The RAIL enthusiast

₹ 100

Vol. 1 No. 2 December 2016

The Rail Enthusiats' Society Quarterly

RAIL MODELLING

Kalka-Shimla Railway

TRIP REPORT

NG TIME WARP

PHOTO FEATURE!

Steam Loco at RIGA

Patiala State Monorail Tramway

The Patiala State Monorail Tramway (PSMT) was a unique rail system constructed by Maharaja Sir Bhupinder Singh of Patiala for movement of people and goods in his state. It operated in Patiala state between 1907 and 1927. PSMT was based on the Ewing system wherein rail-guided vehicles use a balancing wheel for balancing. 95% of the load is taken by the single rail and the remaining 5% by the balancing wheel. The PSMT can be seen at the National Rail Museum at New Delhi where it is one of its many exhibits.

A Magazine
of the Rail Enthusiast,
by the Rail Enthusiast &
for the Rail Enthusiast

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Musings of the Editor...

The first step toward change is awareness.
The second step is acceptance.
– Nathaniel Branden

***The Rail Enthusiast**, launched on the 6th of August earlier this year, was our first step towards change – a change that envisages the recognition and appreciation of the rail enthusiast; a change that sees more and more persons of the automotive generation being attracted to the fascinating world of rail lovers and addicts; a change that creates awareness of the realm of the railway in the general public. It pleases us that some of these changes, though embryonic, are appearing as shafts of light at the end of the tunnel. The first issue has certainly been a catalyst to show-case the enormous and diverse aspects of the interests of the rail enthusiast.*

*You now have the second issue in your hands. We hope that with this copy we will move from the stage of awareness to acceptance. Just as a performance, however good, is of no consequence if its audience does not appreciate it, a magazine is of no significance if its readers do not acknowledge and value it. We would, therefore, like to place on record, the overwhelming and encouraging feedback, mostly verbal, that we received from readers of the first issue of **The Rail Enthusiast.** Not all the feedback was positive, but by and large, most readers acknowledged our effort and welcomed the advent of this new magazine dedicated to the rail enthusiast. Thank you, dear readers!*

We not only appreciate constructive criticism but actually welcome it. We hope and expect that your feedback will be forthcoming for this issue as well. It is only when we know what you feel about the magazine and its highs and lows that we can strive to improve it.

In our first issue, we took you through a large gamut of subjects relating to the railway: from trips in India to one in Siberia, from history to present day photo-features, from toy trains to sports, from an assortment of vintage gold passes to rail nostalgia, news and events and rail humour. While we will continue some of our features and make them regular, it is our intention that we introduce you to as many aspects of rail enthusiasm as possible. In this issue, we are entering the alluringly attractive hobby of rail modelling. This is an interest that is still nascent in India although a significant number of rail modellers already exist. One of the latter, Ranjeev

Railway station at Dharampur in miniature

The steam locomotive at Riga

Dubey, recounts how he has miniaturised the Kalka-Shimla Railway. This is a railway that many have travelled on, or even if they have not, they have seen it from the road on their way to Shimla, and can thus relate to it. In another article, T.R. Raghunandan records his visit to Pendon Model Railway Museum in the UK. The museum is an excellent example of a 1930s Oxfordshire countryside in miniature with a railway running through it. In both models, the one Ranjeev has built and the one visited by Raghu, the attention to detail is not only amazing but virtually unbelievable when you see the pictures that accompany the articles.

Present day double-decker coach

One of our regular features is going to be the "Photo-feature". After traversing the picturesque Shindhawane Ghat in our inaugural issue, we now bring you some stunning pictures by Dileep Prakash in black and white of the steam locomotive at the Riga Sugar Company Limited at Riga near Darbangha in Bihar. These black and white pictures certainly add colour to the magazine by their composition, simplicity and perfection.

Among the other features that we aim to make regular are Interview, History, Then and Now, Humour on Rails. In this issue, we have interviewed Sir Mark Tully, one rail enthusiast you will find at any function or occasion to do with rail heritage. In spite of his 81 years, he was seen climbing energetically on to the Fairy Queen at the steam run organised by the Indian Steam Railway Society in November this year. The completion of the last link between Calcutta and Bombay is covered in the History feature. Vinoo Mathur connects this linking to its reference in the famous book, ***Around the World in 80 Days,*** *penned by Jules Verne a century and a half back. In the Then and Now section, we tell you about the first double-decker passenger coach that ran on the BB&CI Railway almost 150 years back and compare it to the present day such coach. We hope that our Humour on Rails section becomes as well-known as the Humour in Uniform that had been popularised by the Readers' Digest.*

One of the feedbacks that we received was that the magazine is too heavy – not heavy reading but physically heavy. We have thus reduced the number of pages and used lighter paper. But do not fret: the magazine still contains a variety of articles and write-ups that we trust you will find interesting as well as informative. We are working on a section for children and will include it in our next issue.

Since this magazine is meant for rail enthusiasts, I would request the reader – the rail enthusiast – to tell us what areas they would like us to include and what is redundant. Therefore, please keep writing to us or be in touch through any means that you find convenient.

Happy rail-fanning and happier reading,

(J L Singh)
Editor

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Feedback

It is our endeavour to give you the best; we can do that only by knowing what you are looking for. Therefore, we are always open to your thoughts, suggestions, ideas, criticisms, and so forth. It would be best if you can put these down in the form of a letter or an email. We have received a lot of feedback but most of it has been verbal. Some of the emails received are reproduced below...

Dear Editor

Thanks for providing me a copy of **The Rail Enthusiast** magazine. I took it with me on my trip to Hyderabad last week. A rail magazine on my air travel left my fellow passengers a little puzzled, but my feeling was that of nostalgia. The first edition of the magazine made me miss the trains a lot more and I think it won't be wrong to say that I officially became a rail enthusiast on board an aeroplane!

All the articles in the magazine were really interesting and the photographs were an absolute delight. Once I finished the magazine, I went through the photographs all over again. I must compliment the fact that despite the magazine being rail-based, it was easy for me to comprehend (as a non-railway person). Any technical word, which was likely to confuse me, was explained as required. Thanks so much for that!

After reading the first issue, I can't help but compare my train journeys to my flights. I know these are totally different modes of transport, with each having its own merits. As I write this, I am flying at a speed of about 800 kms an hour at 25,000 ft. From this far and height, it does get a little meaningless even to look out of the window. This plane is just physically transporting me to a new city, but the trains do not only take me to my destination, but also to all the places they go through. Please help me with the membership.

Thank you so much!

Regards,

Prem Agarwal *(through email)*

14.09.16

Editor: *Prem is now a life member of the Rail Enthusiasts' Society*

Dear Editor,

Thanks for the two copies that arrived safely and in good condition yesterday.

Purely personally I have to admit it's so much nicer and easier to read as a hard copy–and having done so I'm even more impressed with the content, editorial design and overall quality...

Needless to say I enjoyed your own article about your trip to the north-east. When I did roughly the same route in early 2012 the museum at Margherita was nearing completion and the three locos were in only a red oxide undercoat. Here's a photo.

***(Editor** – Please see picture below)*

When we meet up it would be good to know your thoughts on the subscription for overseas members who'd prefer a hard copy of the magazine each time.

Best regards,

Paul Whittle *(through email)*

Vice Chairman

Darjeeling Himalayan Railway Society

14.10.16

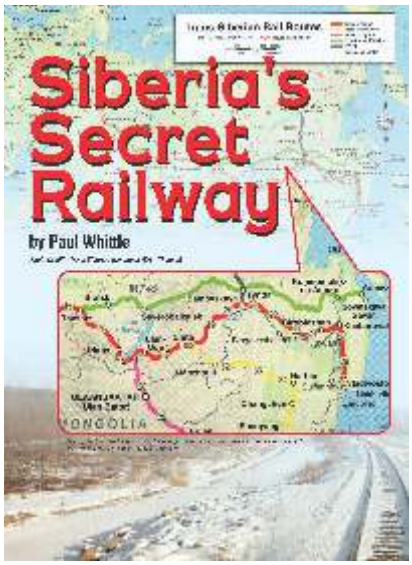
Editor: *Towards the end of the Magazine, you will find the rate for hard copies of the magazine in Europe and the Americas. You will also find subscription of society membership by foreign nationals*

Feedback

Dear Editor,

"The Rail Enthusiast" has left me feeling very emotional & nostalgic.

"Siberia's Secret Railway" evoked memories of my trips to Siberia, Lake Baikal & Mongolia. My younger daughter dropped in Lake Baikal when she went to see how a fisherman was catching fish after cutting a hole through the thick ice (month of May). The ice cracked beneath her & she fell into the frozen water!



The **"Toy Train's Final Act"** also sent me back to my childhood days of mid 1930s. My father was a Colliery Manager in Dalta Colliery Juner Deo. On my way back from School, we travelled on these trains & the names Itwari, Chhindwara and Parasia flooded my mind with nostalgia. In fact, in Darjeeling, the whole School had to travel by DHR to Siliguri. All this makes me feel that no modernization (conversion to BG, use of electric and diesel locomotives) should be done on some such routes.

The photos of **"Shindawane Ghat"** are really breathtaking. Wish I could have

gone there. Congrats to Apurva Bahadur & his team. The same goes for **"Trains in the Monsoon"**.

The Article on **Gold passes** was out of the world. I had and still have a penchant

for getting one. Having risen only up to silver (when I quit the Railways) my craving for a gold pass still remains. I envy Israni.

My work takes me to Tinsukia. I am astonished at what you have written in your article on the NF Railway. Did not have a clue that I have been bypassing all this.

Regards and all the best for your future issues,

P.C.Sen *(through email)*

16.9.16

***Editor** – At 86 years, P.C.Sen is the oldest member of the Rail Enthusiasts' Society*

Dear Editor,

I have read your magazine and overall I liked it very much. The modern layout is in my view very appropriate. Despite being interested in the railway heritage, we should not be perceived as just nostalgic people, if we want our work to be accepted as culturally important.

The quality of some of the pictures was a bit low. I don't know if it was due to the lack of a better original or if it was a printing error. The paper quality is a bit heavy for our standards. So there may be room for optimisation. The article from Alexander Karnes could have been a bit shorter for my taste. I liked the maps showing the locations featured in the article and in particular missed them in the articles about the two toy train networks.

Regarding the content I have two suggestions:

1. Articles that explain how the railways work; e.g. operational procedures, signalling systems, rolling stock. Not at the detail of an educational article but on a principal level. As I understand, the railway fan scene is still at the beginning in India regarding organisation and exchange. What I often observed here in Europe was that even hard-core fans had barely a correct knowledge on how the object of their desire really worked. Therefore, this suggestion.
2. Articles about historic developments in railways which are less based on personal experience but material facts; e.g. descriptions based on archive material on how a technical development took place or why decisions were taken in the way they were. I know that requires access to archives and historic photos but it can add value to a publication.

If you think I may be able to contribute to your magazine, get back to me, please. I was a bit surprised that the preservation of the cultural heritage is still somehow at the beginning in India, which I had to learn at the conference but also at some other visits we made. India is a country of such a rich heritage and has much to give to the world.

Joining your society is a nice idea. I have just to figure out how to pay the subscription, since India is not in the standard payment network available to me.

Best regards,

Heimo Echensperger *(through email)*

Dipl.-Ing. (FH), MSc

Vice-President and Treasurer

FEDECRAIL - Europäische Föderation der Museums- und Touristikbahnen

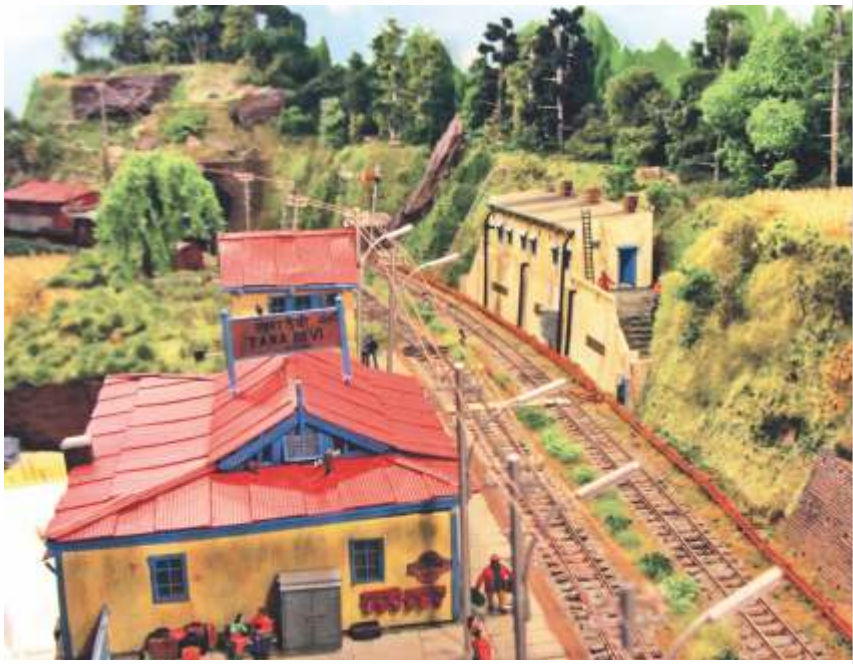
Recreating the Raj Railway in Miniature

Ranjeev C Dubey

Stopping Time (the Prequal!)

There are at least three ways to experience history outside the pages of a book. You can visit a monument to get a sense of the scene where history has unfolded, as for instance the Qutab Minar. You can experience living history, visiting Jaisalmer fort for instance to see how people prospered within its walls. You can also experience recreated history, as in period theatre, or in viewing the exhibits of a museum. I like to reproduce history in miniature in 3D. In my hobby room in Gurgaon, I have a model of the Kalka Shimla Railway (KSR) as it existed on September 14th 1971. It may be a scale model, but I have tried to make it as true-to-prototype as I cared. So far, as of September 2016, I have built five stations: Dharampur, Barog, Solan, Solan Brewery and Taradevi. All that remains on my bucket list of planned eight stations are Kalka, Summerhill and Shimla. Whether I succumb to temptation and build two more stations beyond my bucketlist – Kandaghat and Kaithleeghat seem like good subjects – depends on how many modelling years I really have left!

As the layout stands today, the journey begins at an unnamed train staging yard somewhere in the plains from which a single line climbs up a succession of punishing loops till it arrives at the lovely hillside station of Dharampur. Dharampur has two passing sidings, a small turntable and a trolley shed. It could well have been my lower terminus, but why do what the railway doesn't? I have accurately modeled Dharampur's evocative station building, signal cabin, *chai* shack and pump house, as also its trolley shed and turntable. On the prototype, Dharampur lost its goods shed and siding sometimes in the mid-1990s, twenty years after my chosen model date. I have also tried to model as much of Dharampur in the background as space allowed, which is as always way too little. You can spot the little temple in the back, as you can the first line of houses by the road curving around the north end of the station. Space is a railway modeler's greatest enemy, and I have my share of miseries!



A view of Taradevi station

From Dharampur, the climb continues. The line snakes up the pine forests and through KSR's longest tunnel to Barog station. Barog has long been the half-way refreshment stop for passenger expresses running up to Shimla. I have accurately modelled every building there is in Barog, including especially the Railway Refreshment Room. Barog as built is lush, moody and a bit claustrophobic, exactly as the prototype is. If you shut your eyes and breathe

RMC No. 6 on Dharampur loop

Solan Brewery - South view

Taradevi temple

deeply, you can still smell the omlette-butter toast being served there.

On the prototype, Barog is the highest point on the line thus far, after which the line slowly drifts down into Solan. Not for me, it doesn't. Because of the nature of my track plan, the line begins another long climb, the longest on my railway, to the south tunnel of Solan. I did not have the space to model the extensive town buildings behind the station, but those that I could represent in my limited station areas have been accurately modelled as they existed in 1971. Solan lost its goods siding about 1989, so don't be surprised if the model doesn't look like the station if you visit it today.

Past Solan, the line continues its climb till it reaches Solan Brewery. Solan Distilleries paid for the construction and maintenance of this evocative little gem, but it still bears the indelible mark of a KSR design. It featured a passing loop. A third goods loop permitted direct loading of Old Monk Rum, Solan No. 1 and Golden Eagle Beer from the brewery store. When trucks became more efficient as a means of transportation, the station fell into disuse till the railways shut it down some years back. The extra tracks were removed and the station building sealed. I was last there about 2005 and photographed the station while it still functioned. My model is a good representation of the station area, but I really do need to replace the viaduct at the northern end of the station: it is too basic and not of a standard I can accept. That said, the station building is almost as pretty as the original!

Our journey up my railway now takes us to the northernmost station on the route yet built: Taradevi. This beautiful S-shaped station hangs on a narrow

ZDM3 No. 155 and KC No. 520 at Solan

ZDM3 No. 155 exits Barog tunnel

ledge above a stiff slope, within sight of Shimla. I have modelled not just the main station area, but the staff quarters as well. I had to relocate the temple to a spot above the station because of space constraints, but the *Devi* still reigns on the top of that hill! Taradevi is just as green and overgrown, exactly as the prototype.

Our journey continues north thereafter, but not too far. Summer Hill awaits creation, after which the tracks will reach Shimla. I expect the railway will be completed as planned by the end of 2020.

In the meantime, stock and locos have been more or less accurately modelled. Most of the 'power' is done: two each of the endemic KC class and ZF-1 class steam locomotives, two each ZDM1 and ZDM3 diesel locomotives and one ZDM2 as well. I even have a derelict Class TJ 2-6-2+2-6-2T rusting in a

ZDM-1 No. 743 passes a bunch of climbers

Miniature train switching lines

siding, which unlike the prototype, never got shipped to Pakistan after partition! Of the railcars, the line already has No 2, 5, 6, 11, 12 and 14. In addition, a variety of accurately modelled four-wheel and bogie wagon stock – open flats, box wagons, gondolas and tank wagons – ply these tracks.

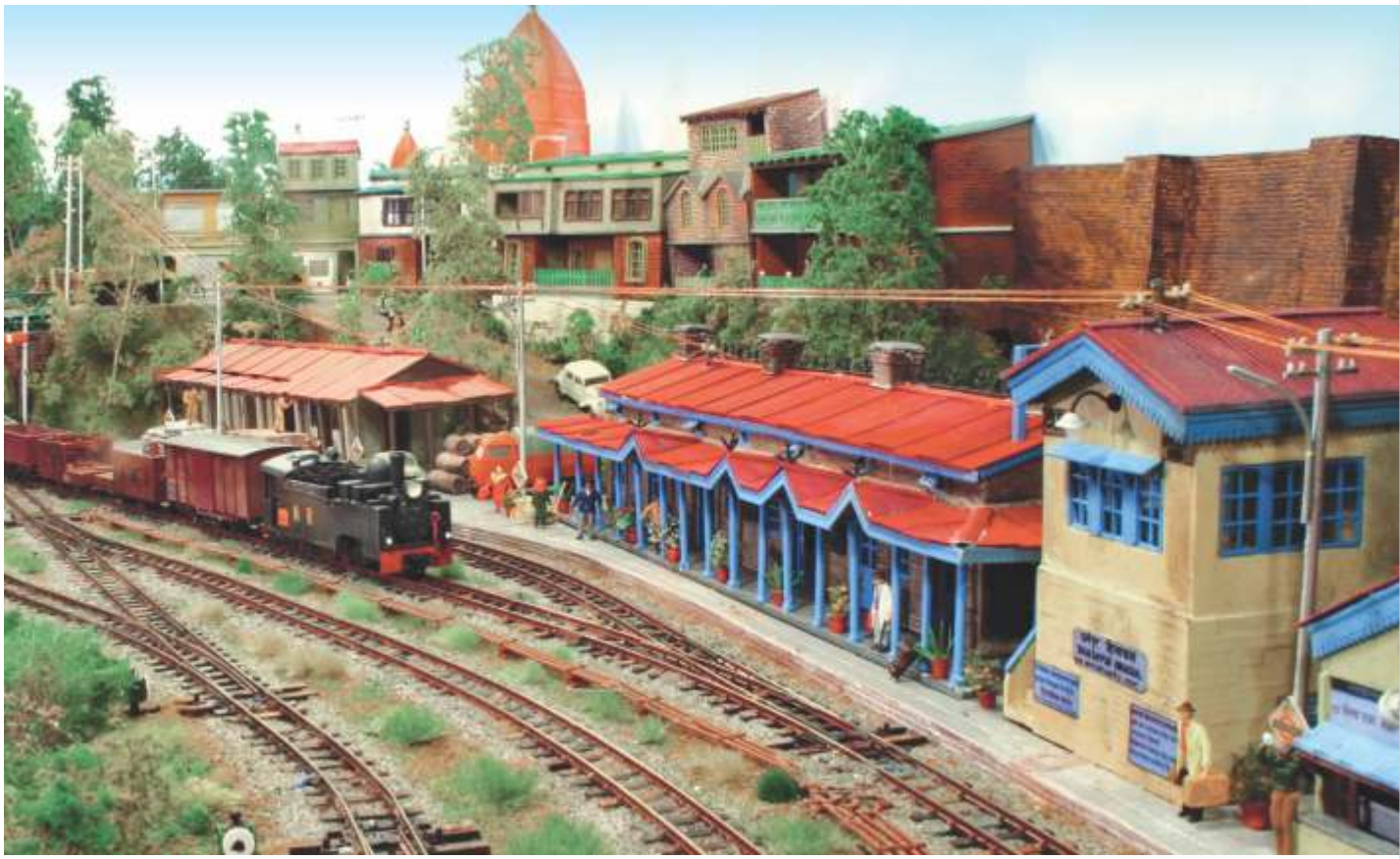
The KSR has long been my lifetime railway project. I have dreamt of building it since at least the mid-1980s. In 2009, I finally acquired the resources to start planning the build. The railway has been six years in the actual building. Given that almost everything is scratch built, five stations in six years, I am sure, classifies as a pretty steady trot! Which leaves open the question: how on earth have I gotten here? I mean, for a first generation migrant from Jammu to arrive in Delhi to practice law in the killing fields of Tees Hazari courts, build himself a home in Gurgaon and then proceed to build a model of a Himalayan Railway line which exists in Himachal Pradesh is not your everyday plot. The story is worth telling, I hope, but it will have to wait for now! What may deserve more immediate telling are the techniques employed in building such a model.

In truth, it's really very simple. This above all remains a universal reality: if you take any problem and break it down into its components, the solution

Solan station on a curve

to the problem becomes completely obvious. And so it is with building model trians. If you build a model railroad, what do you use for a base? You can use a wooden base, or you can use a plastic base. I use plastic: not your normal hard plastic but very light weight blue foam normally used for insulation in the construction industry, procured from a wholesaler in Raja Garden. Onto the foam, I attach 3mm cork sheet from the gasket manufacturing industry using white wood glue, a.k.a. Fevicol. My stocks of cork sheet come from Kashmiri Gate. This allows me to now lay down the track.

ZF-1 No. 119 coasts into Dharampur



Another view of Dharampur station

KC No. 520 awaits the north start signal at Barog

Dharampur station receives RMC No. 14

Road along the track

To lay down any track at all, we need to decide the 'scale' in which the railway is to be built. The Kalka Shimla Railway is narrow gauge with a track width of 2.5 feet. I settled on 3.5mm to the foot scale on a track gauge 9mm wide, a popular scale gauge combination, commonly called HOe in Europe and 'HOn2½' in America. A variety of English, American, German and Austrian manufacturers offer track in this size. My track is stuck down with white glue, after which the sleepers and rail sides are painted using Acrylic paints to increase the realism. I use river sand to represent ballast used to hold down track on the prototype. How do I plan each station? I have hundreds of pictures of KSR stations taken over the years. I merely follow the prototype, eliminating the need for imagination! If the station is built on a curve, space permitting, I build mine on a curve too, and place the turnouts where KSR's management did. Once the track is down, it has to be electrified, and this requires soldering, at which skill, despite 40 years of hard labour, I am still remarkably bad. These days, locomotives have chips inside them which control systems directly address, so there isn't that much rail electrification to be done. At this stage, the layout can be tested thoroughly, using scale model locomotives and off-the-shelf wagons and coaches.

Once you get past the stage where everything works electrically, the fun part begins. This is where the engineer in your heart yields to the artist. All my builds are patterned after those actually found along the line. I have taken measurements where I could, and where I could not, I have made intelligent

Repairing Dharampur road bridge

A general view of Barog station

guesses. Once you know that a brick is 9 inches long and 3 inches high, all you have to do is count the number of bricks to know the length and height of a building. I build my buildings out of HIP sheet procured from Paharganj, though I may occasionally use readymade plastic window castings from European manufacturers if I can find them. I do the same with locomotives and wagons. Manufacturers offer a variety of locomotives and stock that run on 9mm gauge. My data base has leading dimensions of all of KSR's stock and power. All I have to do is find a suitably sized underframe, buy it, throw away the body, and build a new KSR body to represent an endemic loco.

That leaves only the scenery, but this is a secret I will share with you if you write to me and tell me that you enjoyed the story so far. Try **rcd@nsouthlaw.com** or **ranjeevdubey@hotmail.com.**

Photos: Courtesy the author

Dharampur station receives RMC No. 11

TRIP REPORT

A Narrow Gauge Time Warp

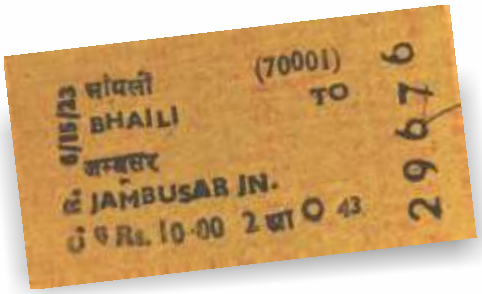
Adrian Shooter

Adrian Shooter's B-class locomotive on the grounds of his residence in the UK

In October 2016, after a short visit to Delhi, I found myself on the Rajdhani Express to Vadodara, formerly known as Baroda. Arrival was at 0425 which, at least, had the merit of meaning that the ride to the National Academy of Indian Railways was pretty short on the empty streets.

I had come to Baroda to meet my friend, Sachin Sharma, a career railwayman, who was the Senior Professor, Management, at the Academy and who had invited me to come and present to some of his students and other Indian Railway officers. To encourage me to accept (although I was very happy to do so) he suggested that I might like to see something of the 2'6" Narrow Gauge railways in the area.

Later, on the morning of my arrival I was taken to nearby Pratapnagar Diesel Loco Shed where regular maintenance was performed on 26 ZDM5 Diesel Hydraulic Locos. These 22-ton B-B machines were introduced to replace steam engines which last ran in 1995 in this area and are powered by a 450 hp



Cummins engine which drives a Voith Hydraulic transmission.

The whole Narrow Gauge visit was very kindly organised by Senior Divisional Mechanical Engineer, H.C. Jagid, who I first met at the shed. There I was shown around by his young Depot Engineer, Bremod Meena, and Senior Section Engineer, Sunil Kelkar, who were responsible for managing the 95 staff. They told me that the locos were very robust and reliable and that it was rare for them to cause any problems. This, they suggested, was partly because they were lightly loaded on almost level routes and, although designed for 50 km/h, did not exceed 20 because of the poor state of the track.

Pratapnagar Shed had formerly been connected by narrow gauge lines to most of the extensive network which had existed in the area at one time. By now, however, conversion to Broad Gauge and closure of some lines, meant that the Shed was only directly linked to the 30-km line to Jambusar Junction, itself simply a terminus, rather than a junction, as a result of closures. This meant that locos from other lines were brought to and from the shed on Broad Gauge

Driver Kalpesh Gandhi at the control of the NG diesel Locomotive

(1676 mm) transporter wagons every six months or so in order to receive scheduled maintenance. Whilst the locos were working elsewhere, staff went out by road to service them from time to time.

The shed has the capability of repairing and rebuilding most parts of the loco including bogies, the Cummins Diesel Engine and auxiliaries like the belt driven compressor and exhauster. This latter is required because this is one of the very few remaining sections in India, or indeed the world, that still uses vacuum brakes. As a mechanical engineer myself, I must admit to having a soft spot for the good old vacuum brake and it was a great pleasure to see the system working faultlessly the following day.

Later on Friday, I was shown the very good small museum in the Railway Institute building and noted, amongst some very interesting displays, a series of photos of steam engines on the NG taken in 1988 by my old friend, Peter (Fuzz) Jordan. Fuzz gets everywhere there is steam and, through his company Darjeeling Tours, (www.darjeelingtours.co.uk), takes people to see and enjoy it.

On Saturday, Sachin and I presented ourselves at Pratapnagar station in time for the train to Jambusar

Young train passengers

View of Pratapnagar Diesel Locomotive shed

where we found that the usual 3, not very full, coaches had an addition in the form of the NG Officer's saloon, newly painted in bright orange. The train was headed by ZDM5 No. 537 which was driven by regular NG driver Kalpesh Gandhi assisted by Narendra Meena. The guard, dressed in immaculate whites, Rakesh Shukla, on the other hand, worked Broad Gauge as well as NG trains.

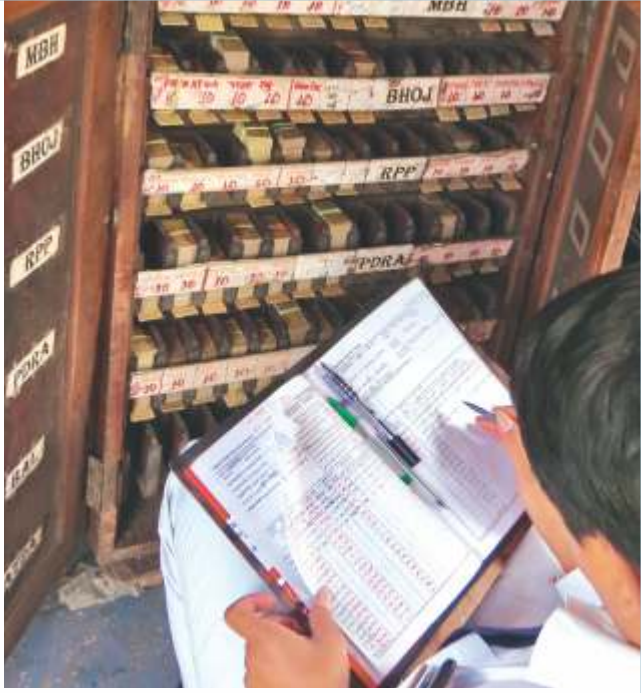
We had the best view from the rear of the saloon which had a desk and full width rearward windows. For the first couple of kilometers we ran alongside a single Broad Gauge line, itself recently converted from NG.

Broad Gauge line alongside the Narrow Gauge line. Note that the BG line has colour light signals while the NG line is with semaphore signals

After that we continued alone and soon found ourselves in the countryside where most of the land was under cultivation. There were many crops including fields of the ubiquitous marigold which is used all over India for ceremonial purposes. Tractors were outnumbered by pairs of oxen used to draw single furrow ploughs which produced some very neat and tidy fields. The whole impression was of well run small but productive farms. One of the reasons for the rather slow journey, apart from the low speed, was the frequent stops. Most were for minor level crossings which were not busy enough to merit an attendant but did need closing off to ensure no accidents took place. A mobile crossing keeper, therefore, came with us and, as the train came to a stand, put a chain across the road and then cleared it after it had drawn forward. Another time I was able to note the efficiency of the vacuum brake, including the emergency rapid application feature housed in the "setter" in the saloon, when our driver, Kalpesh, spotted two donkeys almost under his engine. Another first for me!

Mobile gate man putting chain across the road

Saloon on which Adrian Shooter travelled



The ticket window at Pratap Nager station. Old Card Tickets are still in use.

After some 3 hours for the 30 kms, we pulled into Jambusar Junction which looked as if it may once have been a busy place before the advent of cars, tuk-tuk's, buses and lorries. Some of the track associated with the closed branches remained and disappeared off into the scrub whilst, back at the broad, deserted, platform there was the full range of offices including guards and drivers box rooms (separate obviously), a parcels godown, station masters office, all closed. Surprisingly, the one which was not closed was the First Class waiting room despite the fact that it must have been 15 years since a train with First Class had called and, probably, many more since there had been any First Class passengers.

This line is a fascinating backwater. A time warp which does not appear to serve anyone much as a means of transport any more. You can get by bus or tuk-tuk the full length of the line in half the time the train takes. It would, on the other hand, be nice if it could be retained. It would fit very well with some of the other amazing tourist attractions in the area and, if smartened up a bit, be very popular with tourists. The saloon that I had the privilege of riding in could easily be let out for quite a substantial sum and the line, being reasonably level, need not be expensive to run.

If you get the chance, enjoy it while you can.

Photos: Courtesy the author

Adrian Shooter is the quintessential railway man and rail enthusiast. He not only ran and managed rail networks but also contributed his might to the cause of rail preservation and rail enthusiasm. A brief account of his colourful career as well as his current activities is given in the following pages.

Adrian Shooter

J L Singh

Adrian Shooter at Rewari steam shed in 2015

Sixty eight year old Adrian Shooter is no stranger to India. I first met him at the Indian Steam Railway Society's 12th Annual Congress in February 2015, having the privilege of accompanying him on a visit to Rewari Steam Shed. I interacted with him once again on the sidelines of the APHTRO conference in New Delhi in October 2016. His love for the railway was obvious and came through whenever you talked or discussed the subject with him.

He began his career as an Engineering Management Trainee with British Rail (BR) in 1970. After a series of appointments covering sixteen years in management positions with BR, he was appointed Managing Director of Red Star Parcels, a Customer Facing Organisation in 1987. Following this, starting in 1989, he was one of five Directors reporting to the Chief Executive of BR, who between them managed all BR Businesses. He also assisted BR with aspects of privatisation.

From 1993, till he retired, Adrian was Managing Director, Chiltern Railways, and Chairman, Laing Rail Ltd., a Division of John Laing Rail plc. In his latter capacity, he was responsible for Chiltern Railways, London Overground, DB Tyne and Wear Metro, Alltram Ltd. and chaired the Boards of all these companies. Under his stewardship, Chiltern grew its business faster than any other train operating company. Safety, punctuality and customer satisfaction ratings were at, or very close to, the top scores for the industry for the whole of that time.

In addition to the above, Adrian Shooter had several Rail Industry non-executive Director roles including those with the British Transport Police Committee, Railway Safety and Standards Board (RSSB Ltd.) and Association of Train Operating Companies (ATOC). In the last named, he was a Board Member for seventeen years and Chairman for two.

For five years Adrian was the UK's representative on the Council of European Railways, alongside CEO's of SNCF (French), DB (Germany) and other European Railways.

Since retiring at the end of 2011, Adrian has cultivated a variety of interests including: Chairman of CBI West Midlands and Oxfordshire Region (2012 & 2013), Chairman of Oxfordshire Local Enterprise Partnership, Chairman of Bicester Vision, a Business led growth agent for the area and Advisor to various Companies including Arup, Railroad Development Corporation (USA).

Recently, Adrian has set up a new company, Vivarail Ltd., to create, sell and service low cost trains. He is also non-executive chairman of two "start up" companies in the rail supply industry.

Adrian is a Fellow of the Royal Academy of Engineering, the Institution of Mechanical Engineers and the Chartered Institute of Logistics and Transport. In

On the footplate of WP 7161 at Rewari

Adrian Shooter's 'B' class locomotive on the Beeches Light Railway

2010, he was awarded the CBE "For services to the Rail Industry".

In recent years, along with his wife, he has taken to long distance rallying in vintage cars. Most recently, he spent 3 weeks in Burma with their 1930 Ford. In 2010, they drove the same car all the way from Beijing to Paris.

Of special interest to rail enthusiasts in India is the fact that he owns a Darjeeling Himalayan Railway Class 'B' steam locomotive No. 778 (originally No. 19), which he operates on the Beeches Light Railway in the grounds of his residence in Oxfordshire. Carriages to accompany the locomotive were commissioned from Boston Lodge works. He has built a station that reflects the style of the stations of the Darjeeling Himalayan Railway in a generic way. He owns an Indian Hindustan Ambassador car as well.

Overall, Adrian Shooter is a person who has always been a rail enthusiast with a special love for steam locos, vacuum brakes and other similar items you do not see any more. Today, his interests are not limited to the railroads alone but encompass transportation based adventures of all kinds.

Photos:
Of Adrian - Courtesy the author
Of B-class loco - Courtesy Adrian Shooter

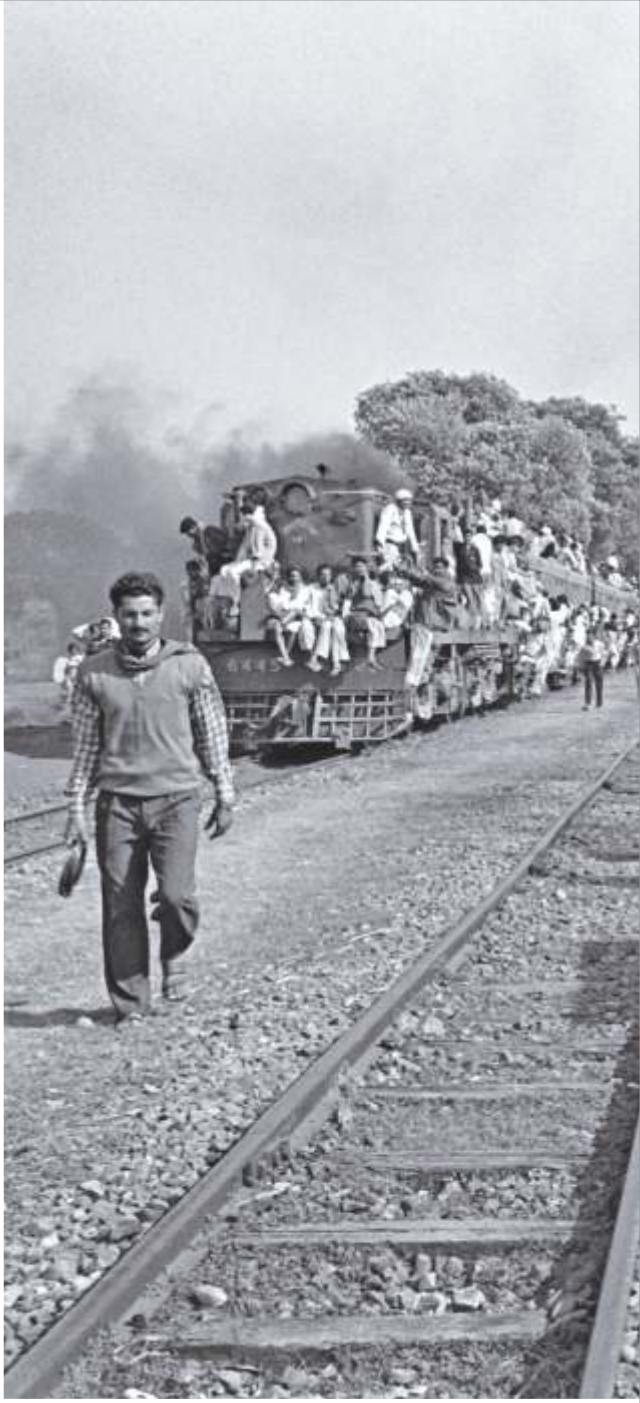
Another view of the B-class loco

PHOTO FEATURE

Steam in Riga

Dileep Prakash

There are some train journeys I can never forget. This was one of the last I took when I was searching for steam all over the country. In March 2003, I boarded the North East Express from New Delhi bound for Darbhanga in Bihar. I was headed for Riga to photograph the steam locomotive at the Riga Sugar Company. Travelling on a budget in 3 Tier Sleeper, I found it difficult even to board the train. The doors were jammed with people struggling to get in with their luggage. It was harvesting season and hundreds of people from Bihar were travelling back to their villages. A young



family of six – a couple not older than 21 and their 4 small children – occupied my compartment. But more than them it was their luggage that took up all the space.

The North East Express became a passenger train. She began to crawl after we crossed Mughalsarai into Bihar and stopped at every little village en-route, reaching Darbhanga in the wee hours ofthe night.

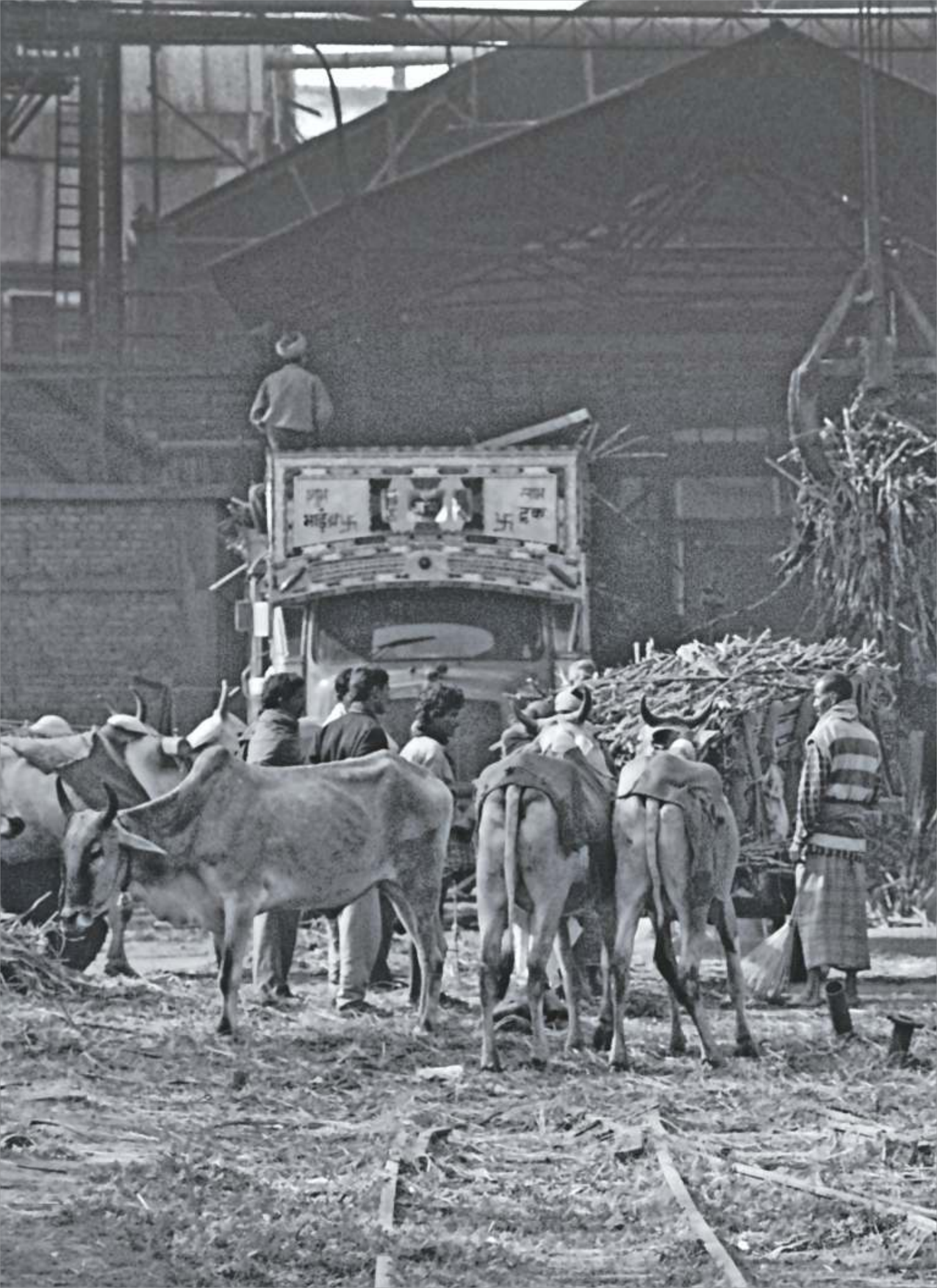
I spent the night in the retiring room fighting mosquitoes, since it was not advisable to venture out to look for a hotel at night. The passenger train to Riga was at 9.30 in the morning. When the train arrived, there was not an inch of space inside. I spent the two-hour ride hanging on the steps of a bogie, as I did not want to sit atop like the others. My arms would get a rest whenever the train stopped. The Guard was kind enough to keep my bags in his compartment.

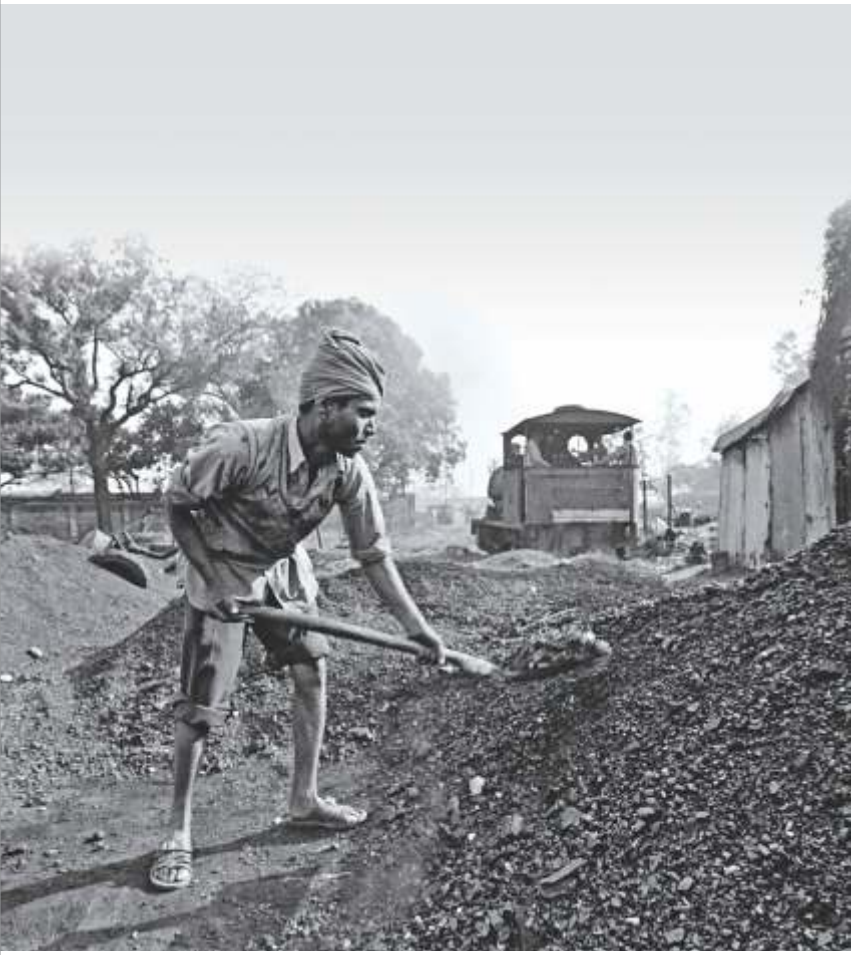
At Riga, I was greeted with the heady smell of a sugar factory along with fine particles of sugarcane bagasse that hung in the air. The guesthouse was rudimentary: a room with a window, a *charpoy* with a mosquito net and an earthen pot with drinking water. The high point was the *Maharaj* who cooked meals in traditional Bihari style. The food was always fresh and delicious with dollops of *ghee* and jaggery, eaten off a brass *thaali*. Sitting on a floor mat, the *Maharaj* would

insist that I eat more and ladle in *daal* and *subzi* along with *rotis*. I stayed for three days and chased the locomotive from factory to main line and back.

Farmers along the Darbhanga-Raxaul line, loaded sugar cane on to wagons. The wagons were formed into a rake and brought into Riga by an Indian Railways diesel locomotive. The Hudswell Clarke steam locomotive would pick up wagons full of sugar cane from the main line and return the empties. The line is fairly short– a little more than a kilometer. Often these duties were performed late at night and these were the most interesting moments when I photographed the steam train.

The Riga Sugar Company Limited owns a meter gauge 0-8-0 Saddle Tank locomotive No. 1644 built by Hudswell Clarke in 1930. They had a second locomotive too, a small Hunslet diesel also built in Leeds in 1935. The locomotives were used to haul sugarcane wagons from the main line to the factory. With gauge conversion the factory gets its sugarcane by trucks and the steam engine lies derelict.





The Photographer

The text and the photographs in this photo-feature have been contributed by Dileep Prakash who is a photographer based in Delhi. Photographing steam trains is his special interest.

His works have been exhibited in India, France, Spain, Germany, Switzerland, the UK, Australia and Cambodia. His books include: Whistling Steam - Romance on Indian Rails (Roli Books 2002); The Anglo-Indians (Photoink 2006) and What Was Home (Photoink 2011).

He is currently photographing British time Dak Bungalows and Forest Rest Houses situated in the forests of Uttarakhand and Himachal Pradesh.

He can be reached at dileep.prakash@gmail.com

INTERVIEW

Sir William Mark Tully

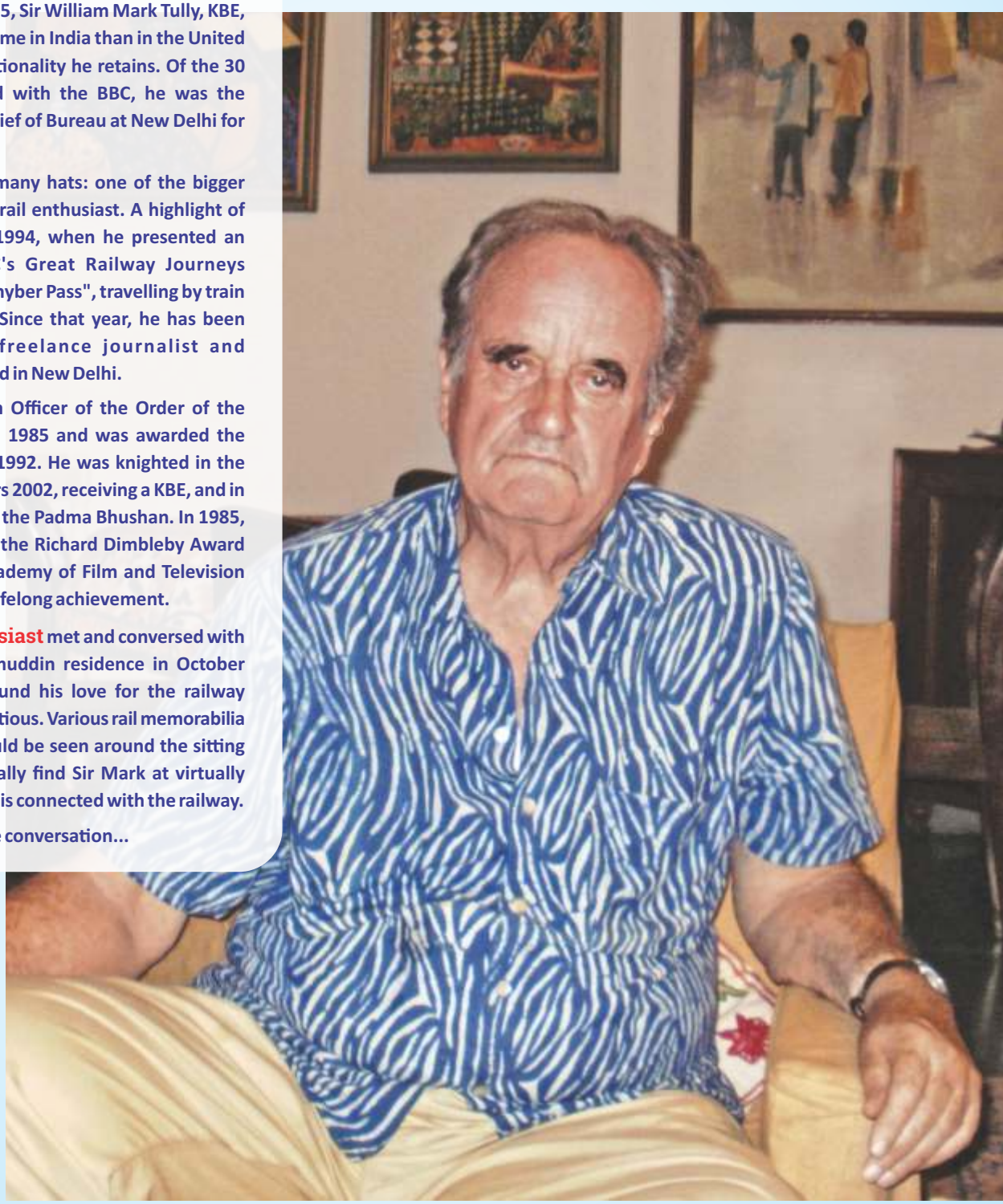
Born in Tollygunge, Calcutta, on the 24th of October 1935, Sir William Mark Tully, KBE, has spent more time in India than in the United Kingdom, the nationality he retains. Of the 30 years he worked with the BBC, he was the organisation's Chief of Bureau at New Delhi for 20 long years.

Sir Mark wears many hats: one of the bigger ones is that of a rail enthusiast. A highlight of this hat was in 1994, when he presented an episode of BBC's Great Railway Journeys "Karachi to the Khyber Pass", travelling by train across Pakistan. Since that year, he has been working as a freelance journalist and broadcaster based in New Delhi.

He was made an Officer of the Order of the British Empire in 1985 and was awarded the Padma Shree in 1992. He was knighted in the New Year Honours 2002, receiving a KBE, and in 2005 he received the Padma Bhushan. In 1985, he was awarded the Richard Dimbleby Award of the British Academy of Film and Television Arts (BAFTA) for lifelong achievement.

The Rail Enthusiast met and conversed with him at his Nizamuddin residence in October this year and found his love for the railway obvious and infectious. Various rail memorabilia and artefacts could be seen around the sitting room. You normally find Sir Mark at virtually any function that is connected with the railway.

Excerpts from the conversation...



The Rail Enthusiast (RE): How would you define a rail enthusiast? What makes a person a rail enthusiast?

Sir Mark Tully (MT): Simple answer: someone who loves the railway; someone who is nostalgic of the railway journeys of the past. On my part, I have a fascination for the organisation of the railway and its problems. As a rail enthusiast I realize the beauty of a train. I always say that it is more difficult to run a train from Delhi to Chennai than to fly a plane or drive a bus over the same distance.

RE: How and when did you become a rail enthusiast?

MT: I have been one as long as I remember. I was born in Calcutta and spent the first decade of my life there. In those days we did not travel as much as we do now. But often, as a child, I found trains going to places one had never been to before. I found Howrah and Sealdah very romantic places. I clearly remember being excited and thrilled by the Howrah station when we went by an overnight train to Puri. I had never been to Delhi or Madras. I am very nostalgic of the rail travel one did in those days. The younger generation will miss what we had when there was only one way to travel. Distances seemed further than what they were. I had once said that I would always travel by train. Far more romantic. I hate flying.

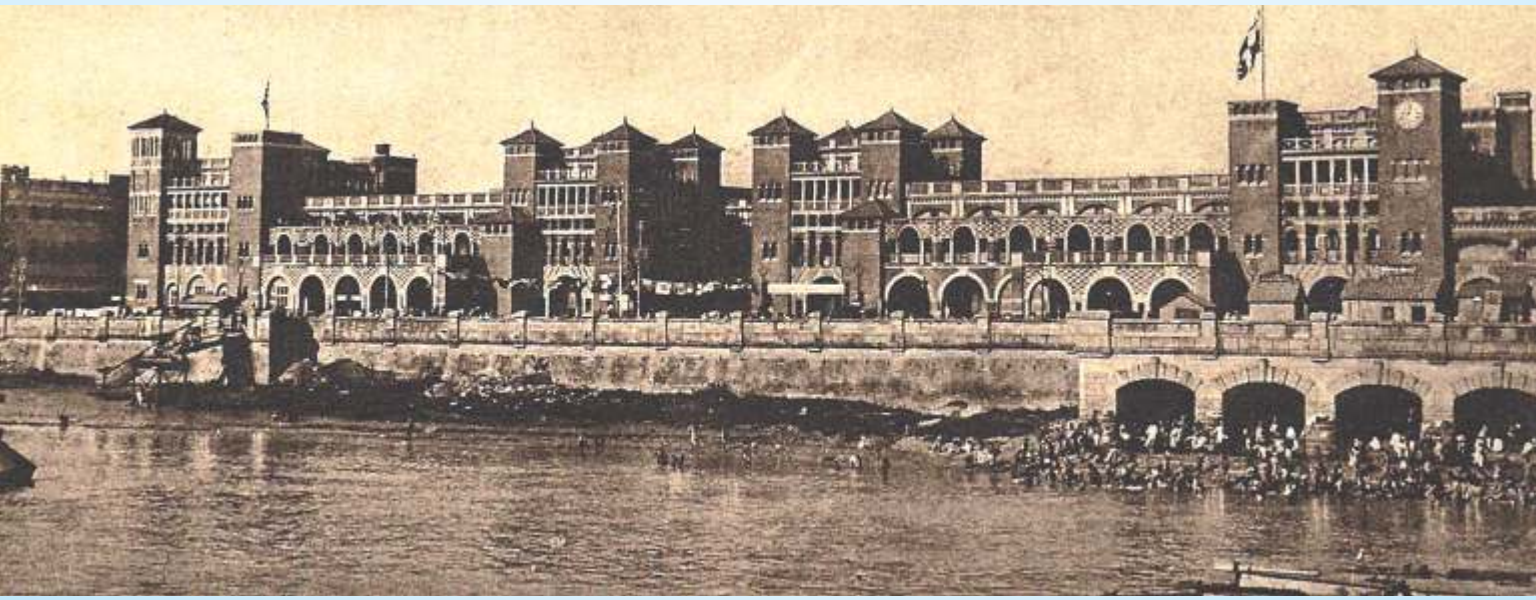
RE: This means that today's youngsters will never have the nostalgic feeling about the railway that us older enthusiasts have. How can we give them this feeling?

MT: Good question; I don't really have a good answer. We must make rail travel really enjoyable. Make it an occasion so that the young people

remember that they have travelled by rail. Basically, make them discover the wonderful feeling of a rail journey. The thing that the railways should bear in mind is to make travel by train special and different. So often, you feel that the railways are an imitation of other modes of transport. There has actually been some deterioration also. Some time back, I travelled by the Nilgiri Express from Chennai to Mettupalayam by the First AC. In the past, the attendant used to make your bed for you. On this trip, I did not see him except when he dumped the bedding on our berths.

Another thing I would like to add. I went on the NIlgiri train to Ooty. There was a steam engine till Coonoor followed by a diesel to Ooty. The carriage was awful. Such a beautiful journey marred by a below par carriage. We certainly need better trains, particularly on routes such as this and Kalka-Shimla. What we need are all glass carriages so that the scenery and the beauty can be enjoyed. What was encouraging though was that plenty of people wanted to get onto the train and the police had to be called in to control them.

The romantic Howrah station of yesteryear. Owing to subsequent construction along the river, a full clear view of the station building is now not possible



Another thing that needs to be appreciated: the miracle of such a small bit of steel (the flange) holding a huge rail vehicle upright and travelling at such a rapid speed.

Of course, it is not an easy task bringing the romance back into the railway. One of the decisions that had been taken by an erstwhile Chairman of the Railway Board, Mr. M S Gujral, to do away with piece-meal loading and only book full trains, was inevitable but sad, as one of the most picturesque of train operations was shunting.

RE: You have written a number of books and articles. Tell us about them.

MT: I have written a number of books but none specifically on the railway. I am now in the process of writing a book with 7 short stories. One of these stories is fully rail-based fiction around the town of Poorvanchal. I have written a lot on the railway in the form of articles but no full-fledged book. I wrote the introduction to Vinoo Mathur's book, **Buildings Bridges and Black Beauties of Northern Railway.** Last year I travelled on the Satpura Narrow Gauge railway when it was on the verge of conversion to Broad Gauge. I later wrote an article* for the BBC on this railway. I had also made a documentary on the Bombay-Howrah Mail about 10 years back.

RE: As one who likes to travel by train, what would you say ails the railways today?

MT: I think that one of the problems with the railway in India is that influential people do not travel by train. I was shocked talking to a senior railway officer about one of my railway journeys. He was surprised and asked, "Do you travel by train?" If such people do not travel by train, they will not use their influence to improve the railway.

A steam and a diesel locomotive at Coonoor station of the Nilgiri Mountain Railway

There is no selling of the railways in India. There is a huge amount of selling in Britain. The Indian Railways have had so much traffic in the past that they never needed to sell themselves but they must do so now.

RE: We would like to reproduce the article you wrote for the BBC on the Satpura Railway in the next issue of our magazine. I hope we have your permission?

MT: You have my permission but I will check with the BBC if it is alright.

Photos: Archives of Rail Enthusiasts' Society

**We reproduce on the next page, the article written by Sir Mark Tully. This first appeared in the Section "Magazine" of the BBC on 13th December 2015.*

Romance of the railway: a train glides across a viaduct

The End of a Much-Loved Railway

Sir Mark Tully

The Satpura narrow-gauge network used to be the longest of its kind in India, stretching more than 1,000 kms (620 miles). But it is now facing closure,

There were once more than 100 narrow-gauge railways in India. They have often been written off as toy trains. The 2ft 6in gauge Satpura engine did look like a toy when I saw it dwarfed by a massive broad gauge engine in the central Indian city of Jabalpur's station where my journey on the Satpura railways started.

But the narrow-gauge railways of India were built for very serious purposes and were anything but toys for those who benefitted from them. The Satpura railways opened up a previously inaccessible hilly area of central India as part of the government's response to the Great Famine of 1878. Before the railways came, there were only bullock carts to carry food to remote famine-stricken areas. They were very slow and couldn't travel long distances.

But India no longer has famines and roads have now been built in the Satpura region – so what purpose has the narrow-gauge train with its maximum speed of just 40 km/h (25 mph) been serving recently?

I once asked a stationmaster on a narrow-gauge line in the western state of Gujarat why so many passengers were waiting for the train at his station, when a main road with faster buses on it ran parallel with the track. He replied with a broad smile: "That's obvious. We are not too particular about ticketless travel. The bus conductors collect the fares." The stationmaster at Jabalpur assured me that passengers on his line did buy tickets.

During my journey, which lasted for some eight hours, I had plenty of opportunities to find out why there were so many passengers on the train. Every few kilometres the train stopped – sometimes at fully-fledged stations with a complete complement

...while others sat cross-legged on the carriage roofs

Diesel locomotive shed at Nainpur

of staff and buildings presided over by a senior stationmaster, and sometimes at what were known as "passenger halts" which were just small huts and served remote hamlets.

At the first station outside Jabalpur, we were greeted by frenetic drummers waiting to accompany a group of passengers going to bathe in the sacred Narmada river.

As I travelled down the line, I met a student who went home from university every weekend. The train was much cheaper than the bus, and anyhow there weren't many buses, he explained. An ex-soldier, recognizable by his formidable white moustache, was on his way to a hospital appointment. He felt the train was "more dignified" than the bus.

A mother with her young child clinging to her hand was going to visit her parents. She believed the train was safer. A group of women carrying heavy bundles of firewood on their heads had saved themselves hours of burdensome walking by taking the train. Several unruly young men told me they were "just time-passing". I thought it unwise to ask whether they too had bought tickets.

Several passengers told me they found the train more comfortable than the bus. I didn't like to think what travelling in the buses was like. The train was so overcrowded that passengers were standing on the steps outside carriages, clinging precariously to the open doorway, while others sat cross-legged on the carriage roofs.

High speeds on broad-gauge lines, and on many mainlines overhead electrification, have rendered the old Indian tradition of rooftop riding almost obsolete. Another tradition which is dying is the variety of food which used to be cooked on railway platforms.

Nowadays passengers are more likely to be offered pre-cooked food or modern branded snacks in environmentally unfriendly packaging. But when my train stopped at Bargi, passengers rushed to buy Hari Singh Thakur's famous fresh samosas served on newspaper, and further down the line at Shikara the sweets Lakshmi Chand Khandelwal made from milk were very much in demand.

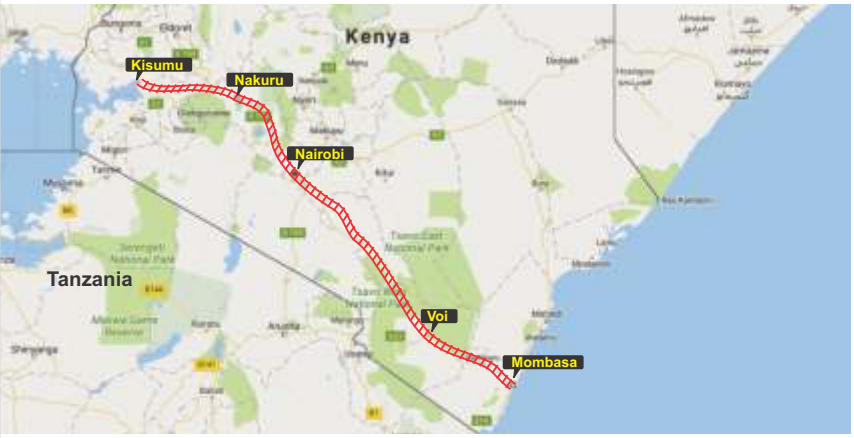
Many of the passengers described the railway as their lifeline. Now that lifeline has been cut. The traditions associated with it will die. A line of outstanding beauty particularly when it twists like a snake following the contours of a thick, hilly forest will be replaced by a broad gauge line which is being bulldozed through that forest. Fast through-trains with few or no stops will run on the broad gauge ignoring the local demand for rail transport.

Many railway officials are deeply saddened by the death of the Satpura lines. A stationmaster at Nainpur junction, the heart of the system asked me, "Why do they have to close such a busy railway? I have 20 trains a day to handle." But at least the railways are hoping to preserve a short section of the historic Satpura lines.

Photos: Courtesy Rajesh Agarwal

Reverse Gear on the Lunatic Line

Padmaja Parulkar-Kesnur



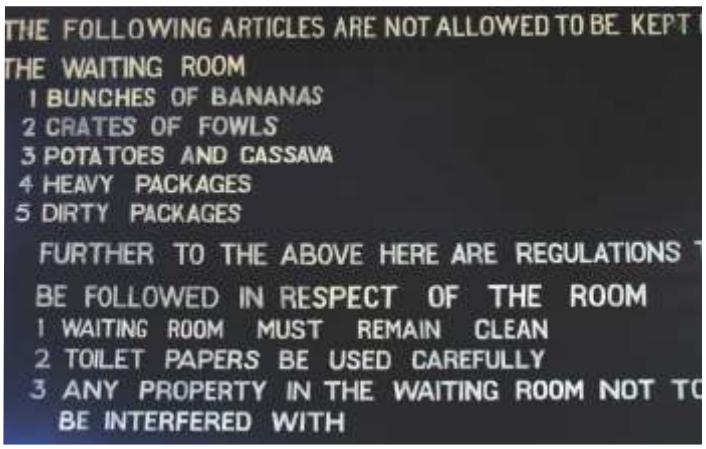
Unlike in India and other British colonies, in East Africa sovereignty came before territory. Land was snatched from gullible African headmen through inducements but territory and terrain still needed to be explored and antagonists subdued. The source of the Nile (Lake Victoria in Jinja, Uganda) having been 'discovered' by the explorers, the Great Lake now seized the British imagination leading to the grand idea of a railway cutting across the hinterland connecting it to the East African coast. The reasons were strategic, the vision romantic and the implementation full of adventure and toil. The "Lunatic Line", as the detractors nicknamed the Uganda Railway (UR), actually presaged the birth of a nation – Kenya. As British Commissioner Charles Eliot remarked: "It is not uncommon for a country to create a railway, but this railway actually created a country".

Cutting through the savannah with its grazing giraffes and gazelles and lion prides and leopards, the journey on the erstwhile Uganda Railway was a customary tourist trail for Kenyans post-independence. Our Kenyan friends regaled us with stories of their weekly picnic to the Indian Ocean coastal town of Mombasa from Nairobi, and back, by train: "When school closed for the weekend, we would set out for the coast, packing the children's uniform so that they could head back to school on Monday, straight from the railway station. The rail journey itself was part of the fun. Imagine a wildlife safari in style. We would eat meals in fancy crockery and silver cutlery while gazing at the game outside the window." Railway journeys are replete with romance and if they be a track from history then even more so.

Over the decades, decadence and negligence set in and travel by train became a stuff of the past. Our friends dissuaded us from embarking on this Kenyan adventure, so the next best thing to do was to visit the important ports of call, which we did, not by any plan, but spontaneously, over three years. And though it wasn't by design, we ended up visiting the stations backwards – from that of the construction of the railway line – from Kisumu to Mombasa, from Lake Victoria to the Indian Ocean Coast – in reverse gear, as it were.

Kisumu station

The UR did not reach the shores of the source (at least, in its first incarnation) as envisaged but ended on the eastern shores of Lake Victoria, in present-day Kisumu, in Kenya. Kisumu is the third largest town in Kenya after Nariobi and Mombasa. During our sojourn in Western Kenya, we found ourselves at the Lake Terminus, the Railway's tail end. The erstwhile Port Florence on Lake Victoria was a hub of activity. Steamers carrying cargo of cooking oil and soaps were heading to Mwanza in Tanzania. The station itself was somnolent. An incongruous picture of cows on tracks – grazing grass growing between the sleepers – and a car parked on the railway station greeted us. Relics such as the old railway clock, lantern, weighing scale and a plaque commemorating the inauguration transported us down memory lane.



Notice outside waiting room at Kisumu

Cows grazing grass growing between the sleepers

Kenya's capital, Nairobi, too owes its existence to the Railway. When the railway plate-laying reached present-day Nairobi, it was a swampy, marshy wasteland. The Maasai, which was one of the chief tribes in this area (Southern Kenya), called this stretch *ewaso nai beri* (stream of cool water) which the British in their characteristic twang and whim rechristened as 'Nairobi'. When the railway moved here with its stores and yards, the enterprising Indian dukawallas (traders) set shops to cater to the everyday needs of the predominantly Indian labour force. Eventually, the British Administration too shifted its headquarters from Mombasa to Nairobi and the beginnings of a township emerged. It was a century ago that Nairobi town radiated outward from the railway station. Ironically, today, the town has burgeoned such that the railway station lies buried in the city's backyard, partially forgotten.

In fact, it is in Nairobi's Railway Museum (NRM) with its assorted odds and ends that we get a real sense of the Railway's history. The wagons, coaches, engines, signals, clocks, communication equipment, inspection trolleys, even silver cutlery and ceramic crockery hold tales of events and episodes in one of the most ambitious projects that the British undertook in any of its colonies.

Of all the stations we visited, the vote for the most adventurous (for the workers though it spelled misadventure) will undoubtedly go to Tsavo—of the 'man-eating lion' notoriety. Tsavo Railway Station was in the middle of nowhere—deserted and isolated. The building of the bridge over River Tsavo was one of the most intriguing features of the UR. Tsavo Park was the biggest game preserve in Kenya, teeming with game, which the "Iron Snake" (clairvoyant of its destructive propensity, local people termed the line thus) sought to rip apart. This gross intrusion into exclusive lion territory could not have been without its consequences. For ten months, as the railway party—the indentured and indigenous labour—camped here, two felines held it hostage in a "state of siege". The drama of the sordid affair elicited a book by Col. John Henry Patterson, who finally concluded the saga by killing the lions. His book, "Man-eaters of Tsavo" was later made into a movie, "Ghost and the Darkness" featuring Val Kilmer (as the protagonist), Michael Douglas and Om Puri.

To visit Tsavo station one has to alight into the heart of the Tsavo National Park. We were provided a gun-toting askari (sentry); after all, this was lion territory. We walked the tracks and crossed the bridge over River Tsavo to get to the railway station—a modest kiosk-size shelter, all the time looking over our shoulders. Not used to visitors, the station-master was pleasantly surprised and eager to show us around. I was only concerned about one thing:

"Do lions still stray this way and aren't you scared?"

"I do hear lions roar at night but they do not come near the station," he had replied unfazed. Brave man this, I remember thinking, who cannot be shaken by a lion's (which in all probability carries the man-eating genes!) war cry in the dead of night. He was surrounded by old memorabilia which formed a panoply of his current dispensation. The antique-

Display of Permanent Way Inspector's bicycle trolley at the Nairobi Railway Museum

Another view of the bicycle trolley

collector husband ventured to ask if he had any that might be junked. With alacrity the station-master disappeared into the siding yard and returned with a trophy—an old signal-lantern with its red-gelatin niche—and handed it over to us!

the station master showed us around the train. Though this was a relatively new train of the Kenyan Railway, it was a shadow of the past with its demarcation of third class passenger compartments and first class dining cars with plush toilets. Mombasa is a bustling town where the old and the new co-exist like a bridge between past and present. It was here, at Mombasa Port, to be precise, that the rolling stock and material for the Railway was offloaded towards the end of the 19th century. This was the doorway to East Africa.

The UR was the umbilical cord connecting India and Kenya. While the grand design to build the UR was British, Indians fitted the nuts and bolts on Kenyan soil thus paving the way for a second wave of Indian diaspora. It is a little sad that a railway so rich in history lies in near shambles, both physically and in

Kiosk-size station at Tsavo

Inside Tsavo station

Back-of-beyond railway station-Voi

Few kilometers away from here another well-documented incident took place where Charles Ryall (then Superintendent of Railway Police) fell to the perpetrators he had sought to prey upon. At the NRM, we stepped into Ryall's shoes when we entered the railway carriage in which Inspector Ryall hid on a night-vigil, ready to shoot the marauder. On that fateful night, the elusive man-eater had managed to hoodwink Ryall and dragged him out of the carriage precisely when he had dozed off momentarily and his guard was down.

The lion territory extended to Voi (a WWI theatre of war) near Tsavo, which we visited when we did the Battlefield Tour. This back-of-beyond railway station is a junction where another line was built at the time of the Great War. Even today, war debris—bullets, rivets and even glass shards of lemonade bottles—from that era lie embedded here. Voi has a cemetery exclusively dedicated to Indian soldiers who fought in WWI.

We finally visited Mombasa railway station where it all began. The deserted platform seemed endless. A passenger train was standing on the platform and people's imagination. Our railway journey was truly complete when a close friend and collector of railway memorabilia presented us with an original number plate of an engine of the erstwhile Uganda Railway. That and the Tsavo souvenir grace the Africa antiques corner of our home and will keep this slice of railway history alive in our imagination.

Photos: Courtesy the author

About the Author:

Padmaja Parulkar-Kesnur is a creative writer and a green blogger. Her writing is fueled by her travels. She has particular penchant for heritage, nature and wildlife.

She spent more than 3 years in Kenya from October 2008 to January 2012 when her husband, Commodore Srikant Kesnur of the Indian Navy, was posted as the Defence Attache at the High Commission of India at Nairobi.

Spanning the Sub-continent

Vinoo N. Mathur

Many readers would have read the Jules Verne classic **Around the World in 80 Days**, first published in 1873. The story is based on a wager of £20,000 between Phileas Fogg and Club members at the Reform Club on whether he would be able to circumnavigate the world in 80 days. The account covers his and his French assistant, Jean Passepartout's many adventures on their journey. The story is conceived against the backdrop of three developments that had taken place at the time – two of them relevant to the rail enthusiast. These were the completion of the first transcontinental railroad across North America in 1869, the completion of the final link of the Railway line spanning the Indian sub-continent between Bombay (now Mumbai) and Calcutta (now Kolkata) in 1870, and the opening of the Suez Canal in 1869. In the story, their rail journey across India is suddenly interrupted, at a place called Kholby across the Vindhyas in the jungles of Central India; the break being owing to the railway line having still not been completed some distance short of Allahabad. The author spins an interesting tale of their journey across this stretch – of buying an elephant and travelling by it; rescuing a Parsee Princess, wife of the Prince of Bundelkhand, from being forced to commit *Suttee* on her dead husband's pyre!

Whereas Jules Verne correctly identified the part of the sub-continental railway which was last completed to ensure a continuous rail link across India, there is a minor inaccuracy in his depiction of the actual section that was finally linked. In fact, the final connection took place on 8th March 1870 at Jubbulpore (now Jabalpur). The line to the West of Jubbulpore was constructed by the Great Indian Peninsula Railway (GIP) while the section towards Calcutta was built by the East Indian Railway (EIR). The initial reconnaissance survey of the line, both towards Bombay and for the branch line North of Jubbulpore towards the Ganges, was carried out by

Platform view of the orginal Jabalpur station. Note the EIR emblem above the station name

GIP. It was interesting that at the time, in the 1850s, the conclusion they arrived at was that it would be preferable to link the line to the Calcutta to Delhi route at Mirzapur rather than Allahabad both on the grounds of technical feasibility as well as commercial considerations. Subsequently, the Government decided that the section from Jubbulpore towards Calcutta should be constructed by EIR. Thus, they carried out a new survey in 1855-56, building on the earlier survey. The major challenge towards the Ganges valley was tackling the incline onto the Rewa table-land. Their recommendation was linking via Allahabad as the line to be constructed was shorter and the gradients up the incline would be easier. However, the Mirzapur link would have provided an overall shorter distance between Bombay and Calcutta. Edward Davidson, in his authoritative book, **The Railways in India – Rise, Progress & Construction**, in 1898 wrote: "The preponderance of advantages was clearly on the side of the Allahabad line; and it received unanimously the preference from the Railway Company and from Lord Canning and his advisers, and the question was finally settled in August, 1858". The construction on

Jubbulpore Bullock Train

The East Indian Railway line to Jubbulpore having been completed, the public are hereby informed that the above transit, will from 10th October next, run on the Road from Jubbulpore to Nagpore. Freight per maund – Baggage, Rs. 3; Mess Stores Rs 2-8. On being furnished with the Railway Receipts or Bills of lading, the undersigned at Nagpore will clear and forward to owner's address in any part of India all goods coming from Bombay, &c., and the undersigned at Jubbulpore will do the same for goods expected from Calcutta and the N.W.P., &c.

Howard Brothers
Proprietors

Jubbulpore and Nagpore
15th August 1867

Advertisement in the Pioneer Newspaper at a time when the Jubbulpore to Nagpore Railway Line of the G.I.P.R. was still under construction

the line from Allahabad to Jubbulpore commenced in 1863-64 and was opened for general traffic in August 1867.

The line from Jubbulpore towards Khandwa, which was built by GIP, got completed about two and a half years later. There was considerable impatience amongst the travelling public and it was felt that GIP was unnecessarily giving priority to constructing what was then a branch line to Nagpur. The Calcutta newspaper **Friend of India** on May 9 1867 wrote: "There still exists a break between Jubbulpore and Khandwa, and we have ascertained that there is no prospect of that being linked until the end of 1869. That is, for two and a half years the public of India are to be denied through communication between Calcutta and Bombay, because the GIPR has been allowed by the Bombay Government to neglect its duty. Four years ago we urged on that Government the necessity of devoting more attention to this part of the mainline than the Nagpore branch..." However, GIP was facing genuine difficulties in construction. For example, on the Khandwa to Sohagpur section in August 1866, on the Towa river, where a bridge consisting of 11 wrought iron girders was being built, the central and its adjoining pier were washed away as a result of a heavy flood. Consequently, the bridge had to be redesigned with longer spans and more waterway. Until the final linking was done, baggage was carried by 'Bullock Trains' between Jubbulpore and Nagpore. An advertisement (see box alongside) placed in the Pioneer newspaper in 1867 illustrates this.

The linking of the line, when it took place, was a momentous event. A grand ceremony was held at Jubbulpore where both, the Viceroy and the Duke of Edinburgh, were present amidst a large gathering of Maharajas from across the country. The actual ceremony was held in the dark in torchlight as the Viceroy's train was delayed. The scene and events of the day are best described in the words of the Special Correspondent of the Pioneer who attended the function and wrote: "The Special Train containing H.R.H. the Duke of Edinburgh and suite reached Jubbulpore punctually at the time appointed – 4 p.m. the journey from Allahabad having been beguiled by breakfast at Satna station halfway, where the Maharajah of Rewah had made beautiful preparation for the Prince's entertainment, and later, by a not less appropriate, if hardly so splendid, reflection, on the platform at Sehora, near the journey's end.

"On the site where the new terminal station of great lines will eventually be erected, a large space had been enclosed by chains of evergreens and flowers, upon opposite sides of which a stage had been improvised by either company, provided with chairs for the expected guests; the East Indian Railway, after brief but happily bloodless contest between the local representatives of the two lines, securing the privilege of accommodating the ladies; whilst the Great Indian Peninsula Railway, with gallantry beyond all praise, regretfully accepted the more glittering honour of accommodating the Native Chiefs. It had been originally intended that the trains conveying His Excellency the Viceroy and the Royal Duke should arrive at the terminus from opposite directions at the same moment, and the opening ceremony take place there and then; but man only proposes; and long before the hour calculated on, there were ominous whispers that the Viceroy could not arrive before six – it might even be seven or eight. After a pause of indecision, the Royal party, whose traditional glories were somewhat obscured by sola topees and shooting costumes, retired to the Commissioner's house a few hundred yards distant. Some few of the spectators of whom a goodly

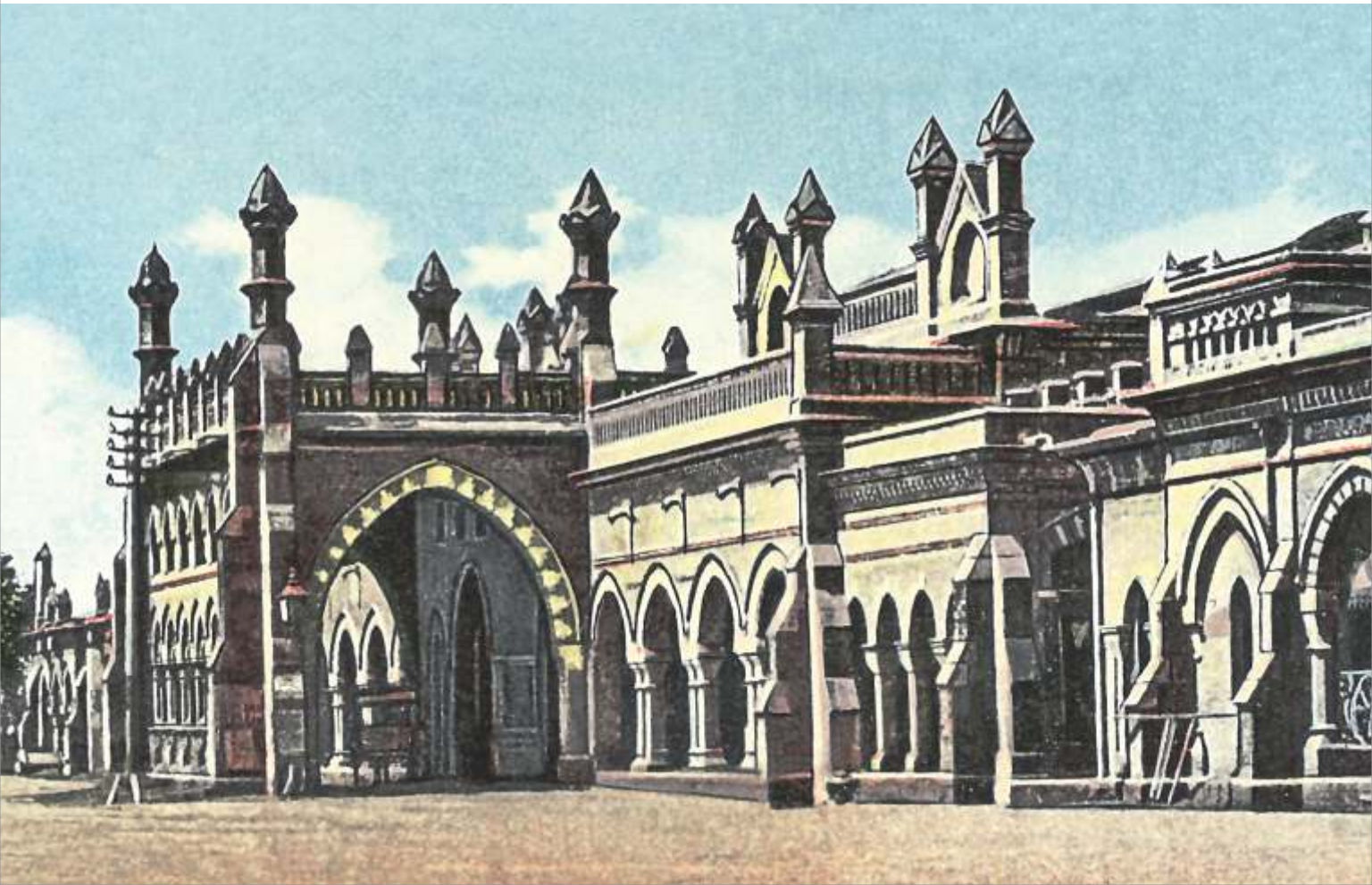
number had assembled on the platform, sagaciously, as the event provided, retiring too. The rest found ample leisure to admire the prettily designed archway of leaves and flags which had been upraised over the spot where the 'keying up' of the last rail was to take place; to listen to the pleasant band of H.M.'s 12th, which was brought to the rescue; to stare at Holkar and his brother Chiefs; and to lavish some attention on the sandwiches and cup which had been mercifully placed within easy reach. It was very warm and very tedious, though the arrival of two specials at short intervals offered some temporary diversion.

"At last the sun went down, and with it the spirits still lower, a conviction gained ground that no ceremony was possible and our gloom deepened over the momentous question – what would become of the dinner. Then the moon rose and light from long lines of torches, and two bonfires on nearby hills, and at last a very audible whisper, that Lord Mayo's Special was in sight. In a very few minutes we saw His Excellency's welcome face among us with Sir Seymour Fitzgerald in attendance; and after greetings had been exchanged, and Holkar and the other Chiefs introduced, a brief consultation determined that the short ceremony needed should be gone through after all. So we followed Lord Mayo and the Prince pell mell on the rails, the silver key was inserted, several hearty cheers were given, the Viceroy accompanied the Prince back to Colonel Spencer's, and then all of us departed to don our war paint for the Banquet..."

The Station was controlled by the East Indian Railway and the actual station building was constructed some years later. The site for the station was decided by a special committee, and according to the District Gazetteer, they took a few years of deliberation to decide. The original building was strongly influenced by the Gothic Revival Architectural style with buttresses to the pillars and a number of skyward pointing vertical elements. The platform shed was impressive with the EIR emblem on it and other decorative features on the outside. Further lines were to develop in the district with a line from Katni to Bilaspur via Umaria coming up between 1886 and 1889 and Katni to Bina section being opened on New Year's Day 1899. Jabalpur continues to be an important railway hub even today after 150 years since the first lines were built in the area. In fact, Jabalpur is now the head-quarters of the West Central zone of the Indian Railways.

Photos: Courtesy the archives of the author

External view of the original Jabalpur Station



Ramblings of an Indian Enthusiast in Europe

Joydeep Dutta

The Air-India Dreamliner flying me all the way from New Delhi to Paris touched down an hour later than scheduled at Paris CDG. Although I have traveled to Paris often, it is a city full of surprises. The first one this time around was the conveyor belt bringing out our luggage stopping suddenly and not appearing to be coming back to life in the foreseeable future. I kept looking at my watch anxiously as I had to catch a night train (Corail Lunea) to the Southern city of Perpignan. With the belt continuing its lack of motion, I realized that there was no chance of taking a train to Gare du la Nord and then changing over to Metro Line 5 and reaching Austerlitz in time for my train. I was bracing myself to miss the train and staying put at a Paris station for the night.

Just when I had more or less given up all hope, the conveyor belt stuttered and started to move. Along with it came my luggage. Being too late to take a circuitous train route and with just one hour to spare, I decided to have my first Paris taxi ride. It was a Volvo and it sped nimbly through the Paris suburbs, the driver having been alerted through my horrible French of the predicament I was in. He wound through the traffic by changing lanes more frequently than gears and dropped me at Austerlitz station with only ten minutes to go for my train. I managed to grab a sandwich and sprinted to the platform where my train was ready to move.

Model of a Talgo train prominently displayed in front of other models at the residence of the author

In Paris, tickets are checked before you board the train, so that I had just about scrambled in when it began to move. So, there I was, on a 10-hour train journey to cover 900 kilometers under 1500 V DC wires. I was in a couchette (like our AC 3-tier but with a corridor and without the upper and lower side berths). In European trains, it is difficult to stow away your luggage especially if the latter is large and heavy. I managed to get my suitcase stashed away and stood in the corridor to enjoy the sights of the Parisian suburbs as the train gradually reached its cruising speed of 160 kmph. I was actually on the famous route from Paris to Toulouse where 200 kmph express trains, Le Capitol and Mistral, used to run in the early 1960s.

European loco hauled trains mention the maximum speed of the coaches on the lower baseline of the coach. I have seen two speed levels. It is either 200 kmph or 160 kmph. However, in many cases I have seen rakes with coaches of mixed speed levels and, of course, the train speed is then restricted to the lower one. After spending half an hour in the corridor I went up to the upper berth which I was allotted and in my mind dreamt that I was really not on a Corail Lunea to the South of France but in an AC 3-tier of an Indian train lulling me to sleep. As I tried to do so, my mind went back to the long trains that must be criss-crossing my country that night carrying the dreams of a billion people.

All of a sudden, I was awake to find the train standing at a station called Narbonne and my compartment empty. My first reaction as an Indian was to see if my luggage was intact. It was indeed so. I got down, freshened myself and again stood in the corridor. The train now changes direction and goes down towards the Spanish border. I was to get down at Perpignan, the next stoppage of the Express.

In Narbonne, I saw some beautiful EMUs and felt in my mind as to when India would have such trains. Indian Railways were initially steeped in the old British tradition of train running, whose one

enduring legacy is the naming of trains, a thing gradually coming to an end now. In France, naming of trains is very simple. They just have classes of trains which go from one point to another like our *Rajdhanis* and *Shatabdis*. I was travelling on the Corail Lunea. Corail is a subsidiary of the French Railways looking after the operations of coaching trains. Lunea is added to mean that this is a night service.

Leaving Narbonne, the train swept past vast salt lakes and entered Perpignan at 7.20 a.m. on the 1st of June 2015. My friend was waiting for me and I left the domain of the railways and went back to the mathematical research world.

But not for long. Soon, at the first opportunity, I was back at Perpignan but now on the TGV platform, waiting for the TGV to Barcelona, my favorite station in Europe. The traditional style of reaching Barcelona is to take an EMU to the Spanish border city of Port Bou and change over to the Spanish Broad Gauge system, which is very similar to ours (1,668 mm against our 1,676 mm: except the Iberian peninsula, the rest of Europe has the Standard Gauge). I have done the journey several times and it takes four hours to reach Barcelona. Another option is the TALGO, a low floor train with a unique design, which is Spain's contribution to the railways of the world. TALGO stands for Tren Articulado Ligero, Giocoechea, Oriol. It means that it is a light weight articulated train, whose financier was Giocoechea and Oriol was the engineer. Starting in 1943, it gradually took over all premier class services in Spain. Articulation essentially means that the ends of two consecutive coaches are on the same wheel bogie. The TALGO is distinguished among trains by having axle-less bogies, so that, through a simple mechanism, it can move freely at the French-Spanish border from Standard Gauge to Broad Gauge.

I recall my travels by the legendary TALGO Joan Miró, traveling from Limoges to Barcelona and getting up early in the morning to see the gauge change at Port Bou. At the French border station the French electric loco used to be taken off the train and it was pushed by a diesel shunter to the gauge change installation and after the coaches had been pushed onto the Broad Gauge, the train was hauled by the legendary class 252 Spanish Electric locomotive whose design is based on the famous EUROSPRINTER design, on which our own WAP5 and WAG9 locomotives are based. For the record, Joan Miró was a famous Spanish painter.

Today, the TGV does the Paris-Barcelona distance in just 6 hours instead of the fastest 11-hour run of the

Talgo train model with a locomotive at its head

TALGO Joan Miró. The romantic TALGO Joan Miró does not exist any more. All the same, TALGO is now trying to enter the Indian market as well*.

As I stood on the TGV platform thinking of the TALGO, the Spanish version of the TGV called the AVE (Alta Velocidad Espanyol) smoothly pulled in. In the usual Spanish style, I just could not find my reserved seat. After arguing a bit with the conductor, he found me "my seat" using a logic that I still do not understand but I know that the number on the seat was not the number written on my ticket. Before I could settle, the AVE was zipping along at 300 kmph. It even crossed over from the left track to the right track at 250 kmph inside a tunnel at the border. Before I realized, I was at Figures. Note that like in our country, French trains travel on the left track while Spanish trains do so on the right.

With the countryside flying past at 300 kmph, in just 1 hour and 10 minutes the AVE was on the outskirts of Barcelona. All this while, on a common screen, a French movie was playing with Spanish sub-titles. It was at about this stage that the staff on board realized that they had not given us headphones to be able to listen to it. It was only when we were inside the city tunnel onwards to our destination in Barcelona that the staff turned up with head-phones in typical RENFE (Spanish Railways) style. It did remind me a lot of Indian Railways.

But, of course, technologically, the TGV is excellent. We arrived at the famous Barcelona Esracio Sants after traveling only one hour and 25 minutes from Perpignan.

Photos: Courtesy the author

**An article on the TALGO system and its current status in India appears immediately after this write-up*

The TALGO conundrum

Santosh Sinha

Headquartered in Madrid, Spain, TALGO is a Spanish rail coach manufacturer of intercity and high speed passenger trains and is acknowledged worldwide for innovation, technology, quality and reliability. TALGO Patents S.A. was first incorporated in 1942. TALGO is an acronym for Tren Articulado Ligero Goicoechea Oriol (Goicoechea-Oriol light articulated train; Alejandro Goicoechea, the financier, and José Luis Oriol, the engineer, being the founders of the company). Thus, TALGO is not a new concept; such trains being first manufactured seventy years back by Spanish Railway engineers. At that time, Spain was coming out of its Civil War and rail tracks were in very bad condition with average high speeds of trains being limited to only 30-40 kmph. TALGO's team of engineers worked on the problem and came out with an innovative concept of a light weight train which could adapt to track in any condition and go at higher speeds with the same track infrastructure. A light weight design was developed as a heavier train uses more energy, damages the track and requires more maintenance. It was against this backdrop that it was decided to carry out timing trials with TALGO trains in India and verify the fact that with higher claimed speeds, substantial time could actually be saved without any improvement to or upgradation of the track infrastructure.

A TALGO train, comprising of nine coaches (two executive class coaches, four general class coaches, a cafeteria, a power car and a tail-end coach), reached India in April 2016 and by the end of May trials were started. Broadly, the trial scheme was to first ascertain 'road worthiness' of the coaches and then carry out timing trials to verify the claimed reduction of travel time.

The first question that comes to one's mind is: what is a TALGO train? Such trains are best known for their

Interior of a Talgo coach

Talgo coaches on trial

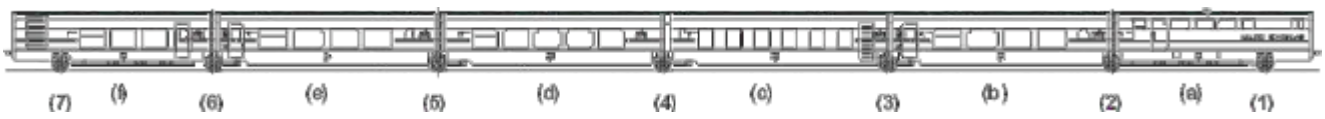
unconventional, articulated, railway passenger cars that use a bogie similar to the Jacob's bogie patented by TALGO in 1941. In rail parlance, a 'bogie' is the wheel and suspension arrangement and not the entire coach as is often the terminology used by non-rail persons. In the TALGO design, wheels are mounted in pairs but not joined by an axle and the bogies are shared between coaches rather than underneath an individual coach. This allows the coach to take a turn at higher speed with less swaying. As the coaches are not mounted directly onto the bogies, they are more easily insulated from track noise. Broad characteristics of a TALGO train are:

- TALGO trains can run at a maximum speed of 250 kmph. However, trials in India were conducted at a maximum speed of 180 kmph only
- With aluminium construction, the lighter trains claim to cut travel time by 30% and reduce coach maintenance costs substantially. Energy bill is also claimed to be reduced by 30%
- No major overhauling of track is required for running TALGO trains at higher speeds
- All desirable passenger amenities like footrests, reading lights, tables, audio entertainment control, etc. are provided for every individual seat. The trains also come equipped for video entertainment
- TALGO trains function well in a wide spectrum of ambient temperature variation from 50° C to 20° C below zero

These features of the train are obtained owing to the design of the TALGO coaches. For example, the

A coach being inspected. The articulation is clearly visible


The axle-less wheels



coaches have an articulated coupling between vehicles and independent wheels with permanent guidance of the axles. The body of the coach has a natural tilting system while on run.

In the traditional design of a railway vehicle, a coupling between two vehicles was intended to simply transfer the hauling or braking forces of the engine while allowing each vehicle to have its own dynamic performance. Therefore, each of the vehicles, in this case the coach, functions individually, mostly in total isolation from the vehicles on either of its sides. In the case of articulated vehicles, such as TALGO coaches, the system of coupling permits a greater continuity of the vehicles in the train. The joining of the coaches allows the dynamic forces to influence the adjacent vehicle, which is particularly useful when on curves.

As can be seen in the diagram above, the number of wheels is less than that in a conventional coach. The numbers in the diagram are bogies while the alphabets are coaches. Thus, track interaction is also less resulting in less wear and tear and damage to the track. Again, with this design, there is less bulky equipment below the coach resulting in reduction of turbulence. This and the fact that the coaches are closer to each other, the aerodynamics of TALGO trains is better than a conventional train.

The maintainability and reliability standards of TALGO trains are better as they are composed of fewer moving parts than conventional vehicles. As

TALGO vehicles share the bogies, there are less bogies per trainset which are the moving parts that require more preventive maintenance work.

One of the primary features of the TALGO design is the independent wheels. A conventional wheel set comprises of two wheels mounted on a rigid axle. Such wheel-sets begin to hunt (oscillate laterally) at high speeds and cause instability and wear of both wheels and rail. Researchers are attempting to solve this problem by decoupling the wheels and making them rotate independent of each other, a concept known as Independent Rotating Wheel system (IRW). TALGO coaches use this concept, resulting in reduced hunting, improved performance on curves, reduced wear of the rail and the wheel flange and lowered energy dissipation and reduced lateral thrust on rails caused by over steering or under steering.

TALGO coaches have undergone several trials & rigorous tests since May this year in line with the stiff standards of the Indian Railways.

a) Bareilly-Moradabad route – Phase 1
(May 29-June 12)

Initially, Indian Railways' RDSO (Research Designs & Standards Organisation) tested the suitability of the TALGO coaches on Indian track on this section for speeds up to 110 kmph. After successful trials here, the train moved for trials to the Rajdhani section. Starting from speeds of 80 kmph to 115 kmph, in 10 runs (5 each with empty and loaded coaches) responses of various technical parameters of the train were tested.

b) Mathura-Palwal Rajdhani stretch
(July 9-July 29)

The trials started at a speed of 120 kmph, increasing by 10 kmph for every successive trial, till it finally reached 180 kmph. This was done with coaches in both empty and loaded conditions. A total of 14 trials, 2 for each speed (empty and loaded) were done. Behaviour of TALGO coaches on various cant deficiencies was noted. Indian Railways also tested the emergency brake system at different speeds.

c) Delhi-Mumbai Rajdhani route
(August 1-September 11)

These were the most stringent trials, involving multiple speeds and parameters. The August 5 trial was done at a maximum speed of 130 kmph, with 125 mm cant deficiency. The run was completed in 12 hours and 36 minutes. The August 9 trial happened at a maximum speed of 140 kmph, with 125 mm cant deficiency. It was completed in 12 hours and 7 minutes. On September 7, the trial was carried out at 140 kmph and 100 mm cant deficiency. The train took 12 hours and 27 minutes. Rajdhani Express presently takes 15 hrs 35 mins. All trials used a diesel powered locomotive to haul the train.

Another view of the coach interior

While a final decision to introduce TALGO coaches on Indian Railways is under deliberation, the coaches have acquitted themselves well. Apart from a direct reduction in train timings, amongst the various possibilities resulting with TALGO coaches, the obvious advantage will be the reduction in the time of run without any large input in the track. Reduction in the time of run itself leads to other possibilities. For instance, at present, Shatabdi trains run in the range of 500-600 kms. one way in order to facilitate same day return. With TALGO coaches, it may be feasible to increase one way Shatabdi range to 900-1000 kms. Thus, Shatabdi trains from New Delhi can be run to cities like Varanasi, Ahmedabad, Patna, etc. or vice-versa, with same day return. This would be a big leap in rail transportation in the country. Alternatively, substantial time reduction may be possible for trains like Mumbai-Ahmedabad Shatabdi. It may be possible to introduce an additional to and fro service with the same rake. With proper pricing, this may attract air traffic back to the rail sector.

Photos: Courtesy the author

Santosh Sinha is a career railway man now working with the Container Corporation of India Ltd.

The Miniature Paradise of Pendon

T R Raghunandan

Ivy grows over a Tudor style farmhouse

The Pendon story in short

Not all trains from Oxford stop at Didcot Parkway. At first impression, it would seem that they did not miss much. But if you are a dyed in the wool railway enthusiast, you might have just passed by an experience of a lifetime.

Neither the station staff nor the bus drivers know where the Pendon Model Railway Museum is. A gentleman with a grey ponytail points out the direction to the village of Long Wittenham; its five miles away, he warns. I do not mind; it is a beautiful day and nothing could be better than a cross country walk.

I duck under the railway line and turn into Cow Lane. Then, a shortcut through the park, and I am on the bridle path to Long Wittenham. The noise of the trains is replaced by the sighing of the wind and the bubbling of a brook to my left. On my right, patches of golden wheat ripple in the breeze. A thunderstorm brings out my umbrella, but it vanishes quickly. An hour and a half later – I see no reason to hurry when I can gorge on wild blackberries – I am at the entrance to the Pendon Model Railway Museum.

In the forties, an Australian recluse named Roye England came to Oxfordshire and fell in love with the countryside in the upper reaches of the Thames river. His passion was model making, and he set about reproducing the humble homes, inns, pubs and farms he saw around him, in painstaking detail. He built his models of paper card, painted each brick and stone with watercolours, and thatched them with human hair – he preferred Chinese hair as it was straight.

You can almost be a bystander at this wayside station

The Vale of Dartmoor was also the beat of the Great Western Railway; Roye and a growing band of

enthusiastic volunteers built from scratch, railway models that run through his miniature landscape.

No words can adequately describe the Pendon model railway. The scenes that are frozen into timelessness by Roye are set in the 1930s. At four millimeters to the foot, the model is 1/76th of the size of the real thing.

The doctor makes a house call

A building under construction

This barn is not worth rethatching, it seems

The Pendon model railway museum is not a large one. In size, it cannot match several other model railway layouts that are open for public viewing. However, what makes it unique is an unmatched attention to detail.

There are four self-contained layouts on display in the museum. As one enters the museum, a single line is set into a glass faced alcove in the wall, where a seaside promenade is modeled and trains sedately clank past people out for a bracing walk. Little does one realise that the promenade is the reverse side of a much larger layout on the other side of the wall, of the Dartmoor landscape. Trains that exit the Dartmoor layout appear on the seaside promenade, before they loop back into the fiddle yard where they are on standby mode; a clever use of model rolling stock in two separate layouts.

Next on view is the Madder Valley Railway, built in the 1930s by another railway enthusiast, John Ahern. It is a pristine example of early railway scenic modelling. It features a fictitious landscape, comprising of Madder Port, the Much Madder town and a castle at one end. The layout is not computerized; it still runs on its original electrical wiring. Owing to the delicate nature of the layout, it is now run only on a few days every year, an event that draws enthusiasts from near and far for the special display. There is plenty of evidence of a Modeller's license on display; I even noticed a Darjeeling Himalayan Railway locomotive here, built

Thatch is replaced on the homesteads with fresh straw

As a modern truck passes, a horse-drawn wagon collects water from the stream

The main road in the village

over-scale to run on Standard gauge track that is represented in the layout.

The Dartmoor layout is dominated by an impressive trestle bridge, over which long trains rumble past at eye level. Absorbing the detail makes one's head spin. As a train goes past, one notices the unmatched weathering. These branch lines were not well maintained, says a helpful volunteer guide. See that fish van? The window glass is broken; so they've patched it up with a packing case.

If one can tear one's eyes away from the trains themselves, the scenery shows even greater detail. Here is a rough farm below the trestle, where everything has to be hauled down from the hills. However, the area offers excellent birdwatching: can't you see that naturalist partly hidden in the trees near the brook? He is not disappointed: here is a hawk poised above the trees, waiting to swoop down on an unsuspecting rabbit.

Upstairs is the piece de resistance of the museum:

The butcher's shop

the countryside around Oxfordshire modeled in painstaking detail. The farm houses and pubs are all modeled from real buildings that existed. Here, a man stands outside a chicken coop, thoughtfully scratching his head. He has a puzzled look on his face. Yesterday there were twelve chicken, today there are only eleven. But then, you notice in the far

A culvert showing the painstaking attention to detail

distance, a fox disappearing into the hedgerow. Does he have a chicken in its jaws? At 4 mm scale, that would make each of the eleven chickens that remain, about 4 millimeters long, and the fox a shade over a centimeter. Yet, every detail is represented.

Here is a doctor making a house visit, his Morris Minor is parked on the road. Look at the gardens, and you can see patches of cabbage and cauliflower. Here, hollyhocks, their stems made from cat's whiskers, nestle against the welcoming entrance to a pub. If the lights are dimmed, one can see inside the homes – look at the armchairs, the books on the bookshelves and the fire in the fireplace.

On all the layouts, the trains run according to pre-arranged schedules and their movement is guided by enthusiasts, who volunteer to keep the model railway running over weekends. Over time, many volunteers have contributed their efforts to adding buildings and landscapes to the layout. It is estimated that the layout might take another ten years to finish. It might take twenty, but nobody is worried about that.

I am the last to leave the museum. Overwhelmed by the dedication of those who built it, I realise that I am terribly hungry now. I escape the rain, into the convivial warmth of the Chef and Brewer, built in

Some of the structures show interior details

Farmers' cottages

Resting outside the village pub

A high arched bridge spanning a gorge

1358, to gorge on fish and chips and the pub's own dark ale. A short walk over the bridge that crosses the placid waters of the Thames, dotted with houseboats, and I am at the Plough inn, built in the sixteenth century, to spend the night in a cozy room up in the attic.

Photos: Courtesy the author

T R Raghunandan, a former member of the Indian Administrative Service, took voluntary retirement to spend time with his multitude of hobbies - vintage car restoration, model-making, rail enthusiasm, and many more.

John Ahern's Madder Valley layout from the 1930s, an early example of scenic rail modelling. Note the scratch-built DHR B-class, upscaled to run on modeled Standard Gauge

On a Bullet Train

Deepak Sapra

I am at Tokyo station, on the platform, waiting for the Nozomi Shinkansen to Osaka. Passengers have queued in at the entrance to their respective coaches in an orderly line, in a fuss free manner. It is the middle of April this year and I am on a trip to Japan.

Standing at one end of the platform is the driver who will take over the train from Tokyo. She is a petite, 5-foot tall young lady, who stands in stark contrast to the massive piece of machinery that she is about to pilot. Quiet, focused and smiling, she is not the only crew member on the platform. Also present, and precisely positioned at the entrance to every coach, is the cleaning crew. Most of them appear to be in their 50s and are dressed in a light pink dress.

As the train gets in, the passengers remain in their respective queues, not moving, not disrupting the orderliness that has been in existence prior to the train's arrival. Most of the passengers are on their phones, some of them are with books or magazines.

The train stops at the platform. The passengers disembark, needless to say, in an orderly fashion. As they disembark, the cleaning crew positioned close to the door of the coach, bows.

The cleaning supervisor then gives the signal, and the cleaning crew gets in.

All of us passengers, who have to get on to the train, are still on the platform. The cleaning crew is in.

I watch from the platform, through the windows.

With the cleaning crew inside, there is a flurry of activity that can be seen. In a minute or so, it is easy to figure out a pattern. They check for trash in front of every seat and put it in their plastic bags. They check the luggage racks for any remnants from the journey the train has just completed. They wipe the floor inside the coach. They turn the seats to face the direction of travel – the seats have a revolving mechanism. The window shades are all lifted. In about seven minutes, the train has a completely new look.

Sleek and aerodynamic

The cleaning crew going about its work

The cleaning crew comes down. The train is now ready to have its new set of passengers on board. The passengers get in. The crew bows again.

Passengers settle in. I am in the Green car, which is about 70% full.

The scheduled time of departure was 10.23. I wondered when exactly the train would leave. Don't get me wrong; 10.23 was never a question. The question to myself was whether it would leave as soon as the clock struck 10.23, i.e. the next second after 10:22:59, or would it leave at 10:23:59, or somewhere in between? We departed at 10:23:15.

In this day and age, setting one's watch is no longer necessary because phones synchronize time from mobile networks. However, setting it to the Shinkansen timing is a very credible and highly accurate alternative.

Shinkansen rakes ready for use

I had read earlier about the Japanese Railways publishing statistics on Shinkansen punctuality timings every year. I recalled from that article that the average delay in the entire year of 2012, aggregated over all trains on all routes, was 36 seconds. This was considered to be a poor performance, when compared to the 1997 record of 18 seconds.

Passengers embarking in an orderly fashion

We depart Tokyo, and in a few minutes, we reach Shinagawa station. Shinagawa is one of Japan's oldest railway stations, and is one of Tokyo's busiest, after Tokyo station. A few passengers board.

A ticket checker enters the coach. She bows on entry. As she goes about her job with the minimum of fuss, she covers all passengers in a few minutes.

Next up is Shin-Yokohama station. A few more passengers board; the train is almost full. The seat next to me is still empty.

The train's really picked up speed now. I had an app on my phone that can determine the speed – at one point, it shows 302 km/h.

A while later, there is a refreshment cart that is passing through. I ask for Japanese green tea. I also ask her about Mount Fujiyama and what time could I see it. She checks her watch. She says, in 13 minutes.

Mount Fuji, called Fuji-san, with the honorific 'san' suffixed like most other things in Japan, is highly revered by all Japanese. Fuji-san is as much about cultural heritage as it is about natural heritage. It is the highest mountain in Japan, with a perfectly symmetrical conical shape. The fact that it is an active volcano does not worry too many people, as its last volcanic activity was in 1707. There has been speculation about an imminent volcanic eruption

post the 2011 earthquake and tsunami, with several mathematical models suggesting danger. That does not deter too many Japanese from continuing to revere and visit Fuji-san.

The weather is clear, and from my train window, I get a clear, uninhibited, picturesque view of Japan's most famous geographical structure. My phone camera gets very busy.

The journey continues. The train stops at Nagoya next, which is a little more than midway between Tokyo and Osaka.

Curious to know more about the Shinkansen, I open the internet through the wifi network on the train. I figure out that the literal meaning of the word Shinkansen is 'New trunk line', but the word is used interchangeably with 'bullet train' and sometimes, with the phrase 'super express'.

Kyoto follows. A few passengers disembark from my coach.

A while later, there are announcements about Shin-Osaka approaching. The 515 km journey takes about two-and-a-half hours.

As I disembark, I reflect upon the multiple trips to Japan that I have done in the last three years. There are several things about Japan and the Japanese people that I find absolutely fascinating– politeness, respect, order, patience, dignity, diligence, helpfulness, simplicity. Many great ideas are implemented pragmatically, with absolute precision, and they form the building blocks of several systems in Japan.

The Shinkansen is, in a way, an embodiment of all of that. And more. A testament to a uniquely Japanese way of integrating technology with a unique human experience.

Photos: Courtesy the author

Mt. Fuji-san from the train window

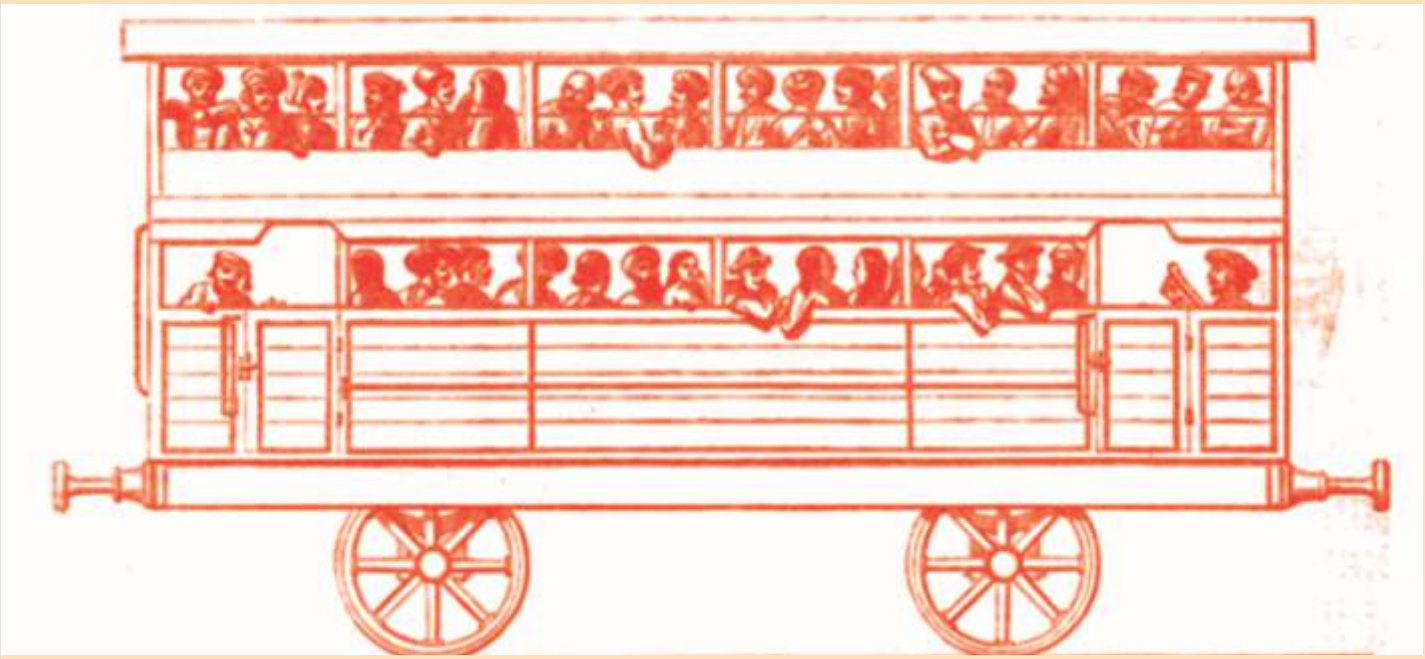
Double-decker Coaches

In a country with a large population, providing adequate capacity for passenger transportation has always been a major concern. After the introduction of railways in India in 1853, once the local population realised the social and economic benefits of it, they actively took to rail travel. At the time, it was the only means of mechanized transport in the country. The advantages of train travel were soon appreciated and volumes grew rapidly. On the Bombay Baroda and Central India Railway (BB&CI), soon after the opening of the Bombay-Baroda line, a 'Two Storied' Third class coach was tried out in 1862 and became popular with the travelling public. The coach had a capacity of 120 passengers with 70 seats below and 50 on the upper storey.

An article on these coaches appeared in **The Illustrated London News** of March 12, 1864, which described some of its characteristics. It mentioned: "By the mode of construction which has been adopted, the weight and cost of the double carriage are less than of the ordinary carriage. The roof of the first storey serves as the floor of the second. The seats are longitudinal instead of transverse, so that the sides of the carriage serve as backs to the seats; but there are also some seats down the centre. The two-storey carriages stand about 21 in. higher than the one-storey carriage. This, of course, would involve some increase of the atmospheric resistance; but, on the other hand, the train of two-storey carriages is little more than half the length of an ordinary train; so that the aggregate amount of such resistance is much reduced". The credit for proposing the 'Two-Storey' coach, at the time, goes to Lt. Col. J.P. Kennedy, a key figure in establishing the BB&CI and a leading railway planner and thinker of the early days of rail development in India. The coach was designed by the Locomotive and Carriage Superintendent of BB&CI, Mr. G.N. Anderson, and was constructed at the Amroli Workshop near Surat.

For well over 125 years since the introduction of the

*An engraving of the 'Two-Storied' coach that appeared in **The Illustrated London News,** March 12, 1864*



four-wheeler 'Two-Storied' coaches on the BB&CI, no one appears to have given any attention to double decker passenger rolling stock. One reason was the challenge of designing a double decker coach for the relatively restrictive 'schedule of dimensions' of the Broad Gauge. The 'schedule of dimensions' specifies the largest size of any vehicle that can move on the track. In the 1980's an effort was made to introduce ordinary second class double decker chair cars on some busy inter-city routes. The experiment of introducing these coaches was not very successful mainly because the windows of the lower deck were very low, virtually at platform level and the intake of dust was a nuisance. However, these coaches continue to run on the 'Flying Ranee' between Mumbai and Surat, a very popular train which has been running since 1906.

Present air-conditioned double decker coach

The real revival of the double decker coaches took place 150 years after the BB&CI initiative with the introduction of air-conditioned double decker coaches in the last few years. An entirely new shell design was developed by the Research Design and Standards Organisation (RDSO) of the Indian Railways in 2010 which was introduced in commercial service between Howrah and Dhanbad the following year. The coaches had a width of 3135 mm. A new design known as Mark I was developed subsequently with a coach width of 3050 mm which was introduced in service on the Jaipur-Delhi and Ahmedabad-Mumbai routes. RDSO is also working on a differential width coach design with a width of 3050 mm below platform level and 3250 mm above known as Mark II so as to optimise use of the maximum moving dimensions. It is interesting to note that the capacity of the new AC Double Decker coach is similar to the four-wheeler 'Two Storey' coaches of 1864 – 120 passengers. The seating and comfort level of modern coaches is, of course, much superior. The new AC Double Decker services have in recent years been introduced on a number of additional routes including Delhi-Lucknow, Chennai-Bangalore, Kacheguda-Tirupati and Kacheguda-Guntur. The passenger feedback of these double decker trains has been good with respect to amenities and comfort on board. However, facilities at the terminal stations often come in for criticism. The Rail Coach Factory, Kapurthala, gets the credit for manufacturing this rolling stock to the new RDSO designs.

Wash-room of double decker coach

Photos courtesy: The Rail Enthusiasts Society

The WP Locomotive

by J L Singh

1-2-3-4-1-2-3-4-1-2-3-4... This is the sound that railwaymen of my generation grew up with: the perfect beat of a steam locomotive. A child's rendering of this beat would be a steady chhook-chhook-chhook-chhook... At times the beat went a little awry and sounded something like: 1-2-3-4-1-2-3-4-1-2-3-4... or even 1-2-3-4-1-2-3-4-1-2-3-4... Whatever the condition, it was a sound that was music to our ears; it was a sound that you could hum popular tunes with; you could use it to accompany songs in movies.

Yes! The steam locomotive had melody, it had poetry, and it was romantic. The electric and diesel behemoths that have replaced it are dull and insipid in looks and although packing more horsepower, do not convey the feeling of awe and raw power that the steam locomotive did. In this, the 21st century, when we see steam locomotives only on heritage runs, in museums or at most on plinths, we forget that for more than half the period since the start of train travel, it was the steam locomotive that was the prime mover. Particularly in India, steam gave way to diesels and electrics only in the 1960s and 1970s, over a hundred years since the first train ran in India from Bori Bunder to Thane way back in 1853.

Among steam locomotives, my favourite has been the WP. Standing on a railway platform at a wayside station and seeing this black juggernaut hurtling towards you at full speed, you were filled with wonder bordering on fear. As the name indicates, the WP was a Broad Gauge (1676 mm) passenger train hauling locomotive. An American design, the first 16 prototype locomotives were built by Baldwin Locomotive Works, Philadelphia. These 16 were designated WP/P and the first of these, No. 7200, named "Azad", is now being maintained at the Rewari Steam shed. The word "Azad" which means "independent" is very apt for the locomotive as the first prototypes were delivered in 1947, the year India became an independent nation.

A WP locomotive. 'W' indicates that this is a 1676 mm gauge loco; while the 'P' shows that this hauls passenger trains

The WP was designed for the high ash content coal that was abundant in India. It proved its worth and in all, a total of 755 were built. Initially, orders were placed on various manufacturers that included the Montreal Locomotive Works, Canadian Locomotive Company, Fabryka Lokomotw of Poland and Lokomotivfabrik Floridsdorf of Austria. In 1963, orders for further WPs were placed on the Indian Railways own unit, Chittaranjan Locomotive Works (CLW). Chittaranjan manufactured 259 of these locomotives till 1966. In 1967, WP manufacture was discontinued owing to the advent of electrics and diesels. In fact, manufacture of the corresponding freight locomotive, the WG, was also stopped in 1972. The Chittaranjan-built WPs were designated WP/1 and were 5 tonnes heavier than the earlier ones. One of these, No. 7161 has been preserved and is being maintained at Rewari for heritage runs. During 2015-16, it is this locomotive that ran virtually all heritage runs to Rewari and other such runs around Delhi.

Right through the 1960s and 1970s, the WP was the main locomotive of the Indian Railways and ran 80% of the key passenger trains on the Broad Gauge. I have had the pleasure of travelling on the footplate of the WP when it was hauling trains such as the Frontier Mail and the Pashchim Express on the Kota-Mathura section. Owing to the intensity of the work, the locomotive ran with two first firemen, who took turns to shovel coal into the fire-box. Particularly on a winter night, when moving at a top speed of over 100 kmph, a blast of bright light and intense heat hit you from one side when the fireman opened the firebox door to shovel in the coal. At the same time, an equally biting blast of cold air at nearly zero degrees hit you from the other side of the open cabin of the locomotive. It was like having one side of your body in an oven and the other in a refrigerator; steam locos were designed for the tough.

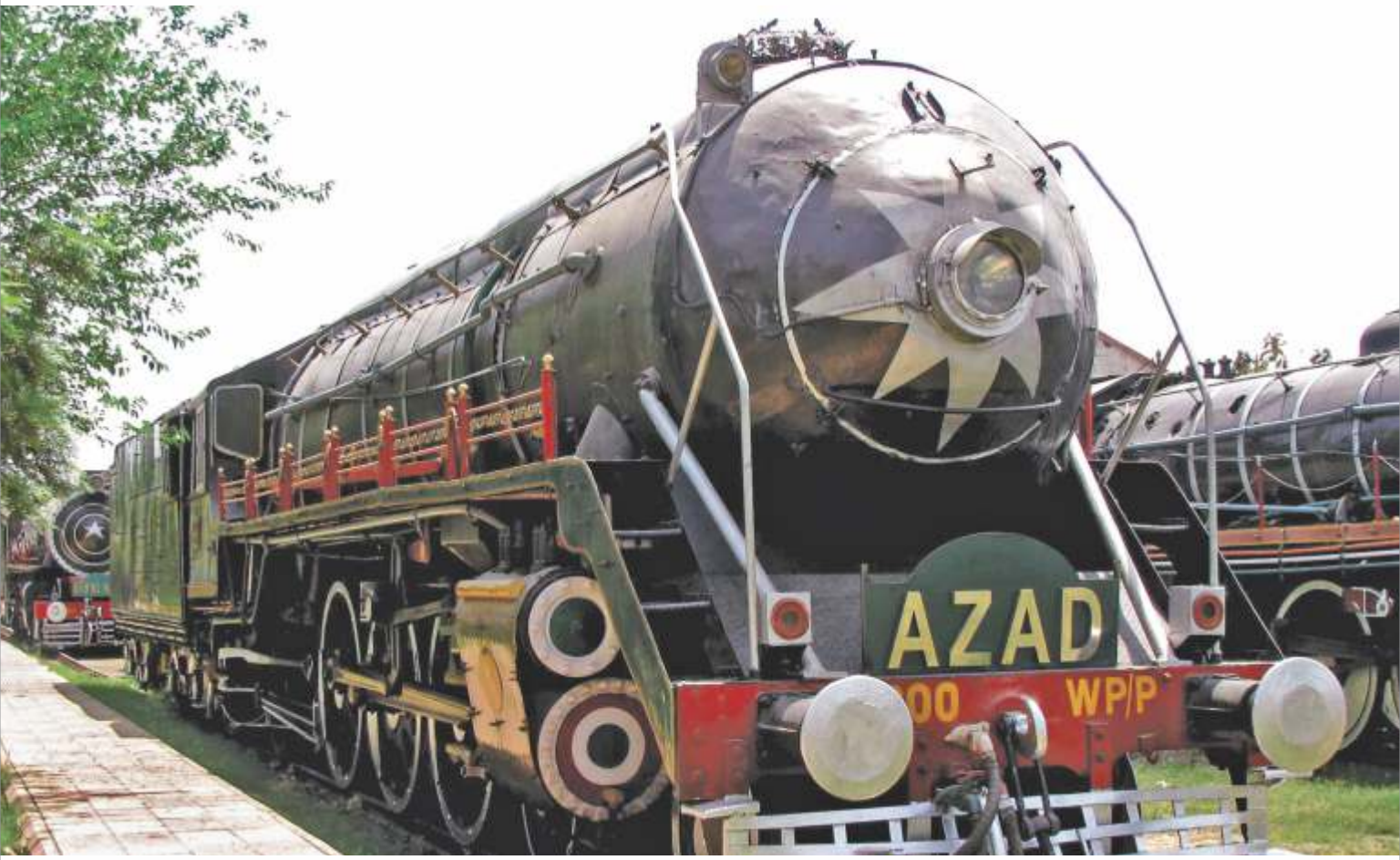
The WP was commemorated by the Posts and Telegraph Department with the issue of a stamp depicting the locomotive. This was a one-Rupee stamp released through a first-day cover that showed 3 other locomotives on the 15th of May 1976. Of the remaining locomotives, one was GIP No. 1, the first locomotive to work the first train in the country and the second, F-1, the first locomotive built fully in India. The third is the class WDM2 diesel-electric locomotive.

With a wheel arrangement of 4-6-2 and a driving wheel diameter of 1702 mm, the WP was ideal of passenger services. The leading bogie with wheels of 1092 mm diameter gave it good manoeuvrability on curves. Its axle load of 18.5 tonnes on the driving wheels made it suitable for the comparatively low axle loads in India as compared to the USA. It had two outside cylinders (514 mm x 711 mm). The boiler maintained a pressure of 210 psi with a fire-grate area of 4.3 m² and a total heating surface of 271 m². Working with the Walschaerts valve gear, the WP produced a tractive effort of 30,600 lbf.

Although a powerful locomotive by the then contemporary standards in India, the WP's counterparts in the USA were in a class by themselves. Among the latter was the iconic locomotive No. J-611. I had occasion to see the latter locomotive at the Virginia Museum of Transportation at Roanoke in Virginia, USA. Any lover of steam locomotive history will be interested in this locomotive as it holds a very special place in the chronology of steam traction in the US. The Class J locomotives were designed and built by the East End Shops at Roanoke, part of what was then called the N&W (Norfolk and Western) Railway. Those were the days when steam traction was on its

Re. 1 stamp of the WP

First day cover issued on 15th May 1976



WP loco No. 7200, aptly named 'AZAD'

way out in the USA and only 14 were built. The first of the class was built in 1941, while No. 611 rolled out of the Roanoke Shops on the 29th of May, 1950, at a cost of USD 251,344. It was retired from service in 1959 and today is the only Class J locomotive in existence. Since its retirement, its home has been the Virginia Museum of Transportation and its predecessor, Roanoke Transportation Museum. It did have its years of action in between from 1981 to 1994 when it was used for steam excursions after restoration at the Norfolk Southern's steam shops at Birmingham, Alabama.

Entry to Virginia Museum of Transportation

S.No.	Item	J Class	WP
1	Length	109' 2"	77' 6"
2	Height	16' 2"	13' 6"
3	Coal capacity	35 tons	15 tons
4	Water capacity	83,000 litres	25,000 itres
5	Wheel arrangement	4-8-4	4-6-2
6	Driving wheel Axle Load	32.5 tons	18.5 tons
7	Driving wheel dia	70"	67"
8	Tractive Effort	80,000 lbf	30,600 lbf
9	Boiler pressure	300 psi	210 psi

Locomotive J-611

The Class J was a remarkable locomotive. Having a distinctive bullet-nosed look as well as a characteristic whistle, like our WPs, it pulled N&W's most prestigious trains in its heydays. These trains included the Powhatan Arrow, the Pocohantas, the Birmingham Special and the Cavalier. Of course, except for its shape and its whistle, it dwarfed the WP and had innovations like roller bearings on its driving wheel axles that were not used on the latter. A brief comparison of some selected specifications of the J class and the WP are tabulated at the top of this page.

All the same, the WP was a remarkable locomotive and the service it gave the Indian Railways will be difficult to match for any other class of locomotive. Aesthetically, its bullet nose and sweeping curves also place it at a level above most other locomotives. Even the latest Delhi Metro coaches do not have its stream-lined look. Last but not the least, its low-pitched whistle that gave you the impression of a WG locomotive with a bad throat, will always ring nostalgically in the ears of old-timers like me.

Photos: From the archives of the Rail Enthusiasts' Society

HUMOUR ON RAILS

The Train to Morrow (Best if read out loud)

I started on a journey just about a week ago,
For the little town of Morrow, in the State of Ohio.
I never was a traveler, and really didn't know
That Morrow had been ridiculed a century or so.

I went down to the depot for my ticket and
Said I, "My friend, I want to go to Morrow and return
Not later than to-morrow, for I haven't time to burn."

Said he to me, "Now let me see if I have heard you right,
You want to go to Morrow and come back to-morrow night.
You should have gone to Morrow yesterday and back to-day,
For if you started yesterday to Morrow, don't you see,
You could have got to Morrow and returned to-day at three.
The train that started yesterday - now understand me right –
To-day it gets to Morrow, and returns to-morrow night."

Said I, "My boy, it seems to me you're talking through your hat,
Is there a town named Morrow on your line? Now tell me that."

"There is," said he, "and take from me a quiet little tip –
To go from here to Morrow is a fourteen-hour trip.
The train that goes to Morrow leaves to-day eight-thirty-five;
Half after ten to-morrow is the time it should arrive.
Now if from here to Morrow is a fourteen-hour jump,
Can you go to-day to Morrow and come back to-day, you chump?"

Said I, "I want to go to Morrow; can I go to-day
And get to Morrow by to-night, if there is no delay?"

"Well, well," said he, "explain to me and I've no more to say;
Can you go anywhere to-morrow and come back from there to-day?"

For if to-day you'd get to Morrow, surely you'll agree
You should have started not to-day, but yesterday, you see.
So if you start to Morrow, leaving here to-day, you're flat,
You won't get to Morrow till the day that follows that.

"Now if you start to-day to Morrow, it's a cinch you'll land
To-morrow into Morrow, not to-day, you understand.
For the train to-day to Morrow, if the schedule is right,
Will get you into Morrow by about to-morrow night."

Said I, "I guess you know it all, but kindly let me say,
How can I go to Morrow, if I leave the town to-day?"

Said he, "You cannot go to Morrow any more to-day,
For the train that goes to Morrow is a mile upon its way."

This happened when Ambala was part of the Delhi Division of the Indian Railways. The top man of the Division, the Divisional Rail Manager (DRM), decided that he would go and have a meal incognito at one of the small *dhabas* behind the station. This is where he used to enjoy his meals when he was training at Ambala as a probationary officer.

The DRM was having a quiet comfortable meal when, to his chagrin, the *dhaba* owner spotted and recognized him. The owner came over and began thanking our DRM most profusely for not just having his meal at his *dhaba*, but also being his saviour, his benefactor, his lord and master, his everything.

Our DRM was taken aback. Why was he being thanked so much when he did not even know the guy?

"Sir," said the *dhaba* owner, "You had dismissed me from railway service when you were the Divisional Mechanical Engineer on this Division."

The DRM was now totally foxed. The guy was thanking him for throwing him out of his job?

"I was an idler and a waster, Sir," explained the *dhaba* owner. "I would have continued in the railways doing no good and would have even today been at the lowest rung of the organisation. Your dismissing me was an eye-opener. I had to work to fill my stomach and raise my family. I opened this *dhaba* as my last hope and with the grace of God, it is doing very well. Thank you, Sir, for making a man of me."

News & Events

Launch of Vol. 1 No. 1 of "The Rail Enthusiast"

From left to right: J L Singh, Sanjoy Mookerjee, Ashwani Lohani, Sir Mark Tully, Vinoo Mathur

The 6th of August 2016 will always be firmly etched in the archives of the Rail Enthusiast Society. It was on this day that at the Central Services Officer's Institute, New Delhi, the first issue of its quarterly magazine – **The Rail Enthusiast** – was launched at a brief but colourful function.

Guests began arriving as early as 5 p.m. Among the earliest to do so were Mahesh Kapoor and Ranjit Mathur, two retired railway men turned rail enthusiasts, who also happened to be the oldest persons at the function. Among the other guests were a six-strong group of rail modellers, certainly the largest single group present. Another group was that of 4 enthusiasts from Japan who are currently working on the High Speed Rail Link proposed by the Indian Railways. The over 50 gathering included a number of women and children as well.

The Chief Guest at the launch was Ashwani Lohani, the current Chairman and Managing Director of Air India. Of course, he was not at the function in this capacity but as one who has perhaps done more for rail heritage in the country than any other person. Other than the Chief Guest, the Society had given special invitations to two other well-known rail enthusiasts – Sir Mark Tully and Sanjoy Mookerjee. While Sir Mark is well-known and needs no introduction, Sanjoy Mookerjee, now retired, was then the Financial Commissioner of the Indian Railways, but was invited in his capacity as an ardent rail enthusiast who has done yeoman service for preserving rail heritage, particularly at Tinsukhia and the National Academy of Indian Railways, Vadodara.

After a cup of tea, the function was initiated by the Secretary of the Society, J L Singh. Vinoo Mathur, the President, welcomed the guests in his delightfully meticulous style, following which, Mayank Tewari, one of the founder members, gave a presentation on the Society and its present and future activities. During the course of his presentation, all founder members were introduced. The 10 founder members, of whom 8 were present at the function, are: Vinoo Mathur, Joydeep Dutta (not present), J L Singh, Vikas Singh, Abhimanyu (Mani) Shaunik, Apurva Bahadur (not present), Ajay Singh, Mayank Tewari, Mathai Samuel and Sudhir Kala.

Following the presentation, guests were invited to give their suggestions and comments as well as ask questions. This led to a highly interactive discussion with a large number of guests contributing. It would be of interest to note that all invitees were rail enthusiasts, so that the exchange of views was animated and highly participative.

After addresses by each of the special invitees and the Chief Guest, the magazine itself was launched. Simultaneously, the Society website – **www.railenthusiastindia.org.in** – was also launched. A Face Book page had already been launched a few days earlier.

APHTRO

The Asia-Pacific Heritage and Tourism Rail Organisation (APHTRO) conducted its Annual General Conference in New Delhi from the 19th to the 21st of October 2016. Hosted by the Indian Railways, the venue for this 3-day conference was the National Rail Museum. Apart from Indian delegates, the conference attracted delegates from Argentina, Australia, Germany, Hungary, Japan, Taiwan and UK. Among the well-known delegates were Bibek Debroy, Member, NITI Ayog, David Morgan, President WATTRAIN, Heimo Echensperger, Vice President FEDECRAIL, Adrian Shooter, who owns and operates a B-class steam locomotive in the UK, and Kyoshi Oda, President APHTRO. Our President, Vinoo Mathur, presented one of the papers at the conference. His paper was on the Indo-Saracenic style of architectural buildings of the Indian Railways. Another paper was read by one of our active members, Sanjoy Mookerjee. The keynote address was presented by Bibek Debroy.

The conference included presentation of a number of papers and various panel discussions. Visits had been arranged to the museum itself, Heritage Transportaion Park at Tauri near Gurgaon and the Heritage Steam Park at Rewari. The conclusions arrived at were that rail heritage must be preserved and conserved by involving not only the railways themselves but other stakeholders and the community. Two suggestions that need follow up were that the Indian Railways must run timetabled heritage trains regularly and that India could become the centre for economical maintenance of steam locomotives and other vintage rolling stock owing to the costs here being much lower than in Europe.

The Fairy Queen is operational once again

The Fairy Queen is operational once again. On the 20th of November this year, it hauled the special train from Delhi Cantonment station to Rewari station as part of the Annual Congress of the Indian Steam Railway Society (ISRS). It was good to see this living great grand parent of all steam locos in India billowing smoke and steam and looking good in its green livery. Driver Amar Singh was at the controls.

The main conference of the ISRS, conducted a day earlier, was a departure from its norm by covering the evolution of transportation in all its forms instead of restricting itself to steam alone.

Ultra High Speed Conference

On 02.09.2016, Institute of Rolling Stock Engineers (IRSE) and Indian Railways Service of Mechanical Engineers Association (IRSMEA) organised an International Conference on Technology for Ultra High Speed Rolling Stock, with the support of the Indian Railways.

This is the first ever international conference in India on technology for ultra high speed rolling stock for operation at maximum speeds of 500 kmph and above and took place immediately before opening, constructing and running an Ultra High Speed Railway system in India on PPP basis. It is expected that the EOI will give a full view of emerging technologies available in the world in this frontier area.

It will not be out of place to mention that the current highest speed in India is 160 kmph on the Gatiman Express. However, if average speeds are taken into account, even this speed appears to be more hype than actual high speed. The Indian Railways needs to increase the average speed of its trains.

Chennai Rail Museum

While the National Rail Museum at New Delhi is well-known, there are a number of other smaller rail museums that have come up in various parts of the country. We will give you a brief on each of these museums in our coming issues. On this page, we cover the rail museum at Chennai.

Located on the New Avadi Road, Chennai Rail Museum was inaugurated on the 31st of March 2002. It adjoins the Furnishing Division of the Integral Coach Factory, the oldest and leading rail coach manufacturer in the county. Spread over 6.25 acres, the museum has five indoor galleries and a large outdoor exhibits park. Recent activities were the creation of an 'Art Gallery' and renovation of the 'Diamond Jubilee Gallery'.

The Art Gallery was inaugurated on the 2nd of October this year. It has been created to initiate young minds into 'Railway Art'.

It comprises 14 canvases painted by eminent artists such as M.S. Murthy and B.G. Gujjarappa. Diverse paintings with titles like "The Driver", "Sleep without Fear", "Railway Blue", "The Creator", "The Sprue Washers" or "Balakrishna Playing in RWF" are on display. As a follow up, an Art camp has been scheduled, signaling the museum's intent to promote the theme of "Art and Railways".

The Diamond Jubilee gallery was initially dedicated to the "JOURNEY OF ICF – 60 YEARS (1955-2015)" on October 1st 2015. Recently, it was renovated into a modern gallery by replacing its mosaic floor with PVC for aesthetic looks, fresh wall plastering, adding concealed wiring, etc. Additions to this gallery include 'heritage furniture', a cut out model of Kolkata metro motor coach, and vintage black and white pictures of the 1960's on the theme of 'Steam and Indian Railways'.

Sofas made of a heavy cast iron base, a wooden frame, cushioning on the seats and back rest, provided in the first class portion of yesteryear are on display. Station benches made of cast iron base and teak wood seats and backrests have a vintage appeal and a classy appearance.

Photos: Courtesy ICF

RAIL ENTHUSIASTS' SOCIETY

(Registration No: S-E/792/Distt. South East/2015)

For those who did not get to see the first issue of this magazine, it gives us immense pleasure to inform you that a new society, viz. Rail Enthusiasts' Society, was incorporated on the 28th of December 2015. The aims and objectives of the society include, *inter alia*, to provide a platform for rail enthusiasts to disseminate knowledge, air their views and exchange ideas regarding the railways in India or overseas and to publish a magazine (hard and E-copy) for all rail enthusiasts, whether they are members of the society or not. The magazine is being brought out every quarter. The society will be adding other activities such as guided rail trips, lectures, interaction with schools and museums, production and sale of rail memorabilia, photographic and other competitions, etc. in due course.

The society's magazine, **The Rail Enthusiast**, was launched on the 6th of August 2016 with the release of its first issue. You can read of the launch in our "News and Events" write-up.

A 'Rail Enthusiast' means a person who may or may not be a professional railway man or railway woman, but who has a deep interest in and love for the railways in all or any its aspects. The interest could be in any area pertaining to the railways in India or overseas and may include history, heritage, anecdotes, books and films, railway infrastructure like track, bridges, stations, etc., railway locomotives and rolling stock, rail operations, rail modelling, staff, sports, and so on. The subjects mentioned are only a sample and, in effect, sustained and deep interest in any area pertaining to the railways makes one a rail enthusiast.

The magazine is owned and published by the Rail Enthusiasts' Society. This is the second issue that you now have with you. To the best of our knowledge, no such magazine exists in India and we feel that **The Rail Enthusiast** has filled this niche. With this issue, we are launching an e-Magazine as well. It is available at Magzter and a digital copy of the magazine can be accessed from there.

We have also launched our website. Please visit **www.railenthusiastindia.org.in**. We have a Face Book page too, which you are requested to visit.

On the opposite page, you will find details of how you can become a member of the society. In case you are interested only in the magazine, the subscription rates are as follows:

Single copy	**₹ 100.00**
Annual subscription (4 copies)	**₹ 360.00**
5-year subscription (20 copies)	**₹ 1600.00**

1. The rate for the E-copy has not been worked out yet but would be less than that for the hard copy.
2. For overseas subscribers wanting a hard copy of the magazine, the rate charged will be as follows (to cover packaging and postage):

Single copy	**USD 8.00**
Annual subscription	**USD 28.80**
5-year subscription	**USD 128.00**

3. For countries that do not deal in the US Dollar, please email a request to the Secretary of the society and we shall give you the rate in other currencies like the Euro or GBP.
4. The subscription rates for membership of the society for those residing in India include free delivery of the magazine as well. For members residing overseas, and wanting a hard copy, please email the Secretary and special rates will be fixed in each case to cover the cost of postage. Overseas members will get an e-copy free.
5. Libraries will be given an additional 5% discount over rates for subscription to the magazine.
6. Bonafide students' rates for membership, valid as long as they remain students, will be 50% of the normal rates. Such rates would not apply to Life membership.
7. For subscription to the magazine, please mail the completed form below to: The Editor, Rail Enthusiasts' Society, C-494, Defence Colony, New Delhi-110024 (India).

Name .....

Type of subscription: ☐ Single copy ☐ Annual (4 copies) ☐ 5-year (20 copies)

Address (Magazine will be delivered here) .....

.....

Email: ..... Telephone .....

Payment enclosed: ☐ Cheque ☐ Demand Draft ☐ Bank transfer (details enclosed)

Membership of the Society

Membership of the society is open to individuals as well as Corporates. While individuals have the choice of three types of membership, for Corporates we have only membership for life.

Corporate Membership

This entails a one-time payment of ₹ 200,000/-. Membership gives the following to the Corporate:

- **Five copies of all magazines or supplements to the magazine that are published**
- **Concessional rates for any item such as artefacts, books or memorabilia on sale**
- **Invitation to 5 members of the organisation nominated by the corporation for any event or activity the society may organise**
- **Other benefits will be added in due course as and when more activities are added**

Rate for Corporate membership for foreign organisations will be US Dollars 4,000/-.

Individual Membership

For individuals, we have 3 types of membership. The member gets all copies of the magazine and its supplements, if any, as and when they are published. Concessions for other activities will be announced as and when the other activities are introduced.

- **Associate member : This gives you membership for one year. Subscription: ₹ 500/-**
- **Ordinary member : This gives you membership for five years. Subscription: ₹ 2000/-**
- **Life membership : This gives you membership for life with a one-time payment: ₹ 10,000/-**

For foreign nationals and overseas members, rates are as follows:

- **Associate member : Subscription: USD 10/-**
- **Ordinary member : Subscription: USD 40/-**
- **Life membership : One-time payment: USD 200/-**

Please see the note on the opposite page for overseas members wanting hard copies of the magazine.

Mode of Payment

Payment is acceptable by cheque, demand draft or cash. You can also do a direct bank transfer. All cheques and demand drafts should be payable to "Rail Enthusiasts' Society". For direct transfer to our bank, details are as follows:

- **Name of bank : State Bank of Patiala**
- **Branch : Personal Banking Branch, New Delhi**
- **Address of the bank : E-4, Defence Colony, New Delhi-110024 (India)**
- **Type of Account : Current**
- **Account Number : 65250409615**
- **IFS Code : STBP0000634**

For enrolling as a corporate member, all you need to do is send an email or a letter to the Secretary of the society. The address is: **C-494, Defence Colony, New Delhi-110024 (India)**, while the email id is **railenthusiast2015@gmail.com.**

Individuals can fill the form on the last page and send it to the Secretary at the address given above. Alternatively, the member may send a scanned copy to the email address also given above.

RAIL ENTHUSIASTS' SOCIETY

(Registration No: S-E/792/Distt. South East/2015)
Registered Address: C-494, Defence Colony, New Delhi - 110024

APPLICATION FOR MEMBERSHIP

TO BE FILLED BY APPLICANT

FULL NAME .....

..... DATE OF BIRTH .....

ADDRESS
(Where you would like to receive all correspondence, magazines, etc.) .....

.....

.....

CONTACT NUMBERS MOB: ..... TEL: .....

EMAIL ADDRESS .....

PROFESSION .....

ADDRESS OFFICE .....

YOUR AREAS OF INTEREST IN RAILWAYS (PLEASE TICK ☑)

- STEAM LOCOS ☐
- RAIL HISTORY & HERITAGE ☐
- RAIL PHOTOGRAPHY ☐
- BRIDGES ☐
- BUILDINGS ☐
- ROLLING STOCK ☐
- RAIL MODELLING ☐
- OTHERS – PLEASE ENTER BELOW

MENTION OTHER INTERESTS, IF ANY .....

.....

WHAT CATEGORY OF MEMBERSHIP WOULD YOU LIKE TO JOIN?

ASSOCIATE MEMBER	☐ ANNUAL SUB.	₹ 500
ORDINARY MEMBER	☐ 5 YEAR SUB.	₹ 2000
LIFE MEMBER	☐ ONE TIME SUB.	₹ 10,000

HOW WOULD YOU LIKE TO PAY YOUR SUBSCRIPTION?

- ☐ CHEQUE (In favour of "Rail Enthusiasts Society")
- ☐ BANK TRANSFER

(State Bank of Patiala, E-4 Defence Colony,New Delhi.
A/C No 65250409615; IFSC CODE STBP0000634)
Please confirm by email

For any queries please contact Secretary at
***railenthusiast2015@gmail.com** or by post/courier at*
Secretary, Rail Enthusiasts Society, C-494, Defence Colony, New Delhi - 110024 (India)
Tel: +91-8130111589
web: railenthusiastindia.org.in

The Institution of Mechanical Engineers (I.Mech.E.), London, UK, presented its Engineering Heritage Award to the Indian Railways on the 19th of November 2016 during the course of the 14th National Steam Congress at the National Rail Museum, New Delhi. The award was for the engineering heritage of the B-class steam locomotives operating on the Darjeeling Himalayan Railway since 1889 and continuing to do so even today. Seen above is a picture of the plaque that was received by the Indian Railways.

This is the first such award presented in India by I.Mech.E.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