at Rajkot.

The MG services on the myriad of branch lines in the Mehsana sub-division continued to be served with steam hauled passenger services during his tenure. Wankaner shed with 20 locos ran on the isolated 80-km Wankaner-Dhrangadhra section; it was the last commercial steam operation service to close down. The "heritage value" of steam wasn't even a thought in those days.

As the Divisional Rail Manager of Mumbai Division of the Central Railway zone (2004-07), the Neral-Matheran Narrow Gauge Hill Railway was his favourite haunt. One B class steam loco was operational there.

During his tenure as the General Manager of the NF Railway zone, the "toy train", the biggest tourist attraction of Darjeeling, fell in his jurisdiction. The Darjeeling Himalayan Railway is an 88-km section which runs from New Jalpaiguri-Siliguri to Darjeeling. A massive breach of about 800 meters in this section at Paglajhora had caused through train services to be stopped. Restoration of the breached line and commencement of through train services resumed in his tenure. This section, however, continues to be very precariously poised.

Ranjit Singh Virdi has been an active member of the ISRS after his retirement.





General view of the stage  
at the Congress

## INDIAN STEAM RAILWAY SOCIETY XV NATIONAL STEAM CONGRESS A REPORT

The XV National Steam Congress was conducted by the Indian Steam Railway Society (ISRS) on the 2nd and 3rd of December 2017. The session on the 2nd was conducted at the National Rail Museum, New Delhi, while a visit to the Rewari Heritage Steam Shed was organised on the 3rd of the month. The journey to Rewari was by a special train hauled by the Fairy Queen. Unlike previous congresses, the session on the 2nd had been shifted to the afternoon instead of the usual morning. The theme chosen was various forms of traction that are in use on the railways. In keeping with this, the backdrop on the stage showed a WP steam locomotive, a WAP7 electric and a WDP4C diesel.

As part of the Congress and before the start of the main event, two special items were exhibited. One was a working model of the Fairy Queen made by Iqbal Ahmed, master craftsman and modeller. A circular 5" gauge track had been laid for this purpose and the model ran flawlessly, towing two to three persons on specially made flat cars. It ran on coal. Iqbal Ahmed also displayed another working model of a generic steam loco named "Indian Glory" but this was not steamed. His ultimate show-piece was a finger nail size working steam engine, recognized as the smallest in the world by the Guinness Book of Records.

The other exhibit was a scale model of a B class DHR loco made out of elephant dung paper by T R Raghunandan. The model was displayed in the gallery outside the auditorium where the congress took place. Along with the loco was the

under gear of a YG class steam loco made of the same paper. The attention to detail and accuracy in the models was remarkable.

In his welcome address, Ashwani Lohani, Working President of ISRS and current Chairman of the Indian Railway Board, gave the history of the 'Friends of the National Rail Museum' and its transformation into the ISRS. He also mentioned that with the running of the Fairy Queen, a new segment of steam heritage tourism was started in the country. But we have a long way to go. The government needs to learn from the likes of Tarun Thakral who has resurrected two steam locomotives and other places like NeverEnuf Garden which are purely individual and private efforts. The least we can do is to have one timetabled run of a steam-hauled train on the first Sunday of each month. In addition, we should ensure that there is at least one train on DHR on steam for the entire route. We should also try and resurrect locos like the 1862 Ramgotty. He promised all support from the Railway Board.

The gathering was then addressed by the President of ISRS, L K Sinha. He informed that for the last few years, ISRS has been sending members overseas for attending meetings of the DHR society in the UK as well as to APHTRO. He also mentioned that APHTRO had decided to have its headquarters in India.

The next speaker was the Secretary, Railway Board, R K Verma, who is responsible for heritage on the Indian Railways. He enumerated various steps that the Railway Board has taken in the recent past. For

instance, all steam locos, working and preserved, have been tabulated. Fairy Queen is now running twice a month during winter to Rewari and back. A Polish loco, WP 7000 has been located and is being revived. A BG Garratt loco available on SE Railway is also being revived. So are locos on NF Railway. Field trials of NG loco ZB 66 have been conducted. Other measures have been taken such as the GM of Southern Railway being advised to set up facilities for steam and for NF Railway to attempt to have steam locos of all 3 gauges at Siliguri.

The keynote address was delivered by Mr. Richard Peck on the building of a brand new steam loco in the UK, appropriately titled "From Dream to Steam: The Story of the Tornado". Steam ended in 1968 in the UK and with it started the movement of steam heritage. While a large number of steam locos are working, they are all resurrected ones and not new constructions. In 1990, the A1 Peppercorn class loco was selected for building. These locos were first built in 1948 and only 43 were put on line. All were cut up by 1966. Since there were no locos of this class available, it was a dream to build this loco, which was known for its reliability and low maintenance costs. Building was not easy and as many as 1100 drawings were scanned at the museum at York. There were advantages though, as better material could be used now. Cutting of metal started in 1994. Cylinders were cast by BSE Renshaw. The loco had to be air-braked to conform to current requirements for main line working.



Iqbal Ahmed's model of the Fairy Queen. Another model, Indian Glory, can be seen in the background



The locomotive was named Tornado and cost GBP 3 million to build. The boiler alone cost about GBP 500,000. During the building and the trials, all statutory bodies were kept informed. The first main line trial run was completed on 18th November 2008 and the first run on the main line was done on 31st January 2009. The loco got its name, Tornado, on the 19th of February 2009.

Mr. Peck gave details of the overhaul of the loco in Germany in 2014 and the sponsors who made the financing of the building possible. It is now planned to manufacture a 1934-built P2. Only 6 of these were built; the 7th one now planned should be ready in 2021 and will be named "Prince of Wales".

Mr. Peck's address was followed by the release of the ISRS calendar and souvenir. This year, instead of the usual souvenir, a book entitled "Steaming On" that is a collection of selected writings from Newsletters and souvenirs published over the last 20 years since the FNRM was first set up, was released. The calendar for 2018 was also released.

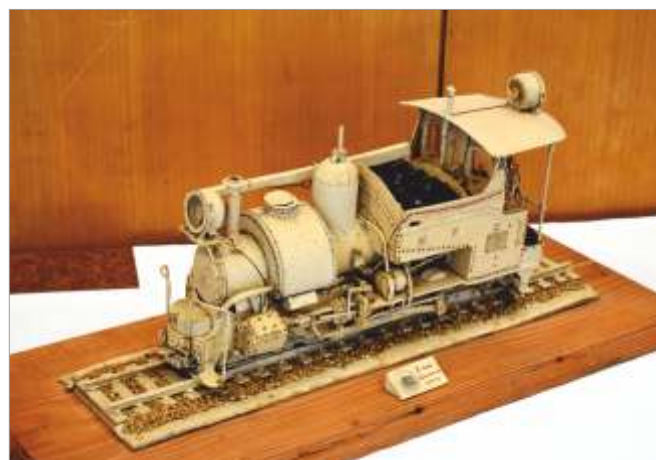
This year, the National Steam Award was presented to Tarun Thakral for the resurrection of two steam locomotives. This is only the third time that this award has been given. Steam staff who have retired from Rewari were also recognized. Awards were given to Iqbal Ahmed for his steam loco models, Sr.DME Shakurbasti for his contributions to the Rewari steam shed and J.L. Singh and Abhimanyu Shaunik for bringing out the book "Steaming On".

The Chief Patron of ISRS, Ravindra Gupta, Member (RS) of the Railway Board then addressed the gathering to mark the end of the first session.

The second session was the technical session. This began with the viewing of a video shot in the morning of the same



► Special train hauled by Fairy Queen arriving at Rewari



General view of the stage at the Congress ◀

day at Chittaranjan Locomotive Works to commemorate the 15th Steam Congress. The video was the run of a 1/4 size model live steamer.

The first presentation was by T R Raghunandan, who gave details of the building of a 1/16 scale model of loco No. B-794 of the Darjeeling Himalayan Railway. This model has been made of elephant dung paper and is accurate to the extent that even the number of rivets on it match the actual loco. Another model made of the same paper is the bar frame and under carriage of YG-3565 loco.

Tarun Thakral then gave a talk on the resurrection of two steam locos for his Heritage Transport Museum near Manesar. He had acquired these condemned steam locomotives from Dehri on Sone, a 1953 Jung and a 1921 Kerr Stuart, which had been lying in the scrap yard for 20 years. With the help of a team of retired railway engineers from Chennai, both the locos are steaming and running on the short track specially laid at the Museum. He recounted how they had achieved this with limited facilities at the Museum.

In the next presentation, M. Jean Luc Verset from Alstom gave a glimpse of today's electric locomotives. The locomotive covered was the WAG12 that the company is manufacturing at the Indian Railways' Madhepura plant in Bihar.

The last presentations was on train sets by S. Srinivas, the Chief Design Engineer of the Integral Coach Factory (ICF) at Chennai. Train sets are the main form of fast passenger train operations the world over but have not made a mark in India yet. This presentation told us about two train sets, Train 18 and Train 20 that ICF is now working on. These are indigenously developed. The Train 18 train set is scheduled to be delivered to the Indian Railways in 2018.

The proceedings ended with a Vote of Thanks by the Secretary of the Society, G. Shankar.

It will not be out of place to mention that the invitation card, a colourful one, was prepared for the Congress by Ajay Singh. It show-cased a painting of a Rewari WP steaming over a culvert; the painting had been rendered by the late V.K. Bhargava, an Indian Railways' mechanical engineer.

The Congress included a run behind the Fairy Queen from Delhi to Rewari on the 3rd of December, followed by a visit to the Rewari Heritage Steam Shed.



Rishra awaits its next shunting turn in the station area ◀

## DARJEELING HIMALAYAN RAILWAY SOCIETY CELEBRATES 20<sup>TH</sup> ANNIVERSARY

The DHRS has celebrated its 20th anniversary and twenty years of supporting the Darjeeling Himalayan Railway (DHR) with a major event at the garden railway of its President, Adrian Shooter CBE.

On 1st July 2018, under a clear blue sky and 'Indian Summer' weather some 170 DHRS members, families and friends enjoyed a day at the narrow-gauge Beeches Light Railway in Oxfordshire with steam action provided by three locomotives, all with strong links to India.

Based at the BLR itself was Sharp Stewart DHR B Class 0-4-0WT No 19 (the only one of its class to leave India), immaculately restored and still using its original 1889 boiler.

Visiting from the Leighton Buzzard Narrow Gauge Railway was 0-4-0T Rishra, built by Baguley Cars Ltd of Burton on Trent in 1921 for Calcutta Corporation, where it worked at a pumping station. Abandoned by 1924, it was rediscovered in 1963 by the late Mike Satow OBE, subsequently a key player in establishing India's National Rail Museum. The loco was restored by apprentices of the Hooghly Docking and Engineering Company at Rishra and repatriated to the UK in 1971.



► DHRS President Adrian Shooter presents author David Churchill with the first copy of the new B Class book



The third loco in steam was 0-4-0ST Woto built in 1924 by W.G. Bagnall Ltd to a gauge of 3ft 6ins and later converted to 2ft gauge in 1988 by its current owner Patrick Keef. The Indian connection is that the locomotive is basically the same as several supplied to the 2ft Tipong Colliery line in NE India.

More DHR atmosphere was provided by the Indian Hill Railway miniature layout, complete with ten locos, mostly B Class but also including the solitary Garratt loco to have worked on the DHR.

Joining the DHRS in its celebrations were welcome guests from India, Arun Bhagra, a senior retired Indian Railways officer and Mingyor Bhutia and his wife. From 2012-17 Mr Bhutia was the highly energetic and successful Director of the DHR.

The event was also the public launch of the DHRS's latest publication – the definitive story and history of the iconic DHR B Class, acknowledged as the world's oldest and still operational fleet of British-built narrow-gauge locomotives. Author David Churchill was presented with the very first copy of the book by Society President, Adrian Shooter. The book is available from the DHRS on-line shop at [www.dhrs.org](http://www.dhrs.org)

Finally, in a reprise of a DHR scene from 1955, No 19 was positioned alongside MK 1 Landrover SNX 891 from the Oxford and Cambridge Universities Overland Expedition from London to Singapore.

Said Vice Chairman Paul Whittle, "This was a hugely enjoyable and successful event. Indian Railways acknowledge the wide variety of support we give, and we look forward to another 20 years of helping them conserve and develop their world famous, world heritage Darjeeling Railway".



The original photo from 1955



Woto heads a short freight train up the loop incline.



B Class No 19 heads up the loop line gradient.



B Class No 19 positioned alongside the 1955 Mk 1 Land Rover



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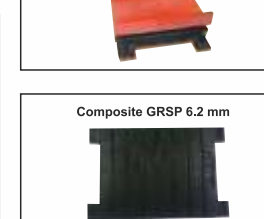
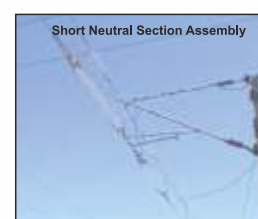
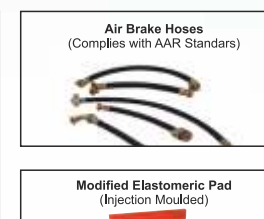
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Model of Thomason, the first steam engine to work on IR, outside Roorkee Railway Station

## HISTORY OF INDIAN STEAM LOCOMOTIVES 18 KEY LOCOMOTIVES

Vikas Singh

Two of the earliest engines ordered by the East Indian Railway were 12-inch diameter outside cylinder double frame, 2-2-2 under slung tank locomotives from Kitson Thompson and Hewitson of Leeds in 1853. Of these two, the 2-2-2T "Express" survives even today and is doing heritage as well as commercial runs on Southern Railway, and the 2-2-2T "Fairy Queen" survives at the Steam Heritage Park at Rewari. Today, they are the oldest steam locomotives in the world still in operation.

It was during the construction of the Solani Aqueduct in Roorkee that the first steam locomotive ran in India. While constructing the aqueduct British engineers wanted to bring a large quantity of clay and other earth materials from nearby Piran Kaliar area situated 10 Kms away from Roorkee. This necessity compelled the engineers to consider the possibility of running a train between the two points. The line laid was 4 feet 8 and half inch gauge. The engine was brought from England in 1851. It was known initially as 'Jenny Lind' after a famous singer of that time. Designed by David Joy, Jenny Lind was an E.B. Wilson Well Tank type with a wheel configuration of 2-2-2. The engine was renamed 'Thomason' after the then Lt. Governor of the North West Provinces. The first run of Thomason was on December 22, 1851.

Initially, two wagons were attached to the engine with a capacity to load 180 to 200 tons of material. The train used to cover a distance of two and half miles in 38 minutes with a speed of four miles per hour. The train remained operational for nine months until in 1852 the locomotive caught fire. Fortunately, by that time, construction of the aqueduct had been completed.



Fairy Queen

The B-26 0-6-0 locomotive was built by Sharp Stewart and Co, Atlas Works, Manchester in 1870. It first worked on the Lucknow-Kanpur section of the Oudh and Rohilkhand Railway. In 1900, it hauled the first train that entered Dehradun.



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In the early days, locomotives were supplied by European manufacturers in knocked down condition. These were then assembled at the workshops established in India. Jamalpur and later Allahabad workshops took the lead in assembling the locomotives. Later, Ajmer workshop started manufacturing locomotives in India. 0-6-0 F-734 was the first locomotive to be fully built in India at Ajmer workshop in 1895. It initially worked on Rajputana Malwa Railway and survives even today at the National Rail Museum (NRM), New Delhi.



► 1870 built B class BG locomotive, Sharp Stewart & Co, Atlas works, Manchester. No 26. Now at National Rail Museum New Delhi

The Neral-Matheran Light Railway connecting Neral with the hill station of Matheran was built between 1901 and 1907 by Abdul Hussein Adamjee Peerbhoy. The consulting engineer was Everard Calthrop who designed a 0-6-0T loco, with Klien-Lindner axles for a flexible wheelbase to negotiate the tight turns. Four locomotives from Orenstein & Koppel worked on the line from 1907 until 1982, when they were replaced by diesel locos.



► 1895 built F class MG loco, Ajmer workshops. No 734. Now at National Rail Museum New Delhi(1)

The first locomotive to work on the Darjeeling Himalayan Railway (DHR) was 0-4-0 ST "TINY". It was used mainly for the construction of the line and in 1886 was sold to Jorhat State Railway. The Siliguri-Kurseong section was opened to traffic on 23rd August 1880. To work on the line four locomotive tank engines were purchased from Sharp Stewart in 1879. These engines were fired with either wood or coal, were known as Class 1 engines being numbered 1 to 8.

The section from Kurseong to Sonada was opened on 1st August 1881. This was followed by opening of the Sonada-Jorebunglow section on 5th April 1881 and Jorebunglow-Darjeeling section on 4th July 1881. With opening up of the full line, 8 more locomotives were ordered from Sharp Stewart. These engines were 0-4-0 WT and were known as Class 2 engines. They were numbered 9-16 and used only coal as fuel. Four of these engines (11-14) were sub-contracted by Sharp Stewart to Hunslet Engine Company in Leeds. Over a period of time, improvements and evolutionary changes were made to these engines at Tindharia workshop.

The Darjeeling-Darjeeling Bazaar section was opened on 16th June 1886. By 1887 the need was felt for more powerful engines with longer boilers and bigger cylinders, due to traffic demands offering to the railway. Four new engines were delivered by Sharp Stewart in 1888-89. These were numbered 1B to 4B. With this new numbering system locomotives 1-8 were re-named 'C' class while locomotives 9-16 were named 'A' class. Later the 'C' class designation was attached to the two large 4-6-2 pacific class locos that worked the plains branch, while the Garratt was allocated the designation "D" class before its demise in 1954. By the time these new locos entered traffic, the previous locos with these designations had been sold or scrapped, allowing reuse of the class designations to the new locos entering service.

0-4-0 ST, B class, was the final steam locomotive design built for the former DHR company before the line was purchased to become part of the Indian Railways.

Till 1902, all orders for B class locos were given to Sharp Stewart. The company supplied DHR locos from its works in Manchester till 1888. After 1888, locos were manufactured at their new location of Atlas Works in Glasgow. In 1903, Sharp Stewart merged with North British (NB) Locomotive Co., and engines continued to be manufactured at the Glasgow works. The last B class locomotive manufactured by Sharp Stewart was No-28 in 1903. Between 1904 and 1914, NB supplied six 0-4-0 ST locos numbered 30, 32, 33, 34, 35 and 36.



1905 built ML class NG loco, Orenstein & Koppel, A.G.Berlin. No 741. ◀ Now outside Matheran Railway Station

The first meter gauge locomotive to work on IR was the A class 2-4-0 tank locomotive largely utilized for construction work.



914 built C class NG loco, North British Loco Co, Glasgow, UK. ◀ No 808 ( DHR 38). Now at NFR HQ Maligaon



► 1874 built A class MG loco, Dubs & Co, Glasgow locomotive Company. No 14. Now at Rail Museum Gorakhpur

One of the earliest MG locomotives imported was the BLACK HAWTHORN, 0-4-0ST locomotive that was imported in 1873 by Rajputana Malwa Railway for an irrigation project but shunted at Ajmer for several years in the later part of its working life.

With growth of the railways, individual railway systems adopted their own standards and types of locomotives multiplied to such an extent that the traditional British manufacturers could not fulfill the demands. The outcome was that the British Engineering

Standards Committee was set up to limit the number of classes. The committee submitted its report in 1903 and a revised report in 1905. The committee suggested eight classes (SP, SG, PT, HP, AP, HG, HG-1 and HT) for broad gauge and four for the meter gauge. HG class locos were later reclassified as HGS when a superheated version was developed. These were known as BESA locomotives.



1873 built MG loco, Black Hawthorn No 421. Now at Ajmer workshop ◀



In 1924, the newly appointed Locomotive Standards Committee was asked to update and re-standardize the BESA design and to recommend new standard types of more powerful locomotives. The committee recommended six IRS class (XA, XB, XC, XD, XE, XT) for broad gauge and four for the meter gauge (YB, YD, YF, YK).



► 1921 built HGS-2 class BG loco. William Beardmore company. No 26761. Now at Regional Rail Museum Howrah

During the war years of 1939-45, the traditional suppliers of steam locomotives from Britain could not meet Indian Railway's requirements and locomotives were ordered in large numbers from North America. The popular American broad gauge designs were AWC, AWE, AWD class from USA and CWD class from Canada. During this period a large number of 2-8-2 meter gauge locos were ordered from America. These were popularly called MAWD or simply WD (war department) locomotives. These locos were having bar frames, outside cylinders, alligator type cross heads, cast bogies for tenders and other prominent American design features. Their satisfactory working influenced the post war design of the WP steam locomotives.



► 1935 built XT1 class BG loco, Friedrich Krupp, Essen. No 36863. Now at National Rail Museum New Delhi

After the war, a new 4-6-2 passenger locomotive was designed and its class name was chosen as WP. In the place of X (IRS design) W was chosen for broad gauge, Y for meter gauge locos and for narrow gauge Z. To simplify, P was chosen for passenger and G for goods locomotives on all gauges.



1948 built MAWD class MG loco, Baldwin Locomotive Works, Philadelphia. No 1798. Now at Railway Station New Jalpaiguri

IR also imported a large number of locomotives from non-traditional suppliers such as Japan (Nippon Sharyo Seizo Kaishal Co. Ltd., Mitsubishi, Kawasaki and Hitachi), Poland (Charnow), Yugoslavia (Duro Dakovic, Slavonski Brod) and Czechoslovakia (Lenin Werke, Pilsen).



1955 built WP class BG loco, Canadian Locomotive Company, Ontario. No 7581. Now at DRM office Sonapur

Chittaranjan locomotive works started production of WP class locomotives in 1963. The first locomotive built in February 1963 was named Vivekananda.



1957 built ZD class NG loco, Nippon Sharyo Seizo Kaishal Co Ltd, Japan. No 549. Now at Sholapur Railway Station



► 1959 built ZB class NG loco, Duro Dakovic, Slavonski Brod, Yugoslavia. No 120. Now at Jodhpur Railway Station

The WP class locos hauled more than eighty percent of passenger trains on the Indian Railways. Between 1945 and 1995, 755 WPs have worked on IR. It is perhaps befitting that this class of locomotives features on the IR logo! Similar to WPs on broad gauge, the meter gauge had 4-6-2 YPs that hauled passenger trains.



► 1968 built WP class BG loco, Chittaranjan Locomotive works. No 7656. Now at Railway Institute Jhansi

The narrow gauge had 4-6-2 ZPs that hauled passenger trains.



► 1968 built YP class MG loco, Tata Engineering and Locomotive Company. No 2825. Now at Railway Station Ambala Cantt

The steam era finally came to an end when WL 15005 hauled the last broad gauge steam train between Ferozepur and

Jalandhar on 6th December, 1995. Production of steam locomotives had stopped much earlier than that. The last broad gauge steam loco WG 10560, christened 'Antim Sitara' was commissioned at CLW in June, 1970. WL 15005 has found a new lease of life at the Rewari Steam Heritage Park.



1954 built ZP class NG loco. Nippon Sharyo Seizo Kaishal Co Ltd. No 5. Now at Nagpur Railway Station

\*Vikas Singh is a keen narrow gauge rail enthusiast and philatelist. As a member of Indian Railway Fan Club he has traveled extensively including the entire narrow gauge network of Indian Railways. As a member of Indian Steam Railway Society he is involved with steam preservation efforts in India. He has won a number of medals in national and international philatelic exhibitions for his collection on Indian Railways. He is an active member and Jt. Secretary of the Rail Enthusiasts' Society. He can be contacted at doonexpress@gmail.com



WL 15005 at the Rewari Steam centre





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# STEAMING ON...

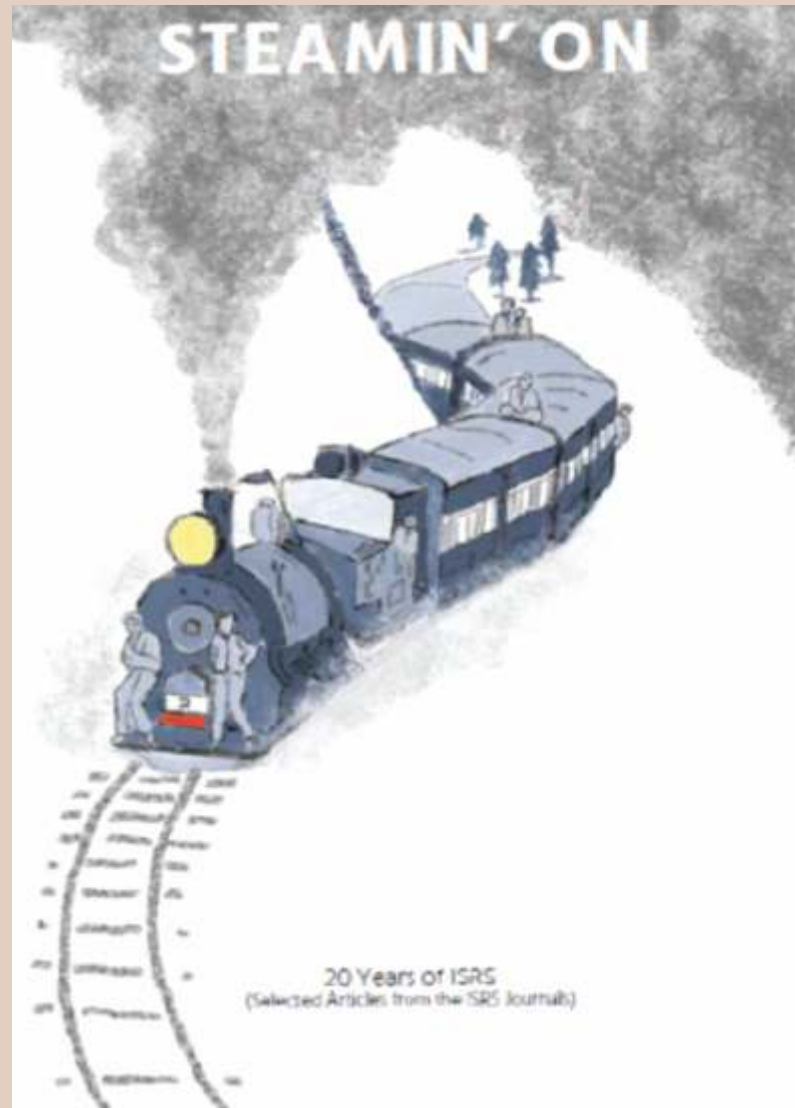
*Ravindra Bhalariao*

One reason why Mani's visits are something to look forward to is that he has been something of a Santa Claus of late. Each time Mani (or Abhimanyu Shaunik, if you like) drops in my hometown, he gets along something that whets my appetite for the railways and its doings. It's amazing to see how it can act as a catalyst in my never ending quest for discovering yet another facet of the Railways of the Raj.

Having dubbed him as Santa, let no one imagine that Mani arrives here at Christmas time dressed in a red cape with white fur trim. Nothing of the kind. Abhimanyu is a top class businessman; as General Manager of Pallas Software Private Limited he is at times required to be on the move, often taking along with him a team of company executives to assist him in his work. Last time he was here, he brought along a pair of large coffee mugs imprinted with the Rail Enthusiasts' Society logo. This time it was something more substantial. It was a book called "Steaming On", a 230 page treatise that would cheer the heart of any steam train buff.

Steaming On couldn't fail to delight me as has every other bit of railway memorabilia Shaunik has got along for me. Here is a book that has not been authored by a single individual; rather it is a collection of writings that have appeared in the dozen or more issues of the Indian Steam Railway Society's journal. Among its contributors may be found engine drivers and General Managers, writers and photographers, college professors and historians. Each one writes using his own slant, each exhibits his own specialized interest, his own fascination within the limitless vistas of the field known to us by the name of railway heritage.

Consequently, Steaming On is free of the monotony we have come to expect in works authored by a single person. Steaming On is a lively voice, a tremendous entertainment where each piece of writing appears to be elbowing out the others in an effort to get the reader's attention. And what a marvellous collection of topics maybe found here! Here at one end we have the scholarly figure of Ranjit Mathur who sets out the facts and figures pertaining to the varied classes of steam locomotives that once ran on Indian soil. If this sounds too technical, we may skip over pages to find members of the Darjeeling Hill Railway Society chattering excitedly over a rare streamlined baby engine that once made its appearance on the DHR many years ago, while still another is here to tell us of his adventures



high up in the hills looking for the grave of his icon, the legendary Barog saab, who was assigned the task of building the famed Kalka Shimla Railway. There is no lack of variety here. Peter Foster may be heard chirping from afar expressing concern over the government's proposal to rename A. H. Wheeler, while Tathagata Chatterji prefers to pen an ode to the BNR Hotel of Puri. Others like the late S K Kashyap are more down to earth; having been a driver himself he finds his supreme pleasure in telling us of the long road to travel before a newcomer to a steam shed could hope to man a mainline express engine. And Siddhartha Joshi and Bharat Vohra – don't they come across as excited youngsters jumping onto the Frontier Mail hoping to catch a glimpse of the last remnants of steam in Mhow? These two boys are desperate; they are in earnest, and their enthusiasm spills over into their writings.

There are others who seem to be calm and collected as they write their memoirs. I liked Harsh Vardhan's "The End of an Era" where this veteran enthusiast tells us in his own quiet way the tale of two enginemen he knew. Or yet again, we have the late L K Sinha taking us back on a nostalgic tour of the days when as a trainee officer on the Indian Railways, he would receive practical training on board the footplate of the mighty engine that pulled the Grand Trunk Express.

The Indian Steam Railway Society has been around for over two decades, a sure haven for all those souls who found India's fast disappearing fleet of steam locomotives gave them cause for distress and anguish. The opening chapter of the book tells the tale of how it all began, how a group of enthusiasts met in a hotel room and decided that something needed to be done to rescue the steam age from slipping away into oblivion unsung. Present amongst the group was Ashwani Lohani, then Director of the National Rail Museum, and a keen heritage enthusiast himself. Under the able leadership of this ambitious and enterprising railwayman, then, was born India's first railway heritage society. It was named the 'Friends of the National Rail Museum' as it was conceived as a group mainly concerned with the preservation of the exhibits at the museum. It soon became apparent, however, that the interests served by the newly formed society were confined to a dismally narrow sphere of activity, and that if the cause of railway heritage was to be furthered, it could only be done effectively through an agency whose professed aims went far beyond those adopted by the FNRM.

Consequently, a few years down the line a new society came into being ; it was named the 'Indian Steam Railway Society' and its objectives were to bring together enthusiasts, disseminate knowledge of railway heritage and insofar as it was possible, help the railways to see the immense potential that lay in running steam services on its tracks.

Like the FNRM, membership of the newly formed steam society never really swelled to large numbers; it would always remain a small band of loyal followers who sang their ditties to the rails of old. But the society brought out an adorable four-page newsletter crammed with interesting findings in the world of steam locomotion. There were reports on the latest engines being shunted out of duty, memoirs, technical articles, besides various other pieces dealing with sundry railway memorabilia.

The ISRS newsletter was at this time being edited by Harsh Vardhan, of whom it has been said that he was the "backbone of the steam preservation movement" in those days. Harsh Vardhan was a keen aficionado of steam railways, a near authority on all that was happening in the world of steam, and his newsletter kept us pretty well informed of anything that took place worthy of note.

At about this time we were also to make a startling discovery; for the steam railways of India seemed to have cast a spell of charm that went far beyond the geographical boundaries of the country, and there were quite a few living in faraway lands who rejoiced, even gloried, in our steam trains. We had David Barrie and Terry Martin of the DHRS arguing persuasively for steam services on the Darjeeling Hill Railway; there was John King educating us on the varied features of Edmondson tickets to be found in different railway zones across the country; and who would not be delighted with the memoirs of Reginald Sowler who kept a diary of his rail travels while he served here as a private in the army during World War II?

The railway movement has now begun to gather momentum. Members of the ISRS meet together at the National Rail Museum each month, and when November comes round, everyone looks forward to a fun-packed 2-day

steam convention held at the same venue. When Tathagata Chatterji took over as editor, the society newsletter had grown from a puny four page printed handout to a 12 page publication. The time seemed ripe for better things and the society decided to have a proper magazine befitting its status as the country's premier railway society.

The "Indian Steam Railways Magazine" got off to a flying start and there were plans initially to sell copies aboard the Rajdhani express trains. It is worth noting that the ISRS magazine was named in tribute to a well respected publication called the Indian State Railways Magazine which thrived in the 1920s and 30s dedicated to railway matters and tourism; and indeed, the new magazine carried a feature known as the Treasure Hunt which reproduced in facsimile some of the more striking writings from the latter.

For the heritage enthusiast these years were undoubtedly a time of great excitement. Ashwani Lohani's labours had borne fruit resulting in the Fairy Queen being reconditioned to run tourist specials from Delhi to Alwar, and equally significant, Lohani had conceived and directed the transformation of the disused shed in Rewari into a top class steam loco maintenance facility. These remarkable accomplishments would further spur enthusiasm, and the Indian Steam Railways Magazine faithfully reflected the upbeat mood. Besides the usual features a steam glossary was added to the magazine; this would be in addition to two very pretty features newly introduced, namely, a half-page devoted to rail humour, and a charming little section called "Echoes of the Past" where readers could send in any railway picture from their personal archives.

Browsing through old issues of the ISRS journals is an enriching experience opening up a window to railway land when steam led the way in all its might and glory. That glory and splendour have long since vanished never to return, and yet we may think over it in moments of quiet solitude and rejoice. We may inspect what is being done on the preservation front, we can visit railway museums and heritage galleries, take a trip on steam run tourist specials. Or we may turn instead to books devoted to heritage and history to savour the richness of India's steam age.

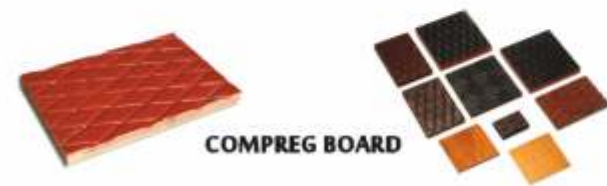
Steaming On is a delightful compilation of writings that have appeared in the ISRS journals over the past twenty years, and has been prepared with this object in view. Both the opening of the Rewari Steam loco shed and the launch of the Indian Steam Railways Magazine were important events in the history of the ISRS, and in Steaming On we have yet another milestone we can be proud of.

Some books have a message, others inspire hope. Steaming On seems to do both. As India's steam age drew to a close, it left many distraught, and there were a great many who looked upon the change as a great irreparable loss. To all such folks Steaming On beckons invitingly to share in the adventure. The pretty Darjeeling engine on the front cover speaks to us, inspiring hope: "Never mind what has happened, I will keep Steaming On..."

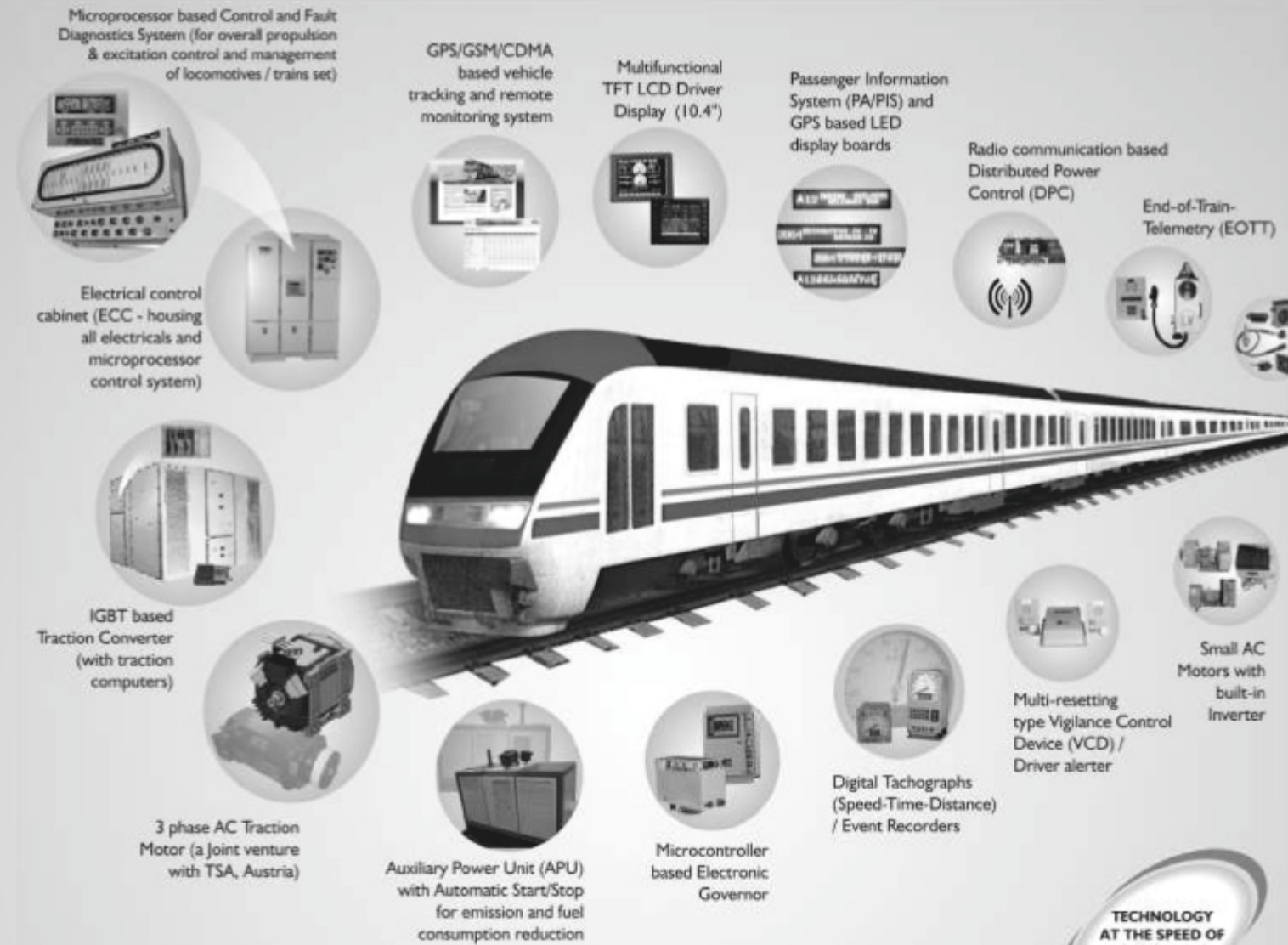




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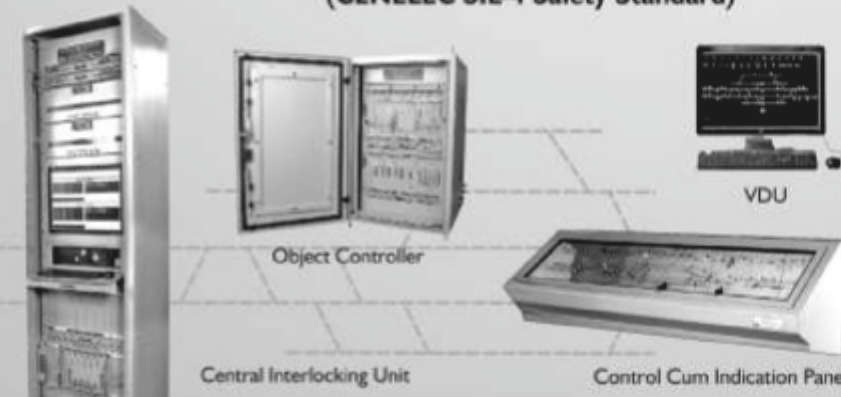
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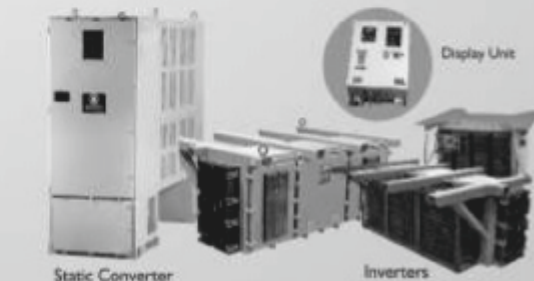
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C-68 locomotive. This was built before the revolution in 1917. After active service, used in Moscow as a factory boiler till the 1970s

## WHITE NIGHTS AND DAYS AT ST. PETERSBURG, RUSSIA

Ravindra Bhalerao

We reached in July earlier this year when the "White Nights" were on. One might well ask what "White Nights" are? This is when daylight seems to last forever, like in the Arctic Circle, and St. Petersburg has the distinction of being the northernmost city with a population of over one million.

When enquiring about the Russian Railway museum, we were directed to the popular railway museum housing the oldest collection of train models in the world. This was the museum for modelers and dates back to 1809, even before the first train ran in 1837. But what we were interested in was a bigger object of affection: the Russian Railway museum.

### History of the Russian Railway Museum

The Russian Railway museum had many avatars; it began in 1978 when St. Petersburg was called Leningrad. The first location had a total area of 7,500 sq. meters and 8 steam locomotives. With the acquisition of more exhibits of which the major portion of 40 exhibits was steam engines, a shift was necessitated to Sushary railway station. With exhibits expanding to 180 by 2001, another shift was made to an area near the Varshavsky railway station. The new location was conveniently located near the Red Line Number 1 metro. With an area of 39,000 sq meters and a track of 1.5 km. the Russian Railway museum is as big as 5 football fields which include 3,500 pieces of which 118 consist of rolling stock. The new location is spread over 2 buildings opened with much



On the left L 2298-4199 built between 1945-55. This locomotive was built in honour of the 12th Congress of Komosol (Youth Congress). In the center is LV - 18-002 Main freight locomotive successfully developed during World War II. It had a thermal efficiency of 9.27%



Diesel Passenger Locomotive TEP 60 - 0190, built in 1967 at Kolmna Works



Electric and Diesel Locomotives: On the left is Electric Passenger Locomotive - Ch 54 - 012; in the middle is Diesel Passenger Locomotive built in 1977 at Kolmna Works; on the right is Diesel Passenger Locomotive TEP - 10 - 163 built in 1965 at Kharkov Works



fanfare on 30th October in honor of the 180th Anniversary of the Russian Railways.

Between January 2018 and August 2018 in a span of 8 months saw 150,000 visitors including children from orphanages, boarding schools and students from colleges and universities.

**Holidays**

The museum is open from 10.30 am to 6 pm Wednesdays to Sunday. Closed days are Monday and Tuesday.

One important holiday is the Railroad Holiday which is celebrated every year on the 5th of August. On the eve of the holiday on 4th August, all staff of the museum and the Russian Railways, past and present, are given free entry. They come dressed in costumes of bygone days. There is steaming of locomotives, working of the turntable and other events.

**Entrance Fee**

Entrance Fee to the museum is Rouble 300 for adults and foreign visitors. For school children, students and senior citizens it is Rouble 100. Exchange rate in August 2018 was Rupee 1 = Rouble 1

The Museum offers free entry on all days of opening to participants of the Great Patriotic War or WW II where 27 million Russians, both civilians and armed forces, died out of a population of 170 million. Others given free entry are disabled persons, children from orphanages and children below 7 years of age. Parents with 3 or more children and persons affected by the Chernobyl radiation are among the others who are given the privilege of free entry.

**Guided tours, photography and video**

On weekends, from 11 am to 4 pm, there are guided tours starting on the hour, and on weekdays, guided tours are at 12 noon, 2 pm and 4 pm. Audio guides are being introduced shortly.

Photography and videography for amateurs is free but professionals have to shell out Rouble 5,000. This applies even to wedding photographs taken within the museum.

**Facilities available**

Among the facilities available are a café with reasonable priced coffee at Rouble 100 and a pot of tea for Rouble 150. The souvenir shop sells models of steam locomotives. There are beautifully made fridge magnets of old steam locomotives of which I picked up a few.

The museum is disabled friendly with a provision for wheelchairs.

A diesel locomotive simulator is available; a 5-minute training session costs Rouble 200.

**For children**

Children get a special place due to the dwindling Russian population. As mentioned earlier, families with 3 or more children are allowed free.

For kids between 7-9 there is “Merry Little Steam Engine” which lasts for 70 minutes and for older kids between 8-12 years of age, a more complex set of play on diesel engines called “Across the Soviet Land”.

Special arrangements are made for children's birth day parties.

**Final thoughts**

What are my impressions about the Russian Railway Museum at St. Petersburg? As one railway enthusiast Peter from Brockenhurst, Hampshire, UK wrote recently in August 2018, “This railway museum is the best in the world and I have been to quite a few.” I would definitely go with that.



Locomotive P-36 -0251 Class O was a main line steam locomotive built between 1950-56 at Kolomna Works. With 9000 locomotives built between 1890-1928, this was the second most popular locomotive after the E Class

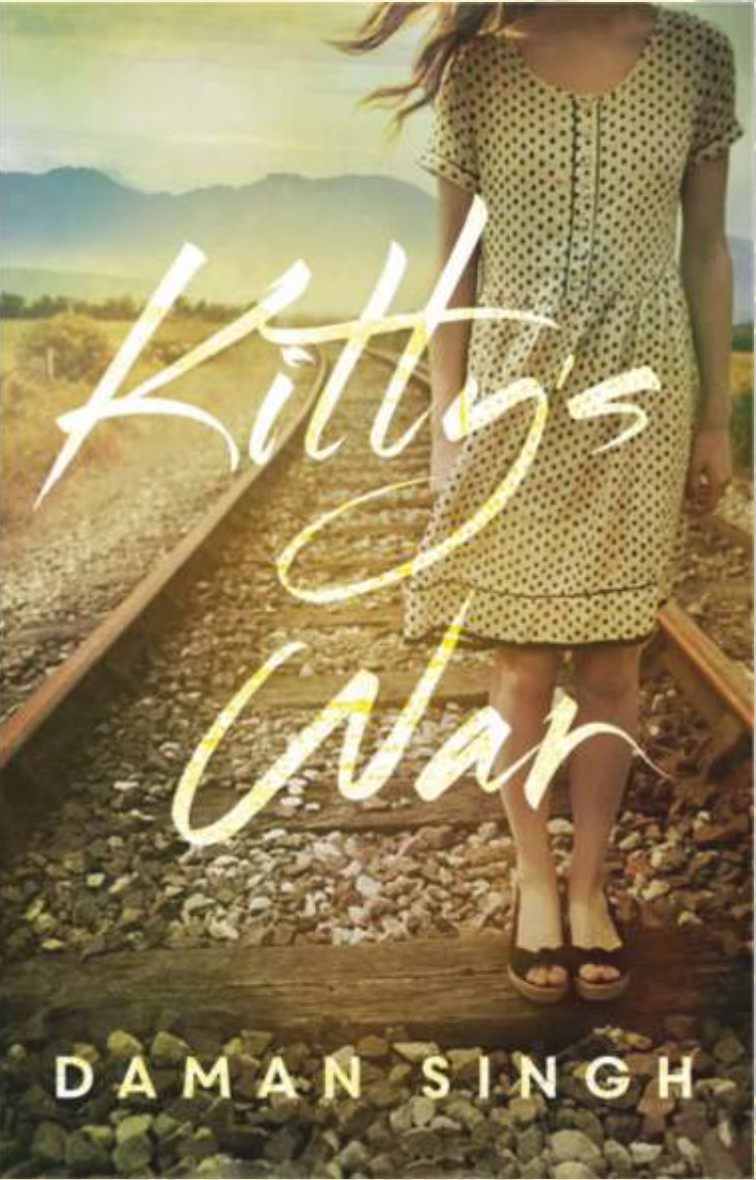
**BOOK  
REVIEW**

**KITTY'S WAR**

“Kitty's War” by Daman Singh is not limited to Kitty. While Kitty Riddle is at war with her emotions owing to a broken heart, her father, Terrence, Assistant Engineer with the East Indian Railway, is warring orders to dismantle a branch line for sending the material to the World War II front lines. Others are at war too: Chakravarty or “Chukkerbutty” to the English speaking Europeans and Anglo-Indians, is at war with his identity as the first “native” to be appointed as an Assistant Station Master; Kitty's Ayah is at war with her son who joined the army and is in Burma; and, of course, the Japanese are at war with the allies and closing in on India, affecting everyone's lives. All this is happening inside a small railway colony, giving a good insight into what life was like in such colonies in the 1940s.

The book is obviously well researched. The music being listened to and the movies playing at the Railway Institute are correctly selected from that period. References to railway working, though not too common in the book, are accurate for the 1940s. Alluding to the freedom movement and the work of revolutionaries also sums up the atmosphere in the country then. The dichotomy of the Anglo-Indians who yearn for going back home to England but realising that they cannot really do so is also well brought out. And the effects of the global war on all and sundry is palpable throughout the narrative.

There are not too many books or stories that are based in a railway set up; this is one of them. In “Kitty's War” Daman Singh covers many events and situations but all are strung into a one piece by being connected directly or indirectly with life in a railway colony. A good read for one to visualise pre-independence life inside a railway community. The book has been published by Tranquebar and is available on Amazon as a hard copy as well as Kindle.





## TWO NOT OUT OF STEAM

Kumar Chellappan

(This article has been reproduced with the approval of “Anglos in the Wind”. It is also a tribute to the large number of Anglo-Indians who served the Indian Railways as locomotive drivers)

Steam engines have always caught the imagination of the young and old alike. These locomotives were so awe-inspiring that their sheer presence made the drivers stars in their own right. The engine driver was revered as he was the interface between the passengers and the organisation. Old timers along the Tiruchirappalli-Villipuram stretch still vividly remember two such drivers, Gerand Vanhaltren (72) and Rudolph Jeremiah (73), super stars of Southern Railway's Tiruchi Division for almost 35 years.

Tall and lanky Gerald Vanheltren, a descendent of Dutch immigrants who came to India in the 18th century and made Nagapattinam in Tamil Nadu their home, joined the railways as part of his family tradition. His grandfather, Aliek, was the driver of a Mail train in Tiruchi Division, while father Alfred was master technician at Tiruchi's Golden Rock Workshop. “That was the tradition. If you were born in a Railway Colony, you joined the railways as a fish takes to water. It was an unwritten rule,” reminisces Vanheltren, now leading a retired life at Crawford Colony in Tiruchi. Once he completed schooling, Vanheltren appeared for the Railway Service Commission Examination. “I was appointed as Apprentice Fireman in September 1963 when I was nineteen. The training was really tough. You needed to be physically and mentally fit to undergo the gruelling schedules. But they helped me develop my will power,” narrates Vanheltren.

He was promoted as shunting driver in 1968, underwent advanced training in diesel locomotives and successfully completed the tough LM-16 (Loco Mechanism) programme. “Only a hardy man could become a steam loco driver. These locos were open on all sides and you were exposed to the elements of nature; the scorching sun of the summer or the heavy downpours of the monsoon. You had to monitor all kinds of parameters while operating the steam locos – the water level in the boiler, the quantity of coal that had to be shovelled into the firebox, the speed of the train, signals and, of course, the gradients. It was thrilling as you had to think on your feet all the time and find solutions midway. You had to be an all-purpose man,” recalls Vanheltren, his skin still tanned by the heated furnace. “I can feel the coal dust in my mouth. And my lungs still have some sooty content,” he adds.

Steam loco drivers turn rough and tough because of the nature of the job and the temperature inside the engine. “There was no room for bantering and soliloquies while on duty. When we negotiated curves and gradients, our minds had to be at their sharpest and work in sync with the engine. An eye on the water level, another eye on the quantity of coal and both eyes on the signal towers... That's how steam loco drivers worked,” he relates.

Vanheltren did not have a single accident in his 38-year career. “But there were occasional failures due to other factors. Once, I was hauling a 1,000 tonne train on the Villipuram-Tiruchi route, known for its steep gradients. It was raining all the way from Villipuram. We have to maintain a particular level of water in the boiler. A decrease in the levels would melt the lead plugs which are provided as a protection against low water level. We crossed Villipuram at 10 in the night. The rainfall increased as we moved forward. The entire coal stock in the tender box got soaked. Once the required quantity of coal could not be fed to the firebox, the pressure started dropping. This resulted in the lowering of the water level, fall in pressure and steam. The lead plug melted and the train came to a halt at the top of the gradient. Meanwhile, the Rockfort Express for Chennai left Tiruchi at 10 p.m. and was on its way. There was no way to communicate with the guard or the nearest station,” recounts Vanheltren.

All of a sudden the train started moving back because of the loss in pressure. Since there was no pressure, the brakes too could not be applied. But the train came to a halt as the momentum slowed and Vanheltren took to his legs and made it to the nearest railway station. “Luckily for us, the station master of one of the halts which we were supposed to cross after Virudachalam noticed the delay in our arrival and alerted all the nearest stations. The Rockfort Express was blocked at one of these. Normalcy could be restored only after the arrival of a relief engine from Virudachalam,” he says.

Petharaj, a former station master, who was an ardent fan of Vanheltren, remembers the incident with mixed feelings. “It was Ger's (as Vanheltren was called by friends) presence of mind which saved the day. His devotion and dedication could be seen by the speed with which he made to the nearest station in the rain as there were no modern communication facilities.”

The station master also remembers how daily commuters would ask him who was the engine driver for the day. “The moment I mentioned Vanheltren, they would nod their heads in appreciation. ‘Today we will be on time,’ they used to say.”

Amalraj, a retired electrician of the Southern Railway, who is an avid buff of steam locomotives, explains the reason behind the expertise of Vanheltren. “He had magic fingers. The smoothness with which he brought the engine to life and gently took it forward was something to be experienced. There was no jerk or jolt and the ride was a smooth affair. Whether it was steam locos or diesel engines, Vanheltren made a big difference,” certifies Amalraj. And the man himself says of his art, “I treated the engine like a human, tender and soft.”

Life has not changed much for Rudolph Jeremiah who bade farewell to the Indian Railways in 2000 after 28 years as a steam loco driver before switching to diesel engines. What is unique about Jeremiah is the kind of passengers who had boarded trains hauled by him. For example, in one instance Jeremiah was in command of the Prime Minister's Special Train which took Jawaharlal Nehru from Villipuram to Neyveli for the commissioning of its thermal power plant in 1963.

Jeremiah, who joined the railways as an apprentice fireman in 1962, followed the footsteps of his father, Frederick, who was a special engine driver with the railways.

An engine driver's job was demanding, says Jeremiah. “After 12 hours of hard work in a steam loco, all that you want is a bath and sleep. You wake up all refreshed and energised for another grilling schedule,” he adds. Like Vanheltren, Jeremiah too almost had a sound connect with his engine. “The moment I entered my cabin, I would go into a trance. Nothing else crept into my mind. I became a part of the engine as much as the engine became part of me,” he relates.

Balasubramanian, his colleague and a shunting driver in Tiruchi, describes Jeremiah as a trouble-shooter par excellence. “He used to attend to even major faults and repair works in the engine all by himself. I remember an incident which happened at Mayladuthurai. We were about to leave for Tiruchi when the piston gland packing, which prevents the steam from escaping from the cylinder,

collapsed. Though Jeremiah approached the maintenance staff for help, they asked him to wait as they were attending to another job. So he tinkered with some instruments and got a new packing ready in minutes. The train left the station on time and reached Tiruchi as per schedule. Had we waited for the maintenance staff to attend to the fault, we would have been delayed by at least 3 hours, recalls Blasubramanian.

Jeremiah, who has a passion for all kinds of electrical and mechanical instruments and gadgets, says he was honoured by the authorities the next day in Tiruchi. But the senior engineer told him, “We know your passion for punctuality and discipline but at times you may have to make some compromises.”

Like Vanheltren, Jeremiah too was very much in demand. “When passengers saw me, they would raise the thumb of the right hand as a sign of acknowledgement. Trains hauled by me never lost a single minute during running hours,” remembers Jeremiah.

He regrets that the railways have completely phased out steam engines from service. “I can understand they are not eco-friendly. But the steam locos are the only link we have with the earlier pioneers. We could have maintained them in museums and have short runs for visitors as a piece of living heritage,” he suggests.

These days, he and Vanheltren keep memories alive by walking to the Tirucuirappalli Railway Junction museum to look at the exhibits and re-live the past.





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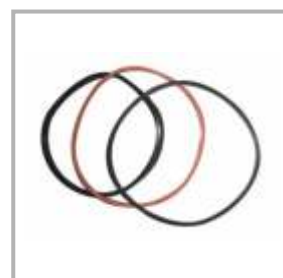
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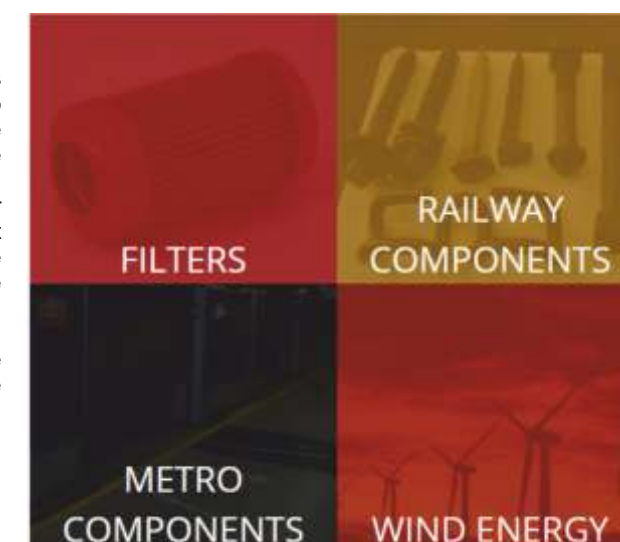
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## LOCOMOTIVE NO. EIR 21

Although now an endangered species, the steam locomotive was and will remain a marvel of pure mechanical engineering. One of the oldest members of this breed, EIR-21, the Express, is now the oldest working steam locomotive in the world. Manufactured in the year 1855 in Leeds, England, this steam locomotive is 163 years old and was taken for rehabilitation in May 2010.

It was another defining moment in the history of Loco Works, Perambur on 29th July 2010 when EIR-21 was seen chugging for the first time after its withdrawal from service in the year 1909 and its restoration by the Loco Works. The loco had been on display in the open on a pedestal for 101 years. During this period, many of its parts were corroded, some were missing, some were broken and some were not fit for use. Loco Works, Perambur took up this challenge even though it appeared to be a wild fantasy to resurrect this loco.

The boiler was completely dismantled and corrosion repairs were carried out. 123 new brass tubes were procured and fitted. All the tubes were hydraulically

and steam tested for leakages. It was provided with two double acting cylinders located on both sides of the Smoke box). New injector was procured and provided. Fire box was attended and fitted. Regulator valves were attended, checked & provided. Gauges were overhauled and calibrated. Water tanks were attended.

Wheels and axles were also attended. The leading and trailing wheels were re-axled as they had UT flaws. Plain journal bearings with white metal lining were manufactured and provided. Broken axle boxes were rectified. Springs were manufactured with the assistance of Carriage Works, Perambur. They were mounted on the wheels and at the bottom of the boiler. Eccentric rods were manufactured and provided.

Cattle guard were attended and refitted. Buffers were modified on the rear side for connection to a current coach. Draw hook modification to suit the coach screw coupling was provided. Previously, it had only a mechanical brake system. Now, an air brake twin pipe system with a captive compressor and generator set for

the braking system of the loco as well as the formation was also provided. Oil lubrication (hydrostatic lubrication) was also provided. Good quality coal was arranged.

After its revival, this loco has worked six times on Heritage runs organized by Southern Railway within Chennai area. 1st Heritage run was conducted on 15th August 2010 from Chennai Central to Avadi with two coaches as a part of Independence Day celebrations.

7th Heritage Run has been conducted on 26th Jan. 2018, the 69th Republic Day, from Chennai Egmore to Kodambakkam, a distance of 5.36 km. During this run, a GPS-based speedometer and a wireless video monitoring system was also provided. Remote-controlled rotational cameras were installed in the loco to capture the view from the cabin. Images from the camera were received in a laptop and transmitted across a mobile phone platform using 3G technology. The run was witnessed by the press and the public very enthusiastically. The public was standing at intermediate stations on the platform to capture a glimpse of the run.

In view of public demand, sanction from the Commissioner of Railway Safety was obtained on 10th May 18 for running a train hauled by EIR 21 over the entire Southern Railway at a maximum speed of 40 kmph. Accordingly, the first Heritage special for the public was run at 10 a.m. on 27.05.2018, Sunday, between Chennai Egmore and Kodambakkam. About 40 heritage enthusiasts including

children travelled in the special coach pulled by EIR 21. Two more such trips were planned. Depending on demand, the above services will be continued for the public on a regular basis.

Following this, similar commercial runs of EIR-21 for the public were organised in Thiruchchirappalli Division between Pondicherry and Chinnababu Samudram 6 times during August and September 2018 (25th Aug, 1st, 8th, 15th, 22nd, & 29th Sep 2018). The ticket was priced at a nominal rate of Rs. 500 per head for adults and Rs. 300 per head for children.

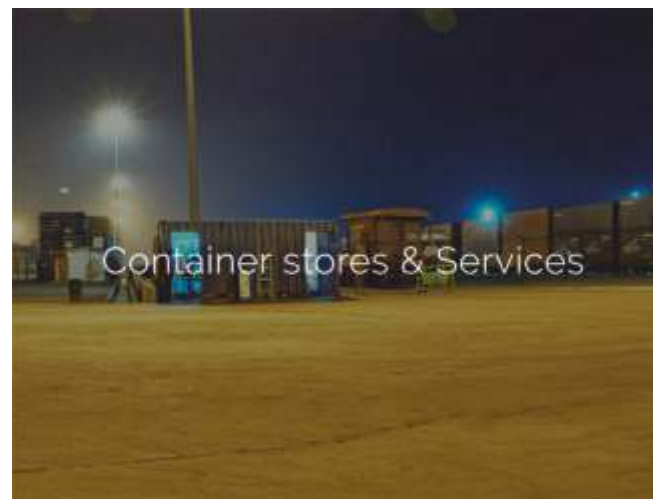
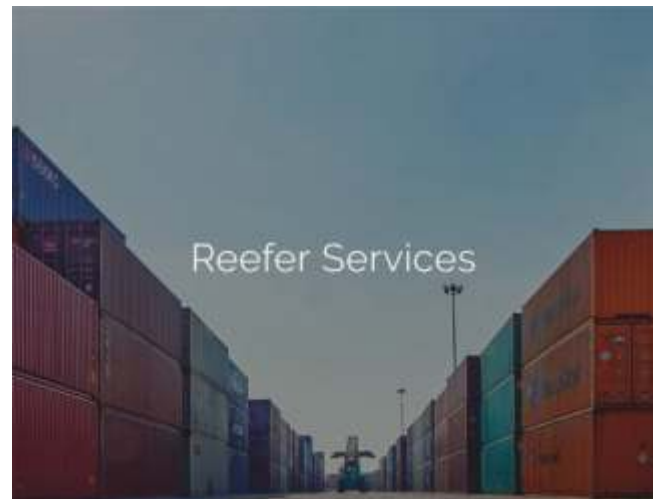
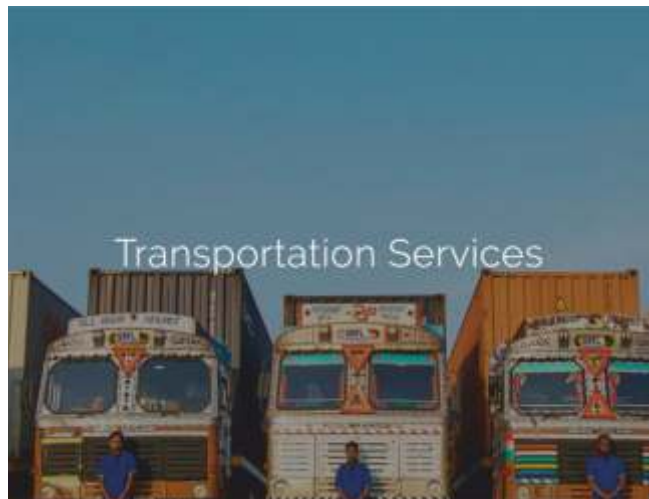
With this running, EIR 21 locomotive has become the oldest working locomotive in the world, thereby challenging the Fairy Queen EIR 22, which has been working since 1998 and has been recognized by the Guinness Book of Records. Steps are being taken to submit an application to the Guinness Book to replace the latter. Approval for EIR 21 to run over the entire Indian Railways is also being considered.

**(Editor – EIR 21 and EIR 22 are sister locomotives of the same type built by the same builder. They were perhaps put on line within a very short period of one another. It is a case of splitting hair needlessly as to whether EIR 21 or EIR 22 is declared the oldest working locomotive in the world. Both are now working and both are owned by the Indian Railways. It is perhaps best to apply to the Guinness Book to declare them the oldest working pair of locomotives in the world.)**





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EIR 22 "Express" renovated and ready to run

## RETURN OF THE GLORIOUS DAYS OF THE SMOKING BEAUTIES

Indian Railways is committed to reviving and preserving its rich and diverse steam locomotive heritage. The process began in 1998 with the resurrection of the Fairy Queen, also known as EIR 22, an 1855 steam locomotive built by Kitson Thompson and Hewitson of Leeds, UK. It is now maintained by Heritage Steam Loco shed Rewari. It has been used regularly since then for heritage and ceremonial runs in and around New Delhi.

The restoration process continued with the rehabilitation of Locomotive No.WP 7200 "Azad". This is a steam locomotive with a 4-6-2 wheel configuration and was built by the Baldwin Locomotive Works, Philadelphia, USA in 1947 (hence the name Azad). This locomotive is also based at Rewari and is used regularly for heritage runs.

One of the recent efforts in this series is the successful restoration of Mini Steam Locomotive 17655, made in 1950 by M/s Krauss Maffic AG, Germany. This steam locomotive has been restored by the team of Northern Railway Heritage Steam Loco Shed Rewari and DEMU Shed Shakurbasti. This mini locomotive had been gifted by our first Prime Minister, Pandit Jawahar Lal Nehru, to Bal Bhavan in 1958 and it continued to run till 2007 providing fun filled rides to children and evoking a sense of nostalgia in adults.

The latest in the series is the restoration of the WG steam locomotive No. 10253 (Boiler No-08584), built in 1955 by Chittaranjan Locomotive Works, which had been lying on a pedestal since 17.05.1998 at the Zonal Training Centre, Bhusawal. It has been decided by Ashwani Lohani, Chairman Railway Board and working President of the ISRS, to restore this locomotive to a working condition. It



WP 7200 "AZAD" on its run from Garhi Harsaru to Farrukhnagar



WG 10253, the first WG at Rewari, likely to be on line by the end of the year

is a different class of steam locomotive and designed for freight traffic. Its last run was between Bhusawal to Napanagar on 24.03.1992. After a gap of 26 years, its transportation from the pedestal to mainline track was a very challenging job but was taken up successfully by Bhusawal division.

Work on its restoration has begun at the Rewari shed. It is expected to be back in working order by the end of this year.

In the meantime, on South Eastern Railway, on the 22.09.2018, a Beyer Garratt steam locomotive ran between

Kharagpur and Midnapur. The loco was a 2-8-0+0-8-2 Garratt numbered 811 manufactured in 1926 and procured by the erstwhile Bengal Nagpur Railway (now South Eastern Railway) from Beyer-Peacock & Company, Manchester, in 1929. It saw service for 40 years till 1969 when electrification led to it being withdrawn from service. It lay in the Kharagpur workshop of the South Eastern Railway till the 17.11.2006 when it was revived and had a heritage run. After this historic run it languished once again and it is only now that it has been revived and steamed anew for this run.



Beyer Garratt 2-8-0+0-8-2 number 811 resurrected and steam



## TIME-TABLED STEAM TRAIN

After the demise of steam traction on the Indian Railways (IR), the only steam trains one saw in the country were the trains of the Darjeeling Himalayan Railway and the Nilgiri Mountain Railway along with a few heritage runs organised from time to time. As far as the main stream railways were concerned, steam was non-existent. Not any more. For the first time, the IR has organised a regular commercial time-tabled train to run throughout the year at a normal fair of Rs. 10/- from Garhi Harsaru to Farrukhnagar at 09:30 hrs. every Sunday. The service began on 23.09.2018.

To fulfil the commitment of the Chairman Railway Board (CRB) during his visit to Farrukhnagar on 29.03.2018, the weekly steam train "Swachhata Express" was inaugurated and flagged off on 15.09.2018 by the CRB, Ashwani Lohani, who is also the Working President of the ISRS, along with other officials of the Northern Railway. It is envisaged that this



steam ride will attract tourists and steam enthusiasts from all over the world, thus increasing tourism in the region.

Presently the train is being hauled by WP7200 AZAD, a 1947-built broad gauge steam locomotive. The locomotive has been restored to its pristine beauty and mechanical engineering perfection. Its revival has been carried out at Heritage Steam Shed, Rewari and DEMU-Shed, Shakurbasti.

During each run at public enthusiasm has been very visible. Train timings are as follows:



04445 GHH-FN		STATION	04446 FN-GHH	
Arr.	Dep.		Arr.	Dep.
-	09.30	Garhi Harsaru	12.00	-
09.53	09.55	Sultanpur Kalia was Halt	11.30	11.32
10.15	-	Farrukhnagar	-	11.15



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Electric	Δ	Δ	Δ	○	--	--	Δ
<b>Passenger Coaches:</b>							
Conventional	Δ	Δ	Δ	--	Δ	--	Δ
High Speed	Δ	Δ	Δ	--	Δ	--	Δ
<b>Freight:</b>							
Conventional	Δ	--	--	--	--	--	Δ
Heavy Haul	Δ	--	--	--	--	--	Δ
<b>Mass Transit:</b>							
Metro Cars	Δ	Δ	Δ	Δ	Δ	○	Δ
EMUs/ DEMUs	Δ	Δ	Δ	Δ	Δ	○	Δ

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## RAILWAY TIDBITS

'lb' in Odisha is the shortest name of a railway station in India.

The longest is in Andhra Pradesh, Tamil Nadu, called '**Venkatanarasimharajuvaripeta**'. That's quite a mouthful!

The railway station of Navapur is built in 2 states; one half of it is in Maharashtra and the other half is in Gujarat.

'Samjhuta Express' (also called the Friendship Express) - that runs between India (Delhi and Attari) and Pakistan (Lahore) was started more than 40 years ago on July 22, 1976.

It was discontinued on Jan 1, 2002 in the wake of the terrorist attack on the Indian Parliament on Dec 13, 2001. Service resumed Jan 15, 2004. It was again suspended following the assassination of Benazir Bhutto on Dec 27, 2007.

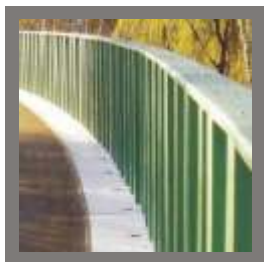
The **first Railway Budget to be telecast live** was on 24 March 1994. Lalu Prasad Yadav, who remained Railways Minister from 2004 to May 2009, presented the Railway Budget 6 times in a row.

Over a million non-Muslims were evacuated by rail during the peak period from August 27 to the end of November 1947 and over 1.3 million Muslims in the opposite direction.

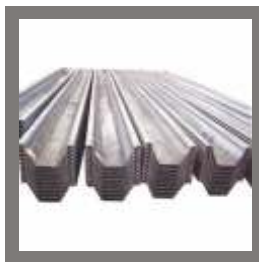
These refugee trains were known as "India Special" or "Pakistan Special." (Source: The Last Journey: Exploring Social Class in the 1947 Partition Migration).

It was more than **50 years** after the formation of Indian Railways that **trains finally had toilets**, thanks to a passenger named Okhil Chandra Sen who wrote an angry letter to a railway office in 1909 complaining about their absence.

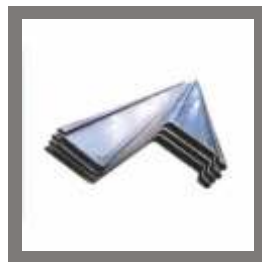
A transcript of the letter is on display at the Indian Railway Museum.



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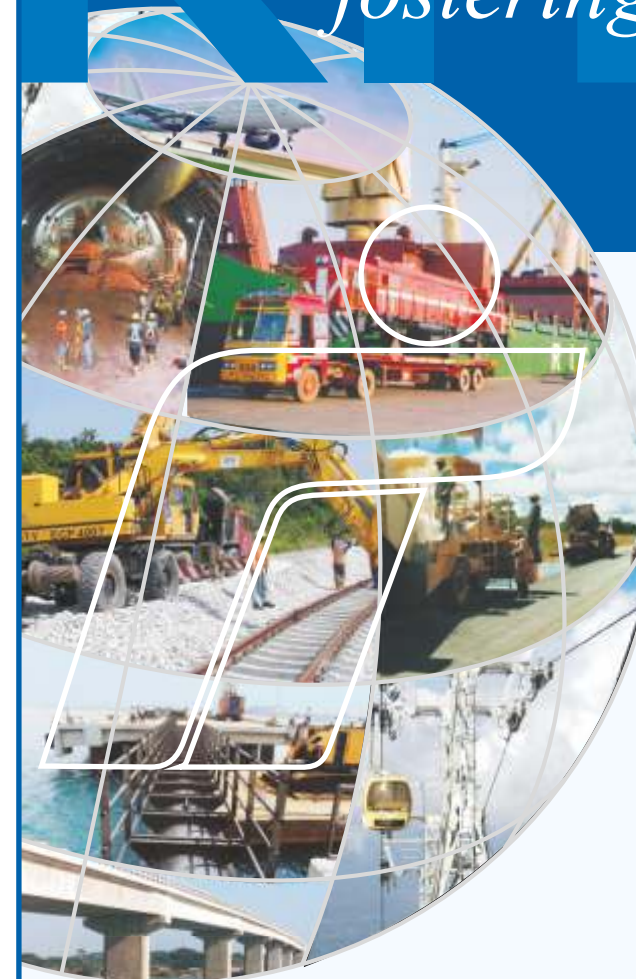
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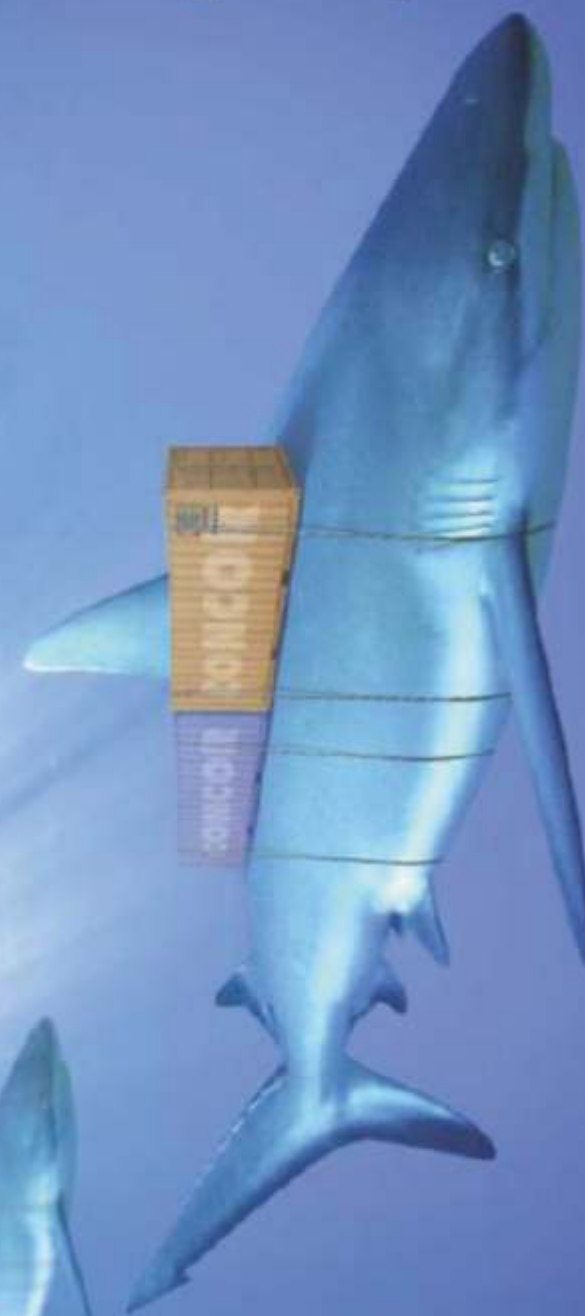
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