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M.A.Jaishankar, SSE/M&P A.R.S.Ravindra, SSE/WS K.Sudhir, SSE/Shop41 Treasurer: R.Mehalan, SE/IT Shell Offices: V.Ramesh, SSE/Project S.K.Satishkumar, SSE/M&P K.Sekar, Ch.OS/Engg N.Jeganivasan, Stores Inspector N.Ganesh,SSE/MPO/S S.Ghatikachalarao,SSE/WS N.Devaraju, SSE/Plant S.N.Vivekanandan, Ch.OS/P9 Shell Shops: P.Baskaran, SSE/40 A-shed: R.Nagarajan,, SSE/10 B-shed: A.V.Gopalakrishna, SSE/22 Shop 24,25,26: P.Chandran, SSE/42 D&L-shed:R.Shanmugam, SSE/13 40, J, E: R. Lakshminarayanan, SSE/40 Stores: K.Damodaran, CDMS/SD RT,RPF: R.Senthilnathan, SSE/48 11,23,41,TS:R.Jegathiswaran,SSE/41 Insp: J.Ananthakumar,SSE/42 Progress: M.Saravanan.SSE/PCO CMT: G.Sivakumar, CMS-1 Electrical:D.T.Vijayaraj,SSE/45 Fur Offices:Harikumar.NV,SSE/MPO Accts: Sudharsan.MN,SSO/Accts PlgF,TS: G.Muthukrishnan,SSE Stores: V.Annamalai, OS/P7 Fur Shops: R.Sundarrajan, SSE/30 30: Bipinkumar Karn, SSE/30 32,34: P.Sathyanarayanan, SSE/PC32 33:D.R.Suresh,SSE/33 80,81,37:D.Santhakumar,SSE/80 88,RRM: K.S.Rajakumar, SSE/88 Elect, CMT, IOW: M. Devaraj, SSE/85 36,54: M.Ganesan,SSE/54 Progress:D.Baskar, SSE/PCO TTC: J.Selvakumar,SSE/TC D&D: Sabapathinathan.M,SSE/D&D Hospital: Raju Balaji, Ch.OS Web: K.Chandran, Webmaster/IT 74, Telph, Assn: D.N.Ramesh, SSE/Proj Advisors: S.Muthukumar, Dy CME/TPTY/SCR B.Chandrasekaran,SME/D-II K.N.Mohan, WM/A/S R.Srinivasan, APE/PR/F



new posting, he served as GM/SCR. He is an officer of Indian Railways Traffic Service (IRTS) of 1976 batch. Shri Rakesh Misra, GM/Southern Railway, has taken additional charge of the duties of GM/ICF on

Shri Devi Prasad Pande took over as Member

Traffic, Railway Board and ex-officio Secretary to

Government of India on 23rd July 2013. Prior to this



Shri Rakesh Misra, GM/Southern Railway, has taken additional charge of the duties of GM/ICF on 2^{nd} July. At the young age of 18 years, Shri Misra was selected by UPSC as a Special Class Railway Apprentice through an All India competitive examination. After completion of his training at Indian Railway Institute of Mechanical and Electrical Engineering/Jamalpur, he joined Central Railway.

In his 36 years of illustrious service, Shri Misra has worked in various important posts in different parts of the country. His assignments include Executive Director in Railway Research, Chief Design Engineer in ICF and Divisional Railway Manager/Malda/Eastern Railway.

In 2008, he was selected for a prestigious Diplomatic assignment and held the post of Railway Advisor /Berlin for over 4 years. He has undergone training in several aspects of Railway working in UK, USA, Japan and Germany and has visited many other countries like Russia, Brazil, South Africa and Sri Lanka for various Railway- related assignments.



Sri S.Sridhar, CEE and Sri M.Selvaraj, CE, receiving the 'Golden Peacock award for Environment Management-2013' from Sri M.Veerappa Moily, Hon'ble Minister for Petroleum and Natural gas, on 19th July at Delhi.

То



Sri Hemant Kumar, AM/Mech, visited ICF on 23rd July



Officials of Angolan Railways visited ICF on 11thJuly. Person of the Month







Hockey Championships held at Anaheim city, California, USA from 14th July to 21st July in which 20 nations participated.

He is the only skater selected for Team India from Tamil Nadu. He is also the captain for the Tamil Nadu State Inline Skating hockey team and won two gold medals in the state Championships. He already secured 6th Rank in Asian Roller Skating Championships 2012, held at Hefei city, China and 19th Rank in World Freestyle Inline Skating Championships 2012.



Ms.S.Pavithra, D/o.R.Sankaranarayanan, tenographer, COS Office performed Carnatic Vocal concert at VDS Acadamy ,MOP Vaishnav College, Nungambakkam, Chennai on 14-07-2013.



Sri E.Balakrishnan, Chief Publicity Inspector, is retiring from service on 31st Aug'13. He has won Rly. week award twice in 1998&2007 and also Railway Board award for implementation of official language. He has received many awards for organizing exhibition stall in IITF, IREE& trade fairs.

SCHOOL EXPERIENCE AFTER 37 YEARS AT SAME PREMISES



The students who have undergone 11 years SSLC at ICF School during 1976-77 met at the school. About 115 students and 24 teachers met to cherish their old days. They had a cultural programe also with Sasikumar, Thankar Bachan, Flim Directors and Pa.Vijay, Lyricist as chief guest. President of the ICF SCHOOL 1976-77 ALUMNI, Sri R Venkata Krishnan and Vice President: Smt. M. Kannamma are working as ChOS in PB/ICF. Secretary is Sri R.Venkatabala working in Ashok Leyland. Other executive committee members are K.Sekar, ChOS/Engg, Sai Subramaninan, Sh74, Sureshkumar, Shop40.

OFFICIAL POSTINGS

Name S/Shri/ Smt	Previous	Present
P.Balasundar	S.Rly	DyCME/Prod
M.Chandrakumar	DyCME/Proj	DyCME/Fur2
R.Veeraraghavan	DyCME/Fur2	Curator/RRM
V.Kalyanasundaram	Curator/RRM	DyCME/Proj
Senthamaraikannan	WM/Prod/S	PE/PR-1/S
N.Ulaganathan	WM/S	PE/PR-2/S
HanumanPrasadMeena	APE/PR/S	AWM/SM/S
V.V.Mahadevan	OS/P8/Fur	AMM/E/Fur

WE DEEPLY MOURN THE SUDDEN DEMISE OF THE FOLLOWING EMPLOYEES

Sl	Sl Name S/Shri		Desi	ignation
1	G.Gopinath		Tech-1/4	40
2	S.Gunasekaran		Helper/3	30
	STAFF OUTFLOW -	- LA	ST MO	NTH
S 1	Name S/Shri	De	esign	Mode
1	R.Selvam	Insp	or/87	Deputation
2	Biswambar Panigrahi	Tec	h-2/85	
3	M.Eswararao	Peor	n	Transfer
4	T.C.Rameshbabu	Ass	t Cook	Resigned
5	S.Veerendrakumar	Ven	dor	
6	G.Srinivasan	SSE	/PlgF	
7	V.Ravishankar	SrTe	ech/35	V.R
8	E.Veerapandian	SSE	/48	
9	D.Mosesrajacecil	SSE	/D&D	
10	P.G.Prakashrao	Tecl	h-1/18	
11	Gracammavarghese	Nur	se	
12	V.K.Divakar	Prog	gMan/F	

	EMPLOYEES RETIRING on 31st August'13				
1	SUBRAMANI.K	Sr.Tech/MGL	16		
2	NEELAKANDAN .S	Tech-1/Welder	20		
3	NEELAMEGAM .PG	Tech-1/Welder	21		
4	DORAIRAJ .C	Sr.Tech/Welder	22		
5	MANI.T	Tech-1/FGL	22		
6	MAHALINGAM.K	Tech-3/FGL	24		
7	RADHAKRISHNAN .G	Tech-1/Welder	26		
8	SALAMUTHU.K	Tech-1/FGL	26		
9	VEDAGIRI .A	Sr.Tech/MTR	41		
10	RAMESH .C D	Sr.Tech/MTR	41		
11	ANANDASAYANAM.R	SrTech/Elec	45		
12	NELSON MANASIA.R	CDMS	SD		
13	BALAKRISHNAN.E	CPI	Admn		
14	KUTHALINGAM N .	HC/RPF	RPF		
15	MUTHU .S	SrTech/Elec	28		
16	MOHAMMED	Tech-1/Welder	28		
17	GNANASEKARAN .S	Tech-1/Elec	29		
18	ELAMANDAIAH.J	Tech-3/Carp	30		
19	DHANANJAYA.R	Sr.Tech/FGL	30		
20	GOPINATH.T U	SrTech/FGL	33		
21	JOHN NESARAJ .J	Tech-1/Painter	36		
22	MUNNAVAR BASHA .	Sr.Tech/MGL	37		
23	SEKARAN .V	SrTech/Elec	39		
24	SUNDARRAJ .G	Sr.Tech/Serang	54		
25	MANIE	IE	80		

We wish them A Happy& Peaceful Retired Life

CIRCULARS

AC25: Grant of one increment in pre revised scale – clarification.

Sri R.Subbaiah, AEE/M-II, has been nominated as member of Safety committee/Fur in place of Sri H.V.Ramakrishnamurthy, AEE.

Last date for submission of applications:
Jr Clerk – PQ GP1900 = 12.08.13
Grant of tech scholarship from $SBF = 31.10.13$
OSD/Ticket checking/Rly Board = 18.08.13
SSE/JE in RDSO = 02.09.13
Health Education Officer/Rly Board = 13.08.13
Asst Traffic Manager/Rly Board = 12.08.13
Jr Clerk in National Academy of IR/Vadodara= 2.9.13
Non-Gaz staff for Patna workshop $= 30.11.13$
OSD/Rly Board = 12.08.13
Gr-B Liaison officer/rly Board = 14.08.13
Gr-D field worker for family welfare $-PQ = 10.08.13$
DGM-Depot/ CMRL = $07.08.13$
BMRCL- Ex Asst = $12.08.13$
RCF Sports quota = $12.08.13$
E.Rly&CLW- Gr-D Ex-servicemen quota = 16.08.13
RRB/Mumbai Gr-D&C Scouts& Guides = 19.08.13
C.Rly- Gr-D Ex-servicemen quota = $26.08.13$

Job for For SC/ST candidates Intelligence Officer : 12.08.13 Indian Banking Personnel Service: 17.08.13 Technician in (BHEL), Hyderabad: 18.08.13

For Guidance & Free Coaching: **9003149739** A meeting will be held on 19th August at 1700

hrs at TTC lawns to plan for improving Integral News. All team members, well wishers, advisors, volunteers are requested to attend.

ABOUT ICF-Part II

by Sri R.Srinivasan, APE/PR/F, 9003141449

(For soft copy, pl contact rsrinivasanicf@gmail.com)

SERVICE SHOPS:

The Service Shops in Shell division are numbered as Shop 45, Shop 46, Shop 48 and Shop 40 and in Furnishing division as Shop 85, 88 and 80.

Shop 45, 46 and 85 are for Electrical Maintenance and Shop 40, 80 are Mechanical Machine maintenance also called MILLWRIGHT and Shop 48 and Shop 88 are Maintenance- Road Transport.

PLANT ORGANISATION:

Mechanical Maintenance Shops such as Shop 40, 48, 80 and 88 are coming under Plant Organization headed by Dy.CME/Plant. It takes care of overall control of all Machines and Road transport vehicles.

Activities:

- Coordinating Project department in preparing the M&P Programme.
- Allotting of Inventory number for all Machinery and Plant.
- ➤Maintaining the Database and History card of all M&P.
- ➤Monitoring the Maintenance and availability of important machines.
- >Dealing with the machine manufacturer regarding service support.
- ➢Initiating and dealing with Annual Maintenance Contract(AMC)
- ▶ Processing all Spares and tools procurement.
- Dealing with all statutory obligations of Factories Act.
- Condemnation of Machines through proper procedure.

Condemnation Procedure:

- Every machine has a CODAL Life. If the machine is beyond repairable condition, it will be processed for Condemnation Even Before codal Life or After codal Life period.
- Codal life of every Asset including Coaches, Machine are provided by the Rly Board in Indian Railway Finance Code. All Machine tools, Special machines and Compressors are given 15 yrs. EOT cranes, Traversers are given 25 yrs. Electrical hoists, Lifts – 20 yrs, Motor Vehicles – 10 yrs, Computers – 3 yrs. IRS coaches – 30 yrs, EMU, Metro Coaches – 25 yrs.
- Separate forms have to be initiated for each and every machine to be condemned by the Concerned Maintenance in charge and will be endorsed by Electrical dept and Production. Approval is given by the HODs as per Schedule Of Power.
- ➢Once approved for Condemnation, the Machine will be sold in "as is where is condition" preferably by Auction method.

<u>SHOP 40</u>

It is the Mechanical maintenance shop of Shell division and is usually referred as Millwright shop. The main office is situated between J & D sheds.

- It has different sections like MW- A shed, B shed, C shed, D shed, E shed, F shed, J shed, NBF shed, NWS, L shed, Erection, Compressor, Gas, Cranes, Equipment, Machine, and Progress.
- ➢It has various technological machines like conventional, Pneumatic, Hydraulic, PLC, NC, CNC, LASER, Plasma and Robot.
- There are about 685 machines in Shell division.
- >The machines are classified as VITAL and Other than Vital machines.
- ≻Vital Machines (Around 123 nos) require Scheduled maintenance.
- Certain machines (around 45 nos) are grouped and monitored as Managerial machines.
- Cranes, Hoists, Pressure vessels are inspected and certified by outside Competent Person authorised by Inspector of Factories. Periodicity is: cranes-every year, hoist- every six months, Pressure vessel- every month.

Erection Section:

- ➢ It does the Erection work of all small and medium size machines for those the scope of Erection is with ICF.
- ➤It takes care of all re erection and relocating of all machines.
- ≻It coordinates with Civil Engg dept and firms in Erection-related matters.

Compressor section:

- Compressor section takes care of Operation and Maintenance of Air compressors.
- There are about 17 Compressors of Screw type/ Rotary type with capacity described in terms of Cubic Foot per Minute (1000 CFM) available.
- ➤All the Sheds are connected through a dedicated Compressed Air line.
- ➤Compressed Air is stored in the Pressure vessel for continuous supply.
- >At ICF pneumatic air working pressure is 7 kgf/ sq.cm or 100 psi.

Gas section:

- This section carries out the supply of various Gases such as Oxygen, Acetylene, Carbon dioxide, Argo shield through dedicated pipelines.
- Oxygen gas is received and stored in Liquid form in Liquid Oxygen plant for bulk storage. Other gases are received in Cylinders.

Equipment section:

This section does the manufacturing and repairing work of all types of equipment such as Trolleys, Stands, Plat forms, Jacks, Dip lorries, Small size furnaces, Torches, and any fabricated components.

Progress Section:

- This is one of the very important sections in Plant orgn where all the records are maintained.
- >It maintains Machine History cards, Manuals, Drawings, and other documents.

Crane section:

- ➤At ICF almost all the sheds and store yards are provided with Cranes for material movement.
- This section is the most important one as the maintenance of Cranes are having direct impact on Production of Shell and Safety of employees.
- This section not only maintains Cranes, Traversers but also Hoists, Chains, Wire ropes and Lifting Tackles.

Cranes:

- ➢ It is the machinery used for Lifting and Carrying the Loads from one place to another.
- There are different types of Cranes available in ICF such as EOT cranes, Gantry cranes, Goliath crane, Under hung Jib Crane, Pillar Jib cranes, HOT crane and Saddle crane etc.
- ➢HOT means Hand Operated Overhead Travelling and EOT means Electric Overhead Travelling Crane.
- ➤At ICF there are about 80 cranes available and around 72 are of EOT type.
- Crane lifting capacity is defined by SWL (Safe Working Load) in Tons.
- Different capacities such as 2 tons, 5 tons, 10 tons, 20 tons and 20/5 tons.
- >20/5 ton cranes have two Hoisting mechanism, main hoist as 20 tons and Auxiliary hoist as 5 tons.
- Almost all the sheds have standard span size of crane (distance between centre of over head rails) i.e 14478mm(approx 50 ft) except Main assy shed, Bogie shed and open gantry.
- ≻For cranes Limits and Brakes are very important.
- Different types of limits such as Roller type, Cam type, Gravity type and Optical type are used.
- >Electro Hydraulic Thruster type Brake is used in EOT cranes. For safety consideration, the Brakes will be in applied condition normally and Energy is supplied to release the brake whenever the movement of Long travel, Cross travel and Hoisting is required.

MAINTENANCE

Definition:

- As per BS 3811 -2000
- Maintenance is defined as the efforts directed towards UPKEEPING of plant and machinery in or bringing back to working condition.
- RETAINING or RESTORING to perform required function.

OBJECTIVES

- Reduce Breakdown and Down time
- Maximise Availability and Production
- Optimize Useful life and Resources
- Minimise Energy usage and Cost

Maintenance is has an effect on

• Productivity, Quality and Safety.

TYPES OF MAINTENANCE

- Corrective or breakdown maintenance
- Preventive maintenance
- Predictive maintenance
- Proactive maintenance

CORRECTIVE/BREAKDOWN MAINTENANCE

- It is the maintenance action done AFTER the occurrence of the FAILURE.
- If it is planned, it is called CORRECTIVE.
- If it is unplanned it is called BREAKDOWN.

BREAKDOWN MAINTENANCE

- Unpredicted Failure, Leads to UNSAFE conditions
- Very old concept, 1960s
- Reactive i.e no Proper maintenance approach.
- Reduced Quality and Efficiency
- High machine Downtime ,Production Loss and More expensive
- High labour cost due to idle and Overtime
- High material cost due to Spare part stocking and Urgent procurement
- Overall 3 times costlier
 - Not suitable New or Hi tech machines

PREVENTIVE MAINTENANCE

- It is the maintenance action taken before the occurrence of the failure.
- Motto is *prevention is better than cure*.
- Developed in 1970s.
- Planned activities, Organised working.
- Scheduled Maintenance such as Daily, Weekly, Fortnightly, monthly, Quarterly, Half yearly, Annually, or HOURLY
- Periodic Overhauling POH means complete dismantling, replacement of spare parts and re assembling like a new one.
- Improves Availability, Quality, Safety.
- Extends Codal Life
- Reduced Production Downtime, Product rejection, Rework
- Reduced Labor cost, Repair cost
- Suitable for all machines

PREDICTIVE MAINTENANCE

- It is the Attitude of using the actual condition of machine to Optimise Plant operation.
- Predicts the Failure by monitoring the Condition.
- CBM Condition Based Maintenance technique
- Uses Non Destructive techniques such as Visual Inspection, Vibration Monitoring, Infrared Imaging and Thermography and other tools
- Condition based Preventive maintenance
- Uses TRIBOLOGY i.e Study of Lubrication
- Referred as Diagnostic Maintenance as it uses Industrial Stethoscope.

PRO ACTIVE MAINTENANCE

- Developed in 1990s
- Approach is to Detect the Source of Failure
- Goal is to minimize the Risk of Failure for Critical System.
- Uses RCFA (Root Cause Failure Analysis)
- Design Out Maintenance i.e. Redesigning to eliminate Root cause of Failure
- Costly but Less maintenance

PRODUCTIVE MAINTENANCE

- Developed in 1990s by Mr. NAKAJIMA , Japanese scientist.
- Comprehensive approach of PM,TQM
- Total commitment from Top mgmt to employees
- Changing the Employee mind set
- Employee empowered to initiate corrective action **TPM**
- Total Productive Maintenance
- Combined MI & MP. (MI Maintenance Improvement, MP – Maintenance Prevention)
- Improves OEE Overall Equipment Effectiveness.
- To eliminate SIX major losses such as Setup & adjustment, Breakdown, Idling & minor stoppages, Reduce speed, Start up, Defects.

Autonomous Maintenance

- Encouraging Operator to take care of his equipment/ machine.
- Uses CLAIR technique. C CLEAN, L LUBRICATE, A ADJUST,
- I INSPECT, R REPAIR
- TPM GOALS: To achieve
- ZERO Breakdowns, ZERO Defects, ZERO Speed loss, ZERO Accidents.

Maintenance Strategy is decided :

- Based on Cost and Criticality
- For initial period of New machines Preventive Maintenance Cost is less compared to Breakdown Maintenance cost and after optimum period of life the BM cost is less compared to PM cost.

CRITICALITY

- No critical -Failure based –Corrective Maintenance is preferred.
- Low critical-Time based Preventive maintenance
- Critical Condition Based- Predictive maintenance
- Hi critical Risk based Proactive maintenance
- Overall TPM is better.

RELIABILITY

- It is the ability of the equipment to perform required function adequately for the stated period under stated conditions.
- It is expressed as a probability.

Causes for Unreliability:

• Increased Complexity & Many assemblies with more parts

FACTORS affecting RELIABILITY

- Design Features.
- Number of Elements, If the no. of elements increases, Reliability Decreases.
- Therefore for Max reliability, No. of items has to be Less.
- Environmental Factors

MEASURES OF RELIABILITY

1. FAILURE RATE : 2. MTBF : 3. MTTF :
4. PROBABILITY OF FAILURE : 5. MTTR

Number of Failures

FAILURE RATE = -----Total Operating Hours

MTBF means Mean Time Between Failures

➢ It is the average value of Time intervals between successive failures of Equipment.

Equipment Total operating hours

MTBF = ----Number of Observed Failures

1 MTBF = -----

Failure Rate

MTTF

- ✤ It means 'Mean Time To Failures'
- It is applicable for Life testing of Specimens, those will not fail at the same time and have different time of failures

PROBABILITY OF FAILURES

It is defined as One minus Reliability of the system.

<u>MTTR</u>

- Mean Time To Restore or Repair
- \clubsuit It is the total time to locate the failure and repair it.
- It is the Total time of all the repairs divided by the number of repairs.

AVAILABILITY

- ✤ It means Operational Readiness of the System
- It is the Ability of an item to perform the required function at a stated instant of time or over stated period of time.

MAINTAINABILITY

- ✤ It is the Ease with which system can be maintained.
- It is the probability that a Unit, Equipment or system will be restored to certain specified conditions within a given period of time when the maintenance is done with prescribed procedure and resources.
- Aim of Maintainability is to reduce Downtime of Equipment, Time taken to carryout PM, Time taken in Fault analysis, and repair.

In the last article degree centigrade has been printed as <u>OC due to error in the font used</u>

- (to be continued)





- •Lie flat on the back and relax.
- •Bend the right knee.
- •Interlock the fingers and clasp the hand on the leg just below the right knee.
- •Pull the leg towards the chest.
- •Keep the other leg (left) straight on the ground.
- •Remain in the position for 5 to 10 counts. (Count mentally)
- •Then return to the base position and relax for little time.
- •Repeat the same procedure with the other leg.
- •Do this exercise 3 to 5 times for each leg.
- **NOTE:** If you have problems in bending knees, can pull the leg by holding the thighs. Obese patients can use towel to pull the legs.

EFFECTS AND USES:

- •Stretch the lower back and one side buttocks which extends still inner thigh.
- •It reduces the tension in the low back and hip.

EXERCISE NO 6: DOUBLE KNEE TO CHEST



- Lie in the starting position as above and relax.Bend both knees.
- •Interlock the fingers and clasp the hand on the legs
- just below the knees.
- •Pull both slowly towards the chest.
- •Hold the posture for 5 to 10 counts.
- •Return to starting position and relax for some time.
- •Repeat the procedure 3 to 5 times.

NOTE: Same caution note as in previous exercise.

EFFECTS AND USES:

- •Stretch the lower back muscles and release the tension in entire low back.
- •Stretch the lower back and loosen the spinal vertebrae.
- •It increases the intra abdominal pressure, effective in removing wind.

EXERCISE NO 7: EXERCISE FOR STRETCHING THE SIDE MUSCLES



- •Lie down on your back with knees bent and feet flat on the floor.
- •Interlock the finger of both hands and keep the palm under the back of the head.
- •Role the bent knees to right and down to the floor and gently turn the head to the opposite side of the legs. (neck pain patients: Keeping the head straight is enough)
- •Hold the posture for 5 to 10 counts.
- •Return to starting position and relax.
- •After a little gap repeat the same procedure on the other side to complete a round.
- •Repeat 3 to 5 complete rounds.
- **NOTE:** Keep the feet and knee together throughout the practice.
- Let the elbow touch the floor during the entire process.

EFFECTS AND USES:

- •Uniform twisting stretch to entire spine.
- •Important exercise to stretch the side flexors and reduce tension over them.
- •Helps in maintenance of anterior and posterior trunk balance.
- •This work out provides overall relaxation of spinal muscles.
- •The twisting stretch may relieve the strain and stiffness caused by prolonged sitting.

EXERCISE NO 8: BRIDGING EXERCISE



•Lie on your back with knees bent.

- •Lift slowly the hip off from the floor and form a straight line between knee and shoulder.
- •Hold the posture 5 to 10 counts and then relax.

•Repeat the exercise 5 to 10 times.

NOTE: If you feel any pain while lifting the pelvis, should avoid the exercise for 2 to 3 days.

EFFECTS AND USES:

Important exercise for strengthen the core muscles.It is a useful exercise for bedridden patients too.

The Public Procurement Bill 2012 and Indian Railways

by Sri G.Loganathan, DyCMM/P/S

8.Re-Bid and Cancellation of Bidding Process

The procuring entity may award the contract to the next successful bidder if i) the successful bidder has withdrawn the bid due to force majeure or ii) the cancellation of the procurement process shall result in insurmountable delay or substantial cost escalation and iii) the procurement is of critical nature. As per the existing CVC instructions, any such withdrawal of the bid by the lowest bidder, will lead to cancellation of the procurement process and re-bid needs to be called for, if the withdrawal takes place before decision is taken. If the decision has been taken to accept the bid, the provisions of risk and cost purchase will apply and the successful bidder is legally liable to bear the additional cost incurred in such purchase, from elsewhere.

9.Payment Time Limits

Hitherto, no time limits are set for effecting the payment, to complete the obligations of the purchaser, once the supplier completes his part of the bargain and situations arise many a times, making the supplier to run from pillar to post, in claiming the payment due to them, in execution of the contract. This is going to change due to the provisions in the bill vide clause 26 (3) which says that every procurement contact shall specify the period within which sums due and payable, in respect of any procurement, shall be paid.

10.Publication of Restricted Bid Details

In the event of deciding to adopt limited competitive bidding, because of reasons of limited suppliers or otherwise, the procuring entity shall exhibit the invitation to bid on the Central Public Procurement Portal (Clause 31 (2)b). As per the current practice adopted on IR, no limited bid information is published on any public domain, but for sending it to the suppliers to whom the tender is issued. This provision will now mandate the IR also to publish the limited bid particulars on the internet, which might attract objections from other eligible suppliers.

11.Two Stage Bidding & Spot Purchase

At present, there are no detailed instructions regarding the conditions under which and the method to be used for adopting two stage bidding on IR. Clause 33 of the Bill provides for the circumstances under which, the two stage bidding may be adopted and also the method to be used while going for two stage bidding. So is also is the case with Spot Purchase.

12.Transparency Mechanism (Chapter-III, Institutional Mechanisms – Part-A)

Using IT can be one of the most effective policy tools in enhancing the level of competition in public procurement. The Central Public Procurement Portal shall henceforth, become the central place where all the information about bids can be found, as compared to the fragmented information available in various web portals of the Zonal Railways and Production Units of IR, apart from its IREPS web portal. The Central Public Procurement Portal shall provide the following information i) pre-qualification document, registration document, bidding documents with modifications, clarifications and corrigenda thereto ii) list of bidders participating in the above iii) list of bidders excluded in the above iv) decisions taken during the process of grievance redressed v) details of successful bids, their prices and bidders vi) debarred bidders etc. This will involve a lot of effort on the part of the Railway zones and units, to collate such large information and get it published in an external web portal.

Clause 7(4) provides for publication of information regarding planned procurement activities (procurement plan) for the forthcoming year or years on the Central Public Procurement Portal. Hitherto various Railway zones publish a procurement calendar, but invariably they are not kept updated.

13.Procurement Redressal Committee (Chapter-III, Institutional Mechanisms – Part-B)

Amongst the Bill's most important features is a grievance redressal mechanism. The mechanism enables an aggrieved bidder or prospective bidder to seek review of any decision, action or omission of the procuring entity. The mechanism further provides for the constitution of independent statutory bodies in the form of procurement redressal committees. These committees consider the grievances of bidders or prospective bidders who are aggrieved by any decision of the procuring entity. If the procuring entity fails to dispose of the application made, within the period specified, the aggrieved party may file an application for redressal to the concerned procurement redressal committee within 15 days from the date of expiry of the allowed period. The Central Government shall constitute procurement redressal committees consisting of not less than three members headed by a retired Judge of High Court.

Under the present system, the bidder who is aggrieved has no option but to file his complaint with the procuring agency itself. Obviously, if the procuring officials are themselves responsible for causing the grievance, there is little chance of the aggrieved bidder to get his due from such a redressal system. Another option available to the bidder is to complain to the internal oversight agencies like Vigilance Organisation or to external oversight agency like CBI or CVC. Arbitration proceedings are the other solution if the tender document itself so provides and the bidder can seek redressal under the Indian Arbitration and Conciliation Act 1996. However, reference to the High Court under Article 226 of the Constitution of India against the decision of the procurement authority/arbitration order can prove to be a lengthy and costly process, given the huge pendency in the Indian courts. Moreover in the absence of a legal framework for procurement, determination of violation of guidelines may come within a grey area.

To be continued-

SOUTHERN ZONE RAILWAY TIMETABLE JULY 2013 New Exp Trains :

1		1		
Train #	From	То	Freq	Via
22631	MAS	BKN	W	BZA, BPL,
22632	BKN	MAS		JP
22808	MAS	SRC	BW	BZA, VSKP,
22807	SRC	MAS		BBS
16001	MAS	PLNI	D	SA, KRR
16002	PLNI	MAS		
16003	MAS	NSL	W	RU, KRNT,
16004	NSL	MAS		AAO
16183	MS	TJ	D	VM, MV
16184	TJ	MS		
16185	MS	VTBO	D	VM, MV
16186	VTBO	MS		introduced
16181	MS	MNM	BW	VM, VRI,
16182	MNM	MS		introduced
16616	CBE	MQBO	D	ED,TPJ, TJ
16617	MQBO	CBE		introduced
16618	CBE	RMM	W	ED, TPJ,
16617	RMM	CBE		KKDI
22636	MAQ	MAO	D	UD, KAWR
22635	MAO	MAQ		
16565	YPR	MAQ	W	BWT, ED,
16566	MAQ	YPR		SRR
17605	DQR	MAQ	BW	KRNT, RU,
17606	MAQ	DQR		CBE
17235	SBC	NCJ	D	HSRA, SA,
17236	NCJ	SBC		KRR
22633	TVC	NZM	W	MAQ, BRC,
22634	NZM	TVC		MTJ
22114	KVCL	LTT	BW	MAQ,
22115	LTT	KVCL		KTYM
18567	VSKP	QLN	W	BZA, RU,
18568	QLN	VSKP		CBE
11017	LTT	KIK	W	PUNE, RU,
11018	KIK	LTT		MS, MV
18681	PDY	CAPE	W	VM, MV
18682	CAPE	PDY		introduced
12552	KYQ	YPR	W	BBS, BZA,
12551	YPR	KYQ		MAS
22351	PT	YPR	W	MGS, JBP,
22352	YPR	PT]	MAS
17413	TPTY	PDY	W	VM, TNM,
17414	PDY	TPTY]	KPD
19627				
10037	HTE	YPR	W	SBP, VSKP,

Extension of Trains:

16127/16128 to Tuticorin as 16129/16130- introduced.
12605/12606 Pallavan Exp. to Karaikudi
12508/12507 to TVC via ERN.
12653/12654 to PDY via VRI as 16857/16858
12082/12081 Jan Shatabdi Exp. (5D) to Kannur.
56514/56513 SBC-Nagore Pass (D) to Karaikal
56700/56701 MDU-QLN Passr, (Daily) to Punalur
56709/56710 MDU- DG Passr. (Daily) to Palani
66612/66611 ERS- TCR MEMU (6D) to Palakkad
66304 / 66305 QLN-NCJ MEMU (6D) to CAPE
76837/76838 KKDI - MNM DEMU (6D) to VPT

New Passenger Trains:

56339/56340 Punalur - Kollam Passenger (Daily) 56769/56770 Palani - Tiruchendur Pass (Daily) 56663/56664 Kozhikode - Thrisur Passr (Daily) 56367/56368 Guruvayur - Thrisur Pass (Daily) 66011/66012 Chennai Central - Tirupati (Daily) 66307/66308 ERS- QLN- via KTYM (6D) 66309/66310 ERS- QLN via Alappuzha (6D)

Increase in Frequency:

22616/22615 CBE- TPTY Express to 4 days a week. 12687/88, 2268788 MDU- DDN/CDG Exp to BW 12217/12218 KVCL -CDG Sampark Kranti to BW 56312 TEN-NCJ passr to Daily 56325 NCJ-Cape passr to Daily 56321 Cape- TEN Passr to Daily

CHANGE IN TIMINGS

16688/ 16788 JT Dep 23.45(Thu), MAQ Arr 22.45(Sun), TEN Arr 00.30 (Mon)

CHANGE IN DAYS OF SERVICE

12692 SSPN Dep 18.30(Sa), MAS Arr 05.15 (Su)

CHANGE IN TRAIN NUMBERS

From-To	Train No	New No	From
MS-MAQ	16107/08	16859/60	
MAS- MYS	16222/21	16021/22	
MS-RMM	16701/02	16101/02	1-Sep
MS-TCN	16735/36	16105/06	
KIK-ERS	16865/66	16187/88	
TN-MYS	16731/32	16235/36	1-Oct
Hapa-TEN	12977	19577	1-Nov
TEN-Hapa	12978	19578	4-Nov

CHANGE IN Arrival time at MAS:

Train#	Name	Arrl	Revised
13351	Tata-Allepy exp	03.10	02.55
16090	Yelagiri exp	09.05	09.15
16204	Tirupathi exp	10.30	11.30
16054	Tirupathi exp	13.15	13.40
12578	Bagmathi Exp	15.50	15.55
16058	Sapthagiri exp	20.35	21.35

CHANGE IN Departure time at MAS:

Train#	Name	Depr	Revised
16053	Tirupathi exp	13.50	14.10
17311	Vasco Exp	14.10	13.50
17313	Hubli Exp	14.10	13.50
22860	Puri Exp	16.15	16.20
22826	Shalimar Exp	16.15	16.20
12578	Bagmathi Exp	16.15	16.20

CHANGE IN Arrival time at MS:

i tuinin i tui	lile	AITI	Revised
11064 Sal	em-Chennai	04.50	04.40

CHANGE IN Departure time at MS:

Train#	Name	Depr	Revised
12661	Pothigai Exp	20.05	20.10

- ✓T.No.16861 Puducherry Kanniyakumari (Weekly) Express will leave Puducherry at 11.30 hrs. on Thursdays and arrive at Kanniyakumari at 03.15 hrs. on Fridays.T.No.16862 will leave Kanniyakumari at 13.35 hrs on Fridays and arrive at Puducherry at 05.25 hrs on Saturdays.
- ✓ 16129 Dep MS 07.40 hrs,Arr TN 20.35 hrs. 16130 Dep TN 07.35 hrs, Arr MS 21.15 hrs. It will be attached to Guv Exp between MS and MEJ.
- ✓ 16185 Dep MS 23.15 hrs,Arr Velankanni 07.45, 16186 Dep VTBO 20.45hrs, Arr MS 05.25. This will be attached to Karaikal exp between MS and Nagai.
- ✓ 16181 Dep MS 20.20 hrs on Wed, Sat, Arr MNM 07.45hrs. 16182 Dep MNM 20.15 hrs on Thu,Sun, Arr MS 06.05 hrs.
- ✓ 16616 Dep CBE 23.55 hrs,Arr MQBO 07.55 hrs. 16615 Dep MQBO 20.10 hrs, Arr CBE 05.00 HRS.
- ✓ EMU local train (MRTS): Dep MSB 21.00, Arr VLCY 21.45, Dep VLCY 21.50, Arr MSB 22.35 hrs.
- \checkmark 16177/16178 Rockfort exp will run only upto TPJ.
- ✓ 16089/16090 Yelagiri exp will run upto JTJ only.

Changes in refund rules wef 01.07.13

Unused unreserved ticket shall be presented for cancellation within three hours of issue of ticket.

Unused reserved tickets:

Refund with minimum cancellation charges

Till 30.06.13	From 01.07.13
The ticket shall be	The ticket shall be
presented for cancellation	presented for cancellation
before 24 hrs of sch dep	before 48 hrs of sch dep
of the train	of the train
25% cancellation charges:	Between 48 hrs and 6 hrs
Between 24 hrs and 4 hrs	before dep
before dep	_
50% cancellation charges:	Between 6 hrs before and
Between 4 hrs before and	2 hrs after dep of train
3/6/12 hrs after dep of	-
train	

Unused waitlisted or RAC tickets:.

Till 30.06.13	From 01.07.13
refund with minimum	Within 3 hrs of
cancellation charges within	actual dep of train
3/6/12 hrs of dep of train	
If no current counter available,	Before 10.00 hrs
for night trains 2100-0600 hrs =	next day
before 12.00 hrs next day	-

If the passengers could not reach the reservation counter for cancellation of tickets, TDR shall be issued to the passenger and the passenger may apply for refund of fare within **ten days instead existing 90 days** from the day of commencement of journey. The TDR shall be issued only upto **three days instead of existing 30 days** after the scheduled departure of the train. Three MoUs were signed on 18.06.2013 between ICF and the National Institute of Design (NID), Ahmedabad, Indian Institute of Technology, Madras (IITM) and RITES Ltd.

An MOU was signed by Shri Pradyumna Vyas, Director, NID and Shri Pankaj Kumar, CME/ICF for Design consultancy for aesthetic improvement of interiors and Passenger amenity items for Sleeper class coaches (Non-AC), AC Sleeper class coaches and AC Chair car coaches. This will provide additional comforts and facilities to the travelling public.

Another MOU was signed by Shri Krishnan Balasubramanian, Dean, IITM and Shri Pankaj Kumar, CME, ICF for collaborative research and development in the area of identified topics like Emergency Openable window, Use of Fire retardant Materials and Use of Biodegradable and recyclable materials, Skin Tensioning of Shells, Computer Modeling of Air Flow in AC coaches and Energy Efficiency –Use of Solar Energy in coaches.

Third MOU was signed between ICF and RITES Ltd. for upgradation of quality of export coaches which includes designing and execution of furnishing of coaches to start with. This project will be executed on turn-key basis by RITES for interior furnishing of DEMU coaches for export.

The above Three MOUs were signed at ICF in the presence of Shri Abhay K.Khanna, General Manager, ICF, Shri P.Rama Krishna Rao, Activity Chairperson, NID, Shri Sumit Sinha, Director, RITES, Shri V.Suresh, Sr.Tech.Econ.Officer, IITM and other Sr. Officials of ICF.

•Shri Rakesh Misra, GM/SR, inaugurated a photo exhibition at Lalit kala Akademi Art Gallery, No.4, Greams Road, Chennai – 600 006, in commemoration of 160 years of Indian Railways on 10th July. The exhibition was open for the public from 11th July to 16th July. The exhibition "160 years of Indian Railways" was a showcase of selected photographs from the archives of Indian Railways.

•The Union Cabinet gave its approval for the extension of the period of the validity of MRVC by a further 5 years that is up to 11th July 2019, to match the completion of MUTP Phase II and facilitate integration of the suburban rail capacity enhancement plans with the urban development plan.

•Pakistan Railways has slashed fare of all passenger trains by over 45% except Karakoram Express initially for the period of three months to attract more passengers. The fares were slashed owing to low occupancy and to compete with the road transport.

•Railway Board has decided to identify senior train ticket examiners (TTEs) as 'captains'. 'captain' will be displayed on the left arm sleeve of TTE who will be required to perform supervisory duties similar to train superintendents who accompany superfast trains such as Rajdhani, Shatabdi and Duronto that operate as point-to point services. Captains will also be required to monitor on-board housekeeping crew.

•Solar powered coach number display unit using light emitting diodes has been designed and made by Sri.S.Rajendran, Tech-1/Shop 85. The device uses photo voltaic cells to charge a battery which in turn illuminates the LEDs. The reflective coating on the display ensures better visibility during daytime. This is a standalone unit that can be easily fitted to a coach and does not require any wiring. A photo voltaic cell is used to charge a nickel cadmium rechargeable (Ni-Cd) battery which in turn gives power to the LEDs. Lights are turned on automatically during dark using a light sensing circuit. Mere 4 hours exposure to ambient light can store energy required for 36 hours glowing. It can also withstand extreme weather & operating conditions associated with train operation. Cost of one unit is Rs1850, but it will reduce when manufactured in bulk quantity.



•Solar powered train reservation chart light using light emitting diodes has been designed and made by Sri.S.Rajendran, Tech-1/Shop85. The device works on the same principle as coach number display unit. Here a push button is used to turn-on the light for a specific duration after which the light will automatically turns off. Mere 4 hours exposure to ambient light can store energy required for 12 hours glowing. Cost of one unit is Rs1900, but it will reduce when manufactured in bulk quantity.

✓ Central Railway has decided to build a 700m-long moving walkway to connect LTT to Kurla station, at a cost of Rs.9 Crores, to ease commuters' woes.

✓ The 163-year old telegram service in the country - the harbinger of good and bad news for generations of Indians was buried on 14th July at 21.00 Hrs. This service generated about Rs 75 lakh annually, compared with the cost of over Rs 100 crore to run and manage it.

✓ On 28th July, Shri Mallikarjun Kharge, union railway minister, laid foundation stone for 68km long Hansi-Meham-Rohtak railway line costing Rs. 500 crores.

✓ Shri D. Lakshmanan has assumed charge as Chief Public Relations Officer of Southern Railway on 15.7.2013. He belongs to the Indian Railways Traffic Service (IRTS). Prior to the present assignment he was Senior Divisional Commercial Manager in Salem Division, Southern Railway.



The Lac-Mégantic derailment occurred in the Eastern Townships of the Canadian province of Quebec, on 6^{th} July, when an unattended freight train carrying crude oil ran away and derailed, resulting in the fire and explosion of multiple tank cars. 42 people died with 5 more missing and presumed dead. More than 30 buildings in the town's centre were destroyed.

The freight train comprised five diesel-powered locomotives hauling one buffer car, followed by 72 tank cars, each filled with 113,000 litres of crude oil. It was 1.4 KM long. It stopped at Nantes at 23:25 on 5th July, for crew change. The engineer parked the train on the main line by setting the brakes and followed standard procedure by shutting down four of the five locomotives. The engineer left the lead locomotive running to keep air pressure supplied to the train's air brakes and also applied a number of manual hand brakes. The engineer departed by taxi for a local hotel.

The train travelled 11 kilometres downhill. The track from Nantes to Lac-Mégantic is downhill on a 1.2% grade. The track was not equipped with signals to alert the rail traffic controller. The train entered the town of Lac-Mégantic at high speed and many of the tank cars derailed on a sharp curve on the mainline. Some tank cars ruptured and crude oil escaped along the train's trajectory as a huge fire blanketed an area 91 to 121 metres in diameter. Between four and six explosions were reported initially, and the heat from the fires was felt as far as 2 KM away. People were jumping from the third floor of buildings in the central business district to escape the fire. As the blazing oil flowed over the ground, it entered the town's storm sewer and emerged as huge fires towering from other storm sewer drains, manholes, and even chimneys and basements of buildings in the area.

Around 150 firefighters were deployed. There was no injured person, all were dead. After 20 hours, the centre of the fire was still inaccessible to firefighters and five pools of fuel were still burning. Five of the unexploded cars were doused with high-pressure water to prevent further explosions, and two were still burning and at risk of exploding 36 hours later. The train's event recorder was recovered at around 15:00 the next day and the fire was finally extinguished in the evening, after burning for nearly two days.

THE RAILWAY EMPLOYEES' CO-OPERATIVE CREDIT SOCIETY LIMITED CHENNAI-3

Our Society grants the following Loans, namely General Loan, Marriage Loan and Education Loan.

- •Single Surety for General Loan and Marriage Loan.
- •No Surety for Education Loan.
- •A Minimum General Loan of Rs.1.5 lakh and a Maximum General Loan of Rs.7.5 lakh is granted. Shortly, this will be increased to Minimum of Rs.2 lakh and a Maximum of Rs.10 lakh.
- •Up to a Maximum of Rs.3 lakh is granted as Marriage Loan.
- •Up to a Maximum of Rs.30,000 is granted as Education Loan.

WELFARE SCHEMES

Personal Accident Coverage Scheme (PACS)

- •Up to a Maximum of Rs.3 lakh per Member, in the event of death on account of an Accident / loss of organs due to an accident.
- •Deceased Member's family is protected from attachment of gratuity. Sureties are protected from Suretyship.
- •As on 01-08-2013, a sum of Rs.3, 30, 45,000/- is paid to 121 Members / family members.

Free Loan Coverage Scheme :

- •All Members are covered under Free Loan Coverage Scheme.
- •In the event of death of member (Accident / Natural) entire loan balance along with interest (after adjusting assets) is fully waived.
- •Loan and interest balance of 521 members amounting to Rs.4, 48, 80,973/- is waived and 778 sureties were protected.

Other Welfare Schemes :

- •Retirement Benefit of Rs.5,000/- to members (on completion of ten years of Membership).
- •Rs.10,000/- is given to the deceased member family through Member Death Relief Fund Scheme.
- •Education Award to Children of members securing 75% and above in 10th and 12th Std. Final Exams.

NEW LOAN SCHEMES

- •Shortly, we will be introducing Tour Package Loans to our members for trips Abroad or within India.
- •Loan for purchase of Insurance Policy, Pension Policy, ULIF Policy, Mediclaim Policy (with IT Benefit).