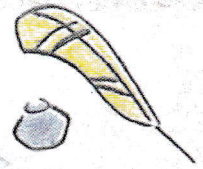




AUGUST 2013

MARITIMES Of Sailors & Seers

I from the editor's desk
From the Editor's Desk...



Ciao Readers, *Rudolf Diesel invented the diesel engine.*

Rudolf Diesel invented the diesel engine but the marine engineers slog hard to keep it running onboard ships. Owing to myriad of its advantages and importance in marine propulsion, we opted for 'Marine IC Engines' as the theme of the August Issue of Maritimes with the inclusion of few miscellaneous articles. Most modern ships use a reciprocating diesel engine as their prime mover due to their operating simplicity, robustness and fuel economy.

Besides, as I indite this editorial, I find it imperative to thank Mr. I.K. Basu, Mr. Sanjeet Kanungo, Mr. S. Subramanian, Mr. S. Sindagi & Mr. Hiren Malhotra for giving their valuable time. Also, acknowledgement and grateful thanks must be extended to all the faculty advisors who provided tremendous encouragement and support throughout the editing process.

Furthermore, I'd like to convey my gratitude to my team members and this is not the first time when I'm running short of words - but with a team as peerless as this, I have no qualms at all. I strongly hope that our work that we have put forth would be liked by one and all. With a promise to meet shortly again, and make our absence sweet - Arrivederci! Have a delightful year ahead! Felix Lectura!

Tushar Raj

Editor-in-Chief

✉ tusharraj8apr@gmail.com

Date: 11th August, 2013

Place: Pune (MH)

HORIZON 2K13

-Himanshu Sharma

Finally, it was that time of the year that every TMI cadet looks forward to. It was the time for Horizon 2K13. The theme this year was Halloween; true to its notion, the setup was pretty scary. So without much ado, let me present you a glimpse of the events that took place.

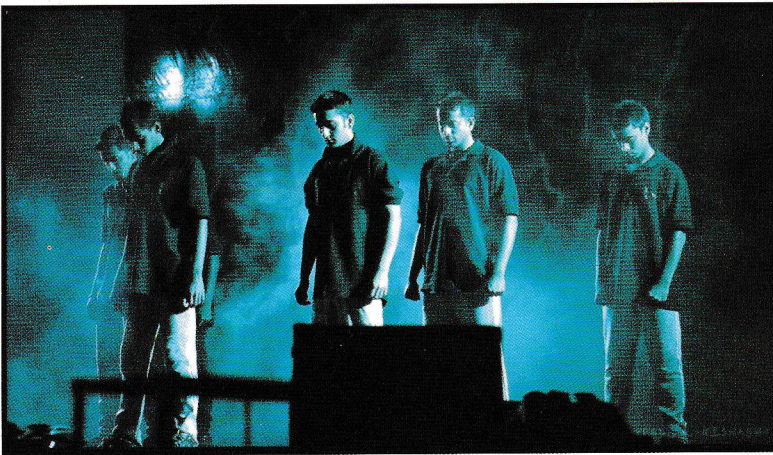


DAY 1 – 26th April, 2013

Horizon was inaugurated by a soul numbing cultural band performance lead by Mr. Uday Deshpandey. Being a Tabla virtuoso, he has already enthralled folks all over the world. For sure, it was the best start to the festival of TMI. This was followed by a breath taking performance by TMI's very own college band. After attending the cultural events, the audience went to the fields to watch Basketball and Futsal where TMIians showcased their talent.

DAY 2 – 27th April, 2013

The day started with the event 'Treasure Hunt' which spanned over two days. The contestants were left extremely exhausted as they had to run around the campus searching for clues and solving mind teasers. Later, it was time for cadets to display their Roadies spirit by performing the challenging tasks 'Chariots of Fire'. Then the painters of the college did some spectacular piece of art for 'Painting Competition'. And finally in the afternoon, 'Poetry Competition' led to the penning down of some beautiful poems within a time constraint of 15 minutes that were given to the contestants. Meanwhile the smartest minds of the institute built efficient warships capable to wreck one another in 'Junkyard Wars'. The rest of the cadets were seen shooting paintballs at each other in the football field. Speed Chess, Sudoku and Quiz were some of the events that forced contestants to exercise their brains. The endurance and fitness of cadets were tested in a unique obstacle course set up for the event 'Temple Run'.



The music lovers had ample reason to rejoice as it was time for the 'War of Bands'. A professional band, 'Consecration' was invited to judge them which too at the end performed few awesome songs for the enthusiastic crowd. Apart from the vivacious singer's renditions, the students of TMI enjoyed the head-banging music and metal songs by all the bands.

Next in the line was the 'Musical Play'. The co-ordination between the actors as well as the song selection was commendable. It was an exhilarating experience for one and all. There was also a soothing performance by Mr. S. Bhilare and Mr. Ayaz Khan which mesmerized the audience. But the real excitement started later in the evening when the DJ started churning out songs of all genres, making everyone sway to his/her tunes.

DAY 3 – 28th April, 2013

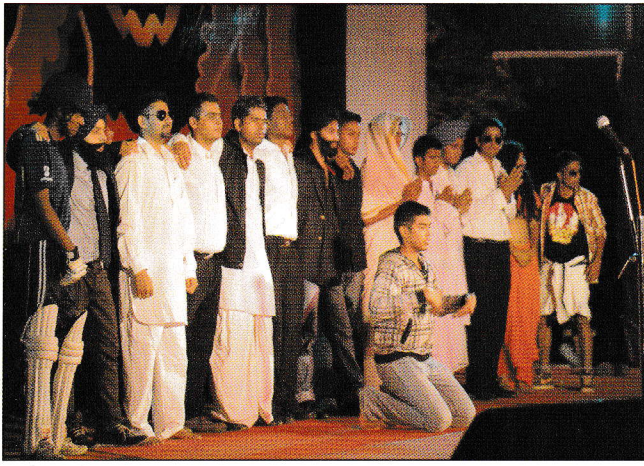
The last day of the fest started with 'TMI's Fittest and Strongest Challenge Person' event, which included pulling Tata Sumo and various other Herculean tasks to test the agility and strength of the contestants.



"It is never too late to be what you might have been."

~George Eliot

Experiencing Euphoria



Some other entertaining events included 'Television Exorcism', 'Group Singing' and 'Dumb Charades'. Cadets also displayed their creativity and unmatched skills in 'AdMad' and 'Cartoon Making' competitions. Some great arguments and discussions were put forward during the 'Debate Competition' which left the judges in utter contemplation so as to declare the winner.



We then witnessed some very fine pieces of direction and acting in 'Group Drama' event. This year the plays revolved around social issues like corruption and bribery. The actors did a brilliant job in bringing out the atrocities

The final event of the day was 'Group Dance'. The coordination amongst the dancers was remarkable. The hours of hard work and practice did pay off as the performances were perfect and amazing. With this came the end of three days of fun and frolic. Horizon 2013 gave us memories that we would cherish for life. We all are eagerly looking forward to the next Horizon as we know that it is going to be full of enjoyment and thrill.

Photo Courtesy: Pranav Khare, Utkarsh Sharma, Rishabh Pandey and Vaibhav Singhal



Vive la TMI

*"All our dreams can come true - if we have the courage to pursue them."
~Walt Disney*

Rendezvous with Dr. D. D. Mundhra

-Abhinav Agas

Soft spoken and serene yet strict, Dr. Durga Das Mundhra needs little introduction to the cadets and faculty of Tolani Maritime Institute, Pune. Ever humorous and joyful while teaching the course of Applied Mechanics to the first years, makes the most insipid topics seem vibrant. Currently as the Examination Controller, he ensures that all exams are conducted in a fair manner. One of the senior most faculty members, he has been with TMI right from the year 2001. Further, he has played a phenomenal role in helping people literally reach for the skies. Maritimes got in touch with him recently and here is what we found out:

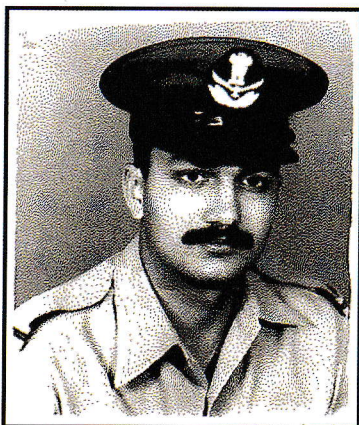
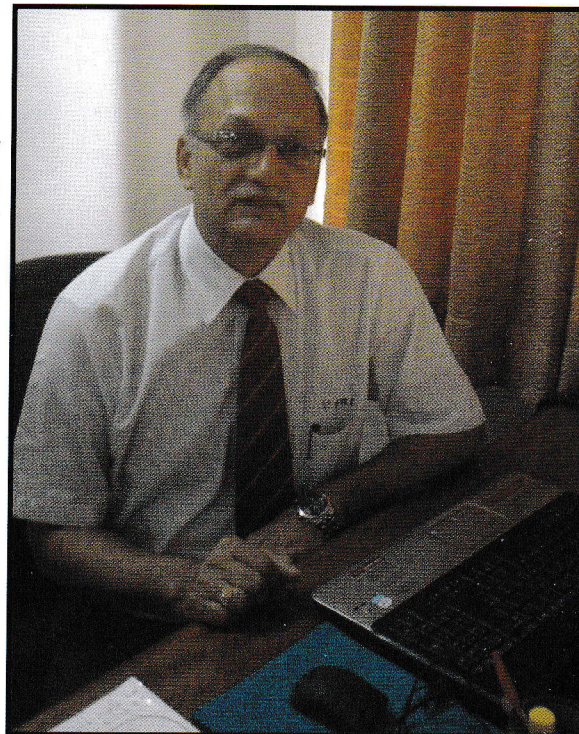
Q: A calm gentleman, highly skilled engineer and a dedicated professor. Where did the journey begin?

A: I was born on 5th October, 1953 in Chaibasa, Jharkhand. I completed my schooling from M.L. Rungta Higher Secondary School, a private school in Chaibasa where I had a small class comprising of only 20-25 students. Following which I joined Bihar Institute of Technology, Sindri where I pursued Mechanical Engineering (a five year course at that time), which I completed in December, '76.

Q: What did you do before you joined TMI?

A: I got the appointment letter to join the Indian Air Force before graduation enabling me to join the IAF in July, '77. I was a part of the Mechanical Engineering branch and started working on jet fighters Gnat and Ajeet (Indian version) for the next three years. The job mainly involved regular maintenance and repairs of these jet fighters. Later, I began working on Surface to Air Missiles (SAM). I was also a part of the Directorate General of Aeronautical Quality Assurance (DGAQA). Afterwards, I opted for premature retirement in November, '99 since I wanted to join academics.

I joined Ghansham Hemlata Institute of Technology and Management (GHITM), Puri as the Professor and Head of Mechanical Engineering Department. I worked there for sixteen months and then joined TMI in July, 2001 as Professor of Mechanical Engineering.



Q: Please share some of your interesting experiences during your service in the Indian Air Force.

A: I clearly remember the day when our regular lifting crane was unserviceable and my crew and I had to arm a Sukhoi-30 jet fighter by carrying a 450 kg missile on our shoulders.

Once I was standing next to the wing of an Ajeet jet fighter which reached up to my chest. The ground crew were testing engine performance by moving the throttle, when accidentally the lashing broke and the plane jerked forward. By God's grace I ducked and no harm was done. This near miss has remained in my memory.

Q: What do you consider as your greatest professional achievement?

A: Receiving my Ph.D. in Management has been my greatest professional achievement by far.

Q: What was the most significant event in your professional life?

A: I was commended by Air Force In-charge, Maintenance Command for the development of a 'Vigorous Training Programme for Officers'.

Q: Which persons influenced your life greatly?

A: My Science teacher- Mr. K.L. Majumdar and my English teacher- Mr. L. D. Mohan influenced my life profoundly.

Q: What hobbies do you pursue?

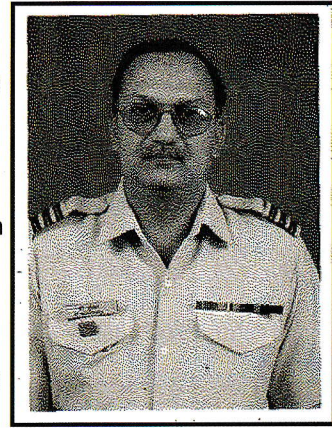
A: I play almost all racquet games; I still play Badminton and Squash with the cadets in the evening and often give them a fair challenge (smiles). Apart from that, I also read books.

Q: Which books do you like the most?

- A: 1. Pathway to Light by Prakash Amte
- 2. Pullela Gopichand: The world beneath his feet. – A biography by Sachi Sharma
- 3. Brick by Red Brick by TT Ram Mohan

Q: With your outstanding experiences as the Examination Controller and a professor at TMI, what message would you like to give the students?

A: Students these days are faced with many distractions. To achieve success, a student has to be systematic and methodical in his/her approach. Time management is of utmost importance. Also, one must decide what he/she wants to be and should work with full dedication towards that goal.



ANMM and VJSMF- A Maritime Museum Development Workshop, Kochi

-Arundhati De (Team member, VJSMF)



Top 3 rows – participants

L - R : Mr. P. Easwaran (CHS), Arundhati De (VJSMF), Johanna Nettleton (ANMM), Michael Crayford (ANMM), Mrs. Asha Sheth (VJSMF) & Dr. Nigel Erskine (ANMM)

The Vasant J Sheth Memorial Foundation (VJSMF) in collaboration with the Australia National Maritime Museum (ANMM) set up a two day workshop in Kochi on March 4 and 5, 2013 for 22 local students interested in maritime history and museology. This was part of a three-city workshop tour conducted by the ANMM in India, the other cities being Chennai and Mumbai. This initiative added another dimension to the ANMM's strong interest in developing an international relationship with India at a time when maritime museums are on the agenda in many Indian states.

The ANMM team consisted of experts in maritime history, archaeology case study and design displays and the 22 students came from backgrounds of History, Archival Studies, Archaeology, Museology and conservation. The VJSMF played a key role as a catalyst in drumming up

student participation, arranging site visits to important historic and maritime sites like Kottapuram Fort Excavation and Pattanam Excavation sites (Muziris Heritage Project) and providing feedback to the ANMM team after the conclusion of the workshop. The ANMM team was led by Mr. Michael Crayford and the VJSMF by chairperson, Mrs. Asha Sheth.



"Life is 10% what happens to me and 90% how I react to it."
~Charles R. Swindoll

Vive la TMI

The Alumni Speak

-Ameya Mutatka

Recently, under a series of motivating interviews conducted, Maritimes luckily managed a colloquy with Hiren Malhotra (DCC, Morarjee House) of 2008 batch. He is presently sailing on S.S. Galea which is a Shell-owned LNG vessel currently moving towards Dahej, Gujarat.



Q: Please share your internship experience with us.

A: I was extremely lucky to experience two firsts at the beginning of my career. I sailed on a coastal run Platform Supply Vessel (PSV) during my internship. And, now have completed a little over two months on a ship which; the guys back in the PSVs would call a part of the 'Main fleet'.

Life on one has been entirely different from the other on the PSV. I learnt the true meaning of hard work. With only three engineers including me; 6 on/off watches, no rest days for five straight months, life was tough (just putting it in a mild way!). But now when I look back at it, I do realize that I did carry away with me a lot of learning and everything I learnt was worth the effort.

My second first as I would like to call it has been much easier with the heaven sent technology called UMS being present on my current vessel. Every day the learning continues, I have been lucky to have my 3rd and 4th engineers from TMI only and have always helped me in college.

Q: Which subjects in TMI proved useful onboard?

A: MAM and IC Engines proved to be very useful on my intern vessel whereas Boiler and Steam Turbines are coming handy on the current vessel. I would recommend

every cadet to carry a copy of HD Mc George and GTH Flanagan when they will board their first vessel. I would also like to add that it is very important to brush up your basics before you join the ship, as it makes it easy to learn things better and faster.

Q: Onboard, what was your experience as a TMI cadet?

A: It's only after I joined my first vessel during internship that I realized the value of being a cadet from TMI. The foundation laid at TMI really helps you learn your job onboard faster. With just a little effort from your side, you can very soon become an important member of the shipboard team. I know that most of you wouldn't agree, but even the morning musters help in their own special way in disciplining you towards your journey to become a responsible and pro-active deck/engineer officer.

Q: Any memorable incident at TMI you would like to share with all of us?

A: Of all memorable incidents, and some of which I would rather not share here, there is one memory which has been refreshed just some time back while talking to my seniors from TMI and discussing our heroics at college. This happened during my first year in college, I was caught playing cricket with a few other friends in the corridor at about 23:00 hours in our HCC. The then HCC happily stayed awake with us for around 00:30 hours; the only difference was that while he was sitting in the courtyard enjoying the cool breeze while my friends and I took about 2500 rounds (YES!



*"If you cannot do great things, do small things in a great way."
~ Napoleon Hill*

Feelings Shared

That's what it felt like!) of the courtyard form corner followed by a few push-ups and I don't even remember the name of those jumps that I had to do later. Moreover, this did not deter us from playing cricket the following day, it just pushed us to plan things better and we had to give up on one fielder to assign him the duty of COW! And did I mention that that HCC is my 4th engineer currently onboard with me!

Q: Do you feel that extra-curricular activities are important for a seafarer?

A: It is very important to play. By play I mean play hard, play to win. At TMI, while playing different games for my house, the loud cheering and the louder jeering helped me learn how to concentrate and focus on my task and keep myself away from distractions. Team work, which is also very essential to work onboard, can also be developed by playing team games. I was a part of the Table Tennis, Cricket and Badminton teams for my house, and I also was an active member of the drama club. And at the end of the day it keeps you fit! A good deal, isn't it?

Q: Any message you'd like to give to all the cadets of TMI?

A: The only message I would like to give to my friends back in TMI is to try hard to give your 100% in whatever you do. Be it work or play; just give it your best shot without worrying about the outcome. More often than not, the result would be in your favor. This is the time you have to make the most of, so be it in class during lectures or during a game of Football with your friends after lectures, just be present in the present and you are bound to succeed! Bon Voyage, Sailors!



International Ferry Designing Competition by WFSA

-Sonal Kumar

The Worldwide Ferry Safety Association (WFSA) conducted a worldwide competition for designing a ferry. The cadets were asked to submit a design for a ferry able to transport 500 passenger in Bangladesh as specified by the Shipping Department for the 250 km route between Dhaka and Barisal (also known as 'Venice of the East') via Chandpur (where three major rivers come together). The river route where the depth varies between 2.5m to 3.9m is subject to fierce storms.

A total of 43 colleges across the globe had participated in the competition and were asked to submit the final design within 3 months. Because of time constraint only seven colleges were able to submit the design. Tolani Maritime Institute (Pune) was one of those colleges.

The team comprised of Anchit Giri (201037TP134), Ashutosh Kumar (201037TP148), Asish Padhi (201037TP152), Joy Dev Mukherjee (201037TP196), Sagar Tolani (201037TP268), Shikhar Sharma (201037TP290). The team successfully were able to complete the project under the guidance of Dr. B.K. Saxena, Dr. Sanjeet Kanungo, Mr. Sudhir Sindagi and Prof. N.K.Mishra.

The submission of TMI was placed in the 2nd position with the cash prize of USD 3000/-. This is a great achievement especially considering the stature and reputation of the other participants.



(L to R) Asish Padhi, Joy Dev Mukherjee, Ashutosh Kumar, Dr.Sanjeet Kanungo, Mr. Sudhir Sindagi, Anchit Giri, Sagar Tolani and Shikhar Sharma.

Vive la TMI

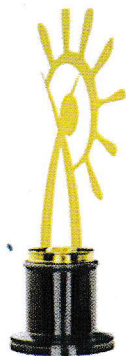


*"If opportunity doesn't knock, build a door."
~Milton Berle*

The Gateway Awards 2013

Excerpt from 'Maritime Gateway' Magazine (p26, May 2013)

-Zeeshan Ali



2013
THE GATEWAY AWARDS
THE BENCHMARK OF INDIAN MARITIME BUSINESS

FINALISTS

Anglo-Eastern Ship
Maritime Academy

Indian Maritime
University

Tolani Maritime
Institute

EXCELLENCE IN MARITIME EDUCATION

Tolani Maritime Institute

The award is presented to Tolani Maritime Institute in recognition of establishing highest quality of faculty- both in-house and visiting - and also creating infrastructure.

Tolani Maritime Institute (TMI) is one of the largest maritime educational centers offering marine engineering and nautical technology degree programmes. The degree programmes are conducted in collaboration with BITS-Pilani and have recognition of Director General of Shipping, India and MPA, Singapore.

There are 115 permanent full time faculty members of which seven are PhD and two are about to complete their doctorate. The maritime faculties of 2 Extra Masters, 8 Master Mariners and 16 chief engineers, have substantial shipboard experience as senior officers. Average teaching experience is eight years while industry experience is 12 years.

TMI has developed about 50,000 square feet workshop area, besides host of shipboard equipment, having a 7-tonne boiler and 800 KW steam turbine and two 500 KVA generators enabling

students do watch keeping on live power plant. Besides, it has 15 state-of-the-art labs and over 7,000 sq ft library. It also offers deck cadet programme, PGD in transportation and logistics and distance learning courses.

“ Around 350 graduates from TMI join office rank every year. Average teaching experience of TMI faculty members is eight years while industry experience is 12 years.

TMI also offers one/two semesters of out of campus internship as part of the degree programme, as part of its efforts to integrate university education with the industrial world.

Around 1,700 graduates, including 40 girls from TMI, have joined the shipping

industry rising up to rank of chief engineer/superintendents over the years. Around 350 graduates join office rank every year.

Some of the TMI faculty members are authorized examiners for MEO Class IV and Second Mates exams conducted by DG Shipping in India.



L to R: S Anil Kumar, Account Manager - Middle East & India, BP Marine, Capt P V K Mohan, Chairman, National Shipping Board, Dr Sujata Naik Tolani, Vice Chairman, Tolani Maritime Institute, Capt Raj Razdan, Provost, Tolani Maritime Institute

Accolade



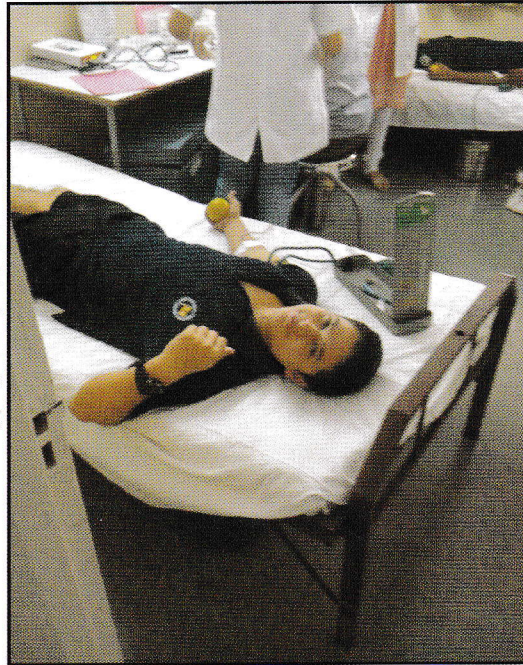
“An obstacle is often a stepping stone.”
~Prescott

Blood Donation Camp

-Pranav Gupta

A voluntary blood donation camp was organized in Tolani Maritime Institute on 24th April, 2013. A joint medical team from M.I.M.E.R. College and Garware Blood Bank (Pune) conducted the camp wherein cadets of TMI came forward with enthusiasm in large numbers to donate blood.

The doctors said that the requirement for safe blood is increasing and regular voluntary blood donations are vital for blood trans-fusion services. They also added that a healthy adult can donate blood 3-4 times a year without any problem and the donated blood is restored within 24 hours. In the end, the group of doctors applauded the efforts of TMI cadets for serving humanity by donating blood.



Just Donate Blood.
It's safe. It's simple. And it saves lives.

Visits

-Zeeshan Ali

Date	Name of Visitor	Company
25-Mar-13	Mr. Khubchandani and Mr. Mistry	BW Shipping
19-Apr-13	Mr. Rico Magcaling Cruz Mr. C. P. Paul	Chief Engineer, NYKSM, Singapore Dean, Maritime Education and Training, NYKSM, India
22-May-13	Mr. R. Ramakrishnan Mr. Sudhir Nair	Mgr.-Sales and Technical, Jotun Paints Regional Sales Manager, Jotun Paints
29-May-13	Capt. Puneet Malhotra Mr. Vivek Ratan	Fleet Personnel Manager, Anglo Eastern Ship Mgmt. Incharge-GME Selection & Superintendent(Trg.), Anglo Eastern Ship Mgmt.
13-Jun-13	Mr. Mahesh Subramanian	Vice Principal & HOD (Engg.), Anglo Eastern Ship Mgmt.
13-Jul-13	Mr. Manohar A Kawadkar	Manager (S&T), Goa Shipyard
30-Jul-13	Capt. Birendra Kumar Jha Dr. Vasant Bang	Gen. Manager, Mitsui OSK Lines Maritime (India) Pvt.Ltd Director, Magarpatta City Institute of Management and Technology, Pune
	Mr.Rajeev Nayar	General Manager (Head, Quality and Safety) Essar Shipping Co.Ltd.
2-Aug-13	Mr. Kisan Kainad Capt. Ramchandran Prakash	Wilhelmsen Shipping
6-Aug-13	Eduardo Mason Kaan Gursoy	From Italy From Turkey
8-Aug-13	Mr. Shirish Kumar	Surveyor, DG Shipping
12-Aug-13	Mr. Carl Johan Carlsson	Chalmers University of Technology, Sweden
14-Aug-13	Ms.Arundhati De Ms.Genevieve Adil Dubash	Vasant J. Sheth Memorial Foundation

Vive la TMI



*"Failure is the condiment that gives success its flavor."
 ~Truman Capote*

Inter House Swimming Championship

-Anmol M

TMI is one of those rare colleges in the country with a fully fledged and well equipped swimming pool. Swimming as we all know is a sport which is given utmost importance in our college. After majority of the sports events in college are over, there is the much awaited Swimming Championship.



Swimming, a sport enjoyed by some and fretted by Non Swimmers is something each and every cadet has to learn and clear in the form of a Swimming Endurance Test (SET). Every year's swimming competition attracts crowd in huge number and this year's championship was witnessed by more than

200 supporters of their respective houses. Every cadet was excited to see his/her housemates setting the pool on fire by fierce competition.

This year's swimming championship trophy went to Cassim House who probably sort to vengeance from their last year's defeat to Master and Morarjee. The events included individual events of all strokes i.e. the 50m Freestyle, Breaststroke, Backstroke and Butterfly. Breaststroke sub-event was won by Master House while the remaining three were won by Cassim House. The championship was split into 2 days, out of which the first was more of a 'Green Wash' for Cassim House, which won all the events including the much awaited 4*50 Breaststroke and the 4*50 Medley Relay Sprints by Mihir Barboza, Anshul Premchandani and Maninder Singh Bhumbra did set the pool on Fire!! The last day witnessed a nail biting competition where all the four houses tried their best to win the trophy.

The Chief Guest for the event was Mr. C. P. Paul (NYK lines), who immensely appreciated TMI cadets' enthusiasm for their houses and their will to do well in academics as well as sports. This year's championship did witness some amazing sprints by cadets of all the houses which clearly showed their passion and hard work for the sport.



Mr. C.P. Paul bestowing the elite swimmers of Cassim House

The overall House Standings were as follows:

- 1st – Cassim
- 2nd – Master
- 3rd – Mudaliar
- 4th – Morarjee

Innate Reflexes



"Luck is a dividend of sweat. The more you sweat, the luckier you get."
~Ray Kroc

Inter House Athletics Championship

-Abhinandan Chandra

A substantial crowd gathered in the field of the synthetic track at the dusk of April 30, 2013 to witness TMI's annual Inter House Athletics Championship 2K13. A total of 21 events were held on April 30, April 2 and April 3, of which 15 events were for male and 6 events for the female athletes.

The first day began with Master house sauntering away with three golds and being closely followed by Cassim House. The next two days bore similar fortunes for Master House as they continued to dominate the track as well as field events with only Cassim House offering serious competition till the final stages of the sports meet. The results tally at the end of the athletics meet read Master

House leading with 192 points, hard on their heels were Cassim House with 176 points. It was a dramatic end for Morarjee and Mudaliar House's tussle for 3rd spot as they both ended up with 138 points each!



Date	Events	Date	Events
30/4/2013	Javelin(M)	2/5/13	5000 Meter Dash(M)
	1500 Meter Run(M)		200 Meter Dash(M)
	Discus Throw(M)		Long Jump(M)
200 Meter Dash(M)	70 Meter Dash(W)		
3/5/13	3000 Meter Run(M)		High Jump(M)
	Long Jump(W)		800 Meter Run(M)
	400 Meter Run(M)	Shot Put(M)	
	100 Meter Dash(M)	Shot Put(W)	
	Discus Throw(M)	4X200 Meter Relay(M)	
	400 Meter Run(W)		
	Decreasing Relay		

List of Events



No prizes for guessing the best athletes! Sharath Krishna of Master House was adjudged Best Athlete(M) for winning 1500, 3000 and 5000m run and Namrata Choudhary of Morarjee House was declared Best Athlete(F) for winning 200m Dash, Long Jump and 400m run.

House	Standings	Medals Tally		
		Gold	Silver	Bronze
Master	1	10	5	4
Cassim	2	5	10	3
Mudaliar	3	2	4	7
Morarjee	3	4	3	7

Sports Chronicle

"The journey of a thousand miles begins with one step."
~Lao Tzu

Inter House Handball Tournament

-Deep Gha

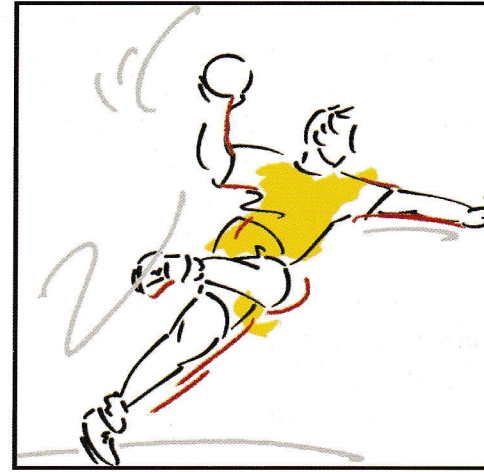
Handball is a game of breathtaking athleticism and surprising brutality. As players try to approach the goal to score, they are bumped, pushed, shoved, grabbed and generally beaten to hell. Most of this is even legal under the rules of the game.

It's also a game of momentum and fast breaks, where it seems a team can run off goals after goals. And that's what TMI encountered from 28th to 5th of April, 2013.

The semi-final results were:

- Cassim house defeated Morarjee house
- Mudaliar house defeated the Master house

In the final, held at 5th of April 2013, Mudaliar house won the trophy



Inter House Squash Tournament 2013

-Faheem Saw



Every year the institute witnesses the high-speed racquet sport of squash on the well-maintained TMI courts. This year too, the skill-show with racquets was no less. A brightly eyed band of merry cadets commenced the play off's. The Master House faced the Cassim House while Mudaliar battled with Morarjee for getting a place in the Finals. Tension was high and every house was looking for that extra few points that would make the difference. After some closely contested games, Mudaliar and Master advanced to the finals. The competition intensified and the court witnessed some really notable games. Cadet Devdutta who had held the racquet for the first time and was an amateur stood victorious. The powerful and direct attacking game of the Mudaliar players' proved worthy enough for a splendid

triumph in the end.

Overall house standings were:-

1. Mudaliar
2. Master
3. Cassim
4. Morarjee

Best player: (Boys category)- Aditya Joglekar
(Girls category)- Mangala Deoghare

For this all of them, who think that this adrenaline triggering games can be a great hobby to pursue, the TMI court awaits you!



Cross Country

-Sarad Damodaran

Cross Country as every time was a perfect blend of unleashing potentials, adrenaline rush, persistent exertion and boost. It was a major breakthrough for many but some cadets got injured in the event. It all began with a Big Bang! Cross Country this semester was an individual event which took place on a fine morning of 21st April, 2013. For a distance of about 5.5kms (approx.), the cadets were supposed to clear it and the time constraint for all male participants was 30 minutes and that for female participants was 35 minutes. Each runner had the determination to complete the race within the given time limit.

The overall positions were as follows:

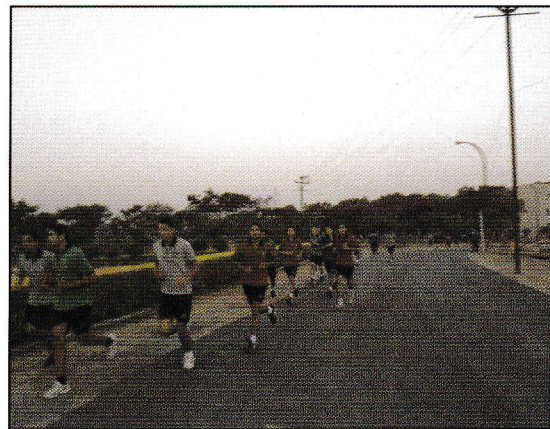
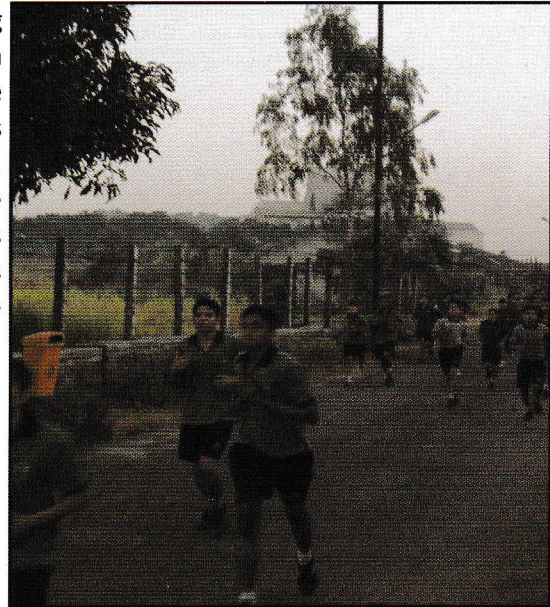
Boys: Gold: Sharath Krishna
 Silver: Meghraj Singh
 Bronze: Gaurav Sasani

Girls: Gold: Namrata Chaudhary
 Silver: Charu Ratna

Cross country this semester also saw active participation from most of the faculty members and their enthusiastic children. Events like this form the zest of life at TMI which each one of us would feel nostalgic about while recalling the panting seconds to finish line. As it has been rightly said:

"The miracle isn't that I finished. The miracle is that I had the courage to start."
 ~John Bingham

Live strong fellas!



Fresher's Cup on 14th August 2013

-Himanshu Sharma



Just like past years, even this time college gave newcomers the opportunity to come forward and bring out their talent through the Fresher's Cup. It was an Inter House event that comprised of two sub-events i.e. Basketball and Football. All the teams were determined to win. Such events provide a very good platform for the new bees to prove their worth and book a berth in their respective house teams as well as the Institute team. The overall standings for the event

w e r e a s f o l l o w s :

- | | |
|-------------------|-----------------|
| BASKETBALL | FOOTBALL |
| 1. Master | 1. Mudaliar |
| 2. Mudaliar | 2. Master |
| 3. Cassim | 3. Cassim |
| 4. Morarjee | 4. Morarjee |

Sports Chronicle

"You must be the change you want to see in the world."
 ~M.K. Gandhi

Marine IC Engines: Historical Timeline

-Compiled/Authorred by Martin Leduc

--Abridged by Tushar Raj

... Marine propulsion is the mechanism or system used to generate thrust to move a ship or boat across water. While paddles and sails are still used on some smaller boats, most modern ships are propelled by mechanical systems consisting of a motor or engine turning a propeller, or less frequently, in jet drives, an impeller...¹

... Marine Engineering is the discipline concerned with the design of marine propulsion systems. Steam engines were the first mechanical engines used in marine propulsion, but have mostly been replaced by two-stroke or four-stroke diesel engines, outboard motors, and gas turbine engines on faster ships. Nuclear reactors producing steam are used to propel warships and icebreakers, and there have been attempts to utilize them to power commercial vessels. Electric motors have been used on submarines and electric boats and have been proposed for energy-efficient propulsion. Recent development in LNG fueled engines are gaining recognition for their low emissions and fuel economy...²

(References: 1,2: Wikipedia)

1801 French chemist *Phillipe Lebon* develops a usable coal gas. Shortly after he patents a coal gas fired internal combustion engine.

1802 The '*Charlotte Dundas*' tows two 70-ton barges, 30 km, along the Forth and Clyde Canal to Glasgow. Not only was this vessel the first practical steamboat, but also the first tug boat.

1821 *James Watt* improves the efficiency of *Newcomen's* reciprocating pump to become the most efficient (4%) prime mover using pistons and expanding steam. The engine become the most popular at the time and lasted for quite a while.



1824 - Sadi Carnot

1824 *Sadi Carnot* published his theory on the thermodynamic cycle of the heat engine. From it, *Rudolph Diesel* would design his engine.

1825 '*Curacao*' built in Dover, England, becomes the first practical steamship to sail. It is bought by the Netherlands Navy. It is a wooden hull, 445 tons, paddle-wheeler with two engines developing 75 kW.

1834 The *Wartsila* company begins operations, originally as a sawmill operation, in Tohmajärvi, Finland. Twenty years later it would later morph into an iron mill.

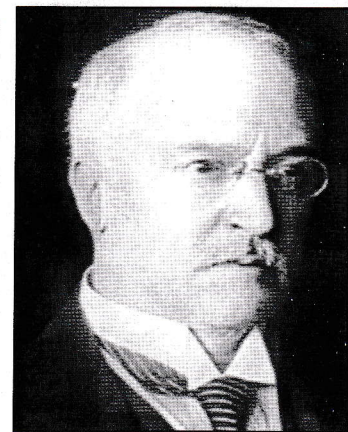
1854 Italian inventors, *Eugenio Barsanti* and *Felice Matteucci*, are granted a patent, in London, for the first working, efficient version of an internal combustion engine. *Nicolaus August Otto* would, however, go on to claim the bulk of the credit for the four cycle design, ten years later.

1880 The 137 meter, 5,247 tons '*Arizona*' is the first steam powered vessel to win the mythical 'Blue Ribband'. The White Star Line steel hulled ship reached 32 km/h with her *John Elder & Company's* 4,679 kW compound steam engines.

1889 *Charles Parson* founds, *C. A. Parsons and Company* in Newcastle, England, to produce turbo-generators to his design. The company's first turbine was only 1.6% efficient and generated a mere 7.5 kilowatts.

1892 *Rudolph Diesel* draws his theories into a design, but it does not get a patent in Europe, at first. On appeal, his 'not original' idea is patented on February 28. Patent # 67027 is issued to *Rudolph Diesel* by the Imperial Patent Office in Germany. It was a design using much higher pressure to achieve *Carnot's* ideal heat cycle. Sometime later, Diesel is granted a patent in the United States for the new engine.

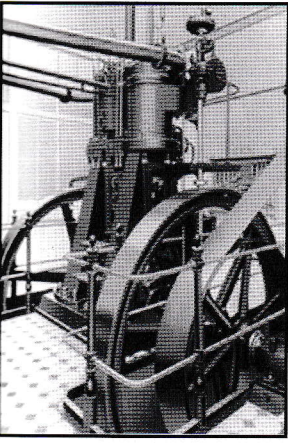
1892 German *Carl Pieper* introduces the helix on plunger to fuel injection system, allowing control of the fuel quantity delivered to a cylinder.



1892 - Rudolph Diesel

1894, February 17, *Rudolph Diesel's* experimental engine runs at 88 rpm for about one minute, the first time ever, about 9 months after first 'test firing'.

1894 Witte, Reid and Fairbanks start building oil engines with a variety of ignition systems.
1895 William H. Scott is granted an English patent for a double port helix for fuel injection pump. This development allows control over both the beginning and ending of fuel injection.
1896 Work begins on the French submarine 'Narval', it is launched in 1899. It features a novel electric propulsion system using steam boiler as prime mover. The technology leads to the Diesel electric propulsion system of 'l'Aigrette' in 1904.



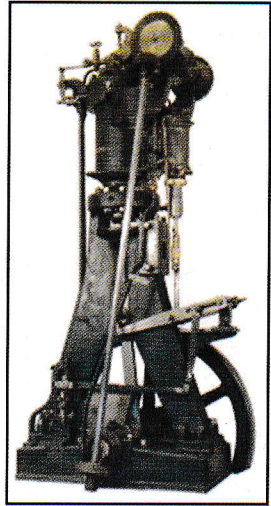
1897 - The first installed engine working, producing power for a match factory

1897 February 17, the Diesel's engine runs on its own. The water cooled, ringed piston, fuel injection, single cylinder engine ran on cheap kerosene. It was considered a total success. It produced 13.1 kW at 154 rpm, and achieved 26.2% efficiency.
1897 Mirrlees, Watson & Yaryman of Glasgow, among others, sign a deal to build the new prime mover from Rudolph Diesel.
1897 Immanuel Lauster, at Maschinenfabrik Augsburg, designs and builds the first twin cylinder prototype Diesel engine. It develops 44 kW at 180 rpm, this is achieved by increasing the size of the bore and stroke as well as other refinements.
1897 Charles Parson's turbine-powered yacht, 'Turbinia', speeds past the Royal Navy's fastest ships, at 34 knots, demonstrating its abilities during Queen Victoria's Diamond Jubilee Fleet Review. Two years later the Royal Navy launches new steam turbine powered warships, and thus began the start of the marine steam turbine era.
1898 June 10, Sulzer starts building its first Diesel engine A four stroke, 260mm cylinder, developing 14.7 kW.

1898 After a successful exhibition of their engines, side by side, at the Munchen Power and Works Exhibit, Machinefabrik Augsburg and Nurnberg decide to continue their partnership. The partnership's name is shortened in 1904 to Machinefabrik Augsburg-Nurnberg, better known today as M.A.N.

1898 In order to manage the explosive growth of the Diesel engine. Rudolph Diesel establishes a company to manage the licensing of the design. The new venture buys all patents and is tasked with the further developments and management of the new engine. It is called the General Diesel Corporation, and is founded on September 17. Rudolph Diesel is paid a sum of 3.5 million German marks.

1900 Rudolph Diesel develops the first fuel injection valve.
1902 Adolphus Busch's company builds the first Diesel engine in the United States. It is a three cylinder, 55 kW model, which first ran in April. Fewer than 100 were sold, most of them without profit.



1900 - The first Diesel test engine, now found at the M.A.N. museum in Germany

1902 French submarine 'l'Aigrette' is launched with a M.A.N. licensed Diesel engine and electric propulsion. It is believed to be the first vessel to be powered by a Diesel engine. It would go on to influence submarine design in the UK, US, Germany and France as well as commercial vessel such as 'Vandal' and 'Venoge'.

1902 F. Rundlof invents the two stroke crankcase, scavenged hot bulb engine.

1903 Sulzer begins engine manufacturing in Winterthur, Switzerland. Three years later, they offer a range of 12 engines with power from 11 to 440 kW.

1903 Norwegian Aegidius Elling builds the first gas turbine, producing excess power. The turbine uses both a rotary compressor and turbine.

1904 M.A.N. installs four DM4x100 diesel engines, with a total power of 1193 kW turning at 160 rpm, for the Kiev Municipal Transport Authority, the first power plant of its kind. At the time, the engines cost 854,000 German marks and remained in operation until 1955.

1904 Sulzer installed their first diesel engine in a ship, the freight boat 'Venoge'. It was much like the 'Vandal', but Sulzer was dissatisfied with the electric motor, the only way to get reverse. They go on to develop their two stroke reversing engine. One year later...

1905 The first two stroke, and the first direct reversible engine (as opposed to starting in reverse) is built by Sulzer. It had four cylinders with a bore of 175 mm and stroke of 250 mm producing 66 kW. It is on exhibit at the Milano World Exposition in 1906.

1907 Rudolph Diesel's patent in Europe expires. A flood of new engine building begins.

1907 Nobel Brothers builds the first four stroke reversible engine.

1909 Benz & Cie entices a young Lebanese engineer, *Prosper L'Orange*, from Deutz. He goes on to design the pre-combustion chamber. Making the Diesel engine run smoother and quieter, but with a slight loss of fuel economy.

1910 James McKechnie of Vickers in England, develops the first solid injection fuel system. The design is still very much in use today; it comprises of a metering pump, operated by the cam lobe, delivering fuel oil which was then injected into the engine cylinder, by a fuel valve.

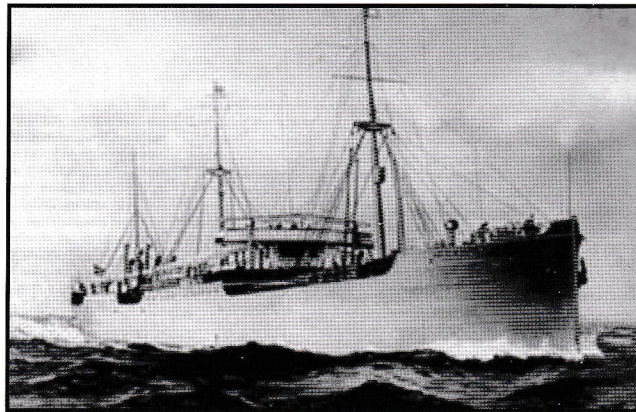
1910 The '*Fram*' receives it's 132kW engines from AB Diesel Motorer of Sickla, Sweden. The ship carries *Roald Amundsen* to the Antarctic. He becomes the first man to reach the South Pole on December 14, 1911. AB goes on to adopt the Polar trademark.

1911 Sulzer builds a larger version of their 1905 engine, ushering in the age of the large slow speed two stroke engine; quite a bit larger. The one cylinder, with a meter diameter piston turns at a leisure pace of 150 rpm. It produces an astounding 1472 kW. Shortly after, they begin '*Selandia*' - the first diesel engine powered ship building a four cylinder version to produce 2760 kW.

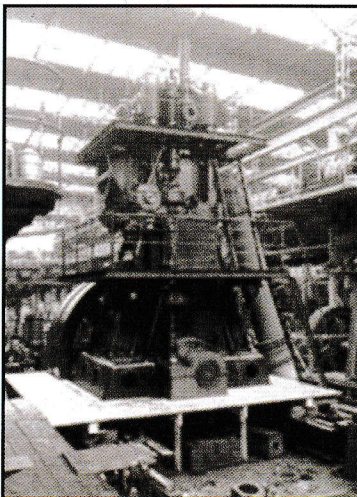
1911 A British patent is issued to *Frederick Lamplough* for a unit fuel injector.

1912 Hamburg Sud cargo liner, the '*Monte Penedo*', launched several days before the '*Selandia*' was completed, and is the first ship to be powered by two stroke engines. The two Sulzer engines developed a combined 1250 kW at 160 rpm; one of them is pictured below left.

1912 February 14, Burmeister & Wain (B&W) builds the 7,000 DWT ocean-going motor ship '*Selandia*', for the Danish East Asiatic Company. It is credited for starting a revolution in shipping and ship design by being the first ocean going motor ship. It is launched on November 4, 1911, and has two B&W '*DM8150X*', four stroke, reversible engines developing 932 kW each, at 140 rpm. The ship design ushers in a new era; one without a traditional funnel, casting away the old steam ship funnels or sails of the past.



1912 - '*Selandia*' was completed several days after the '*Monte Penedo*', but is often credited as being the 'true' first 2 stroke Diesel powered ship



1912 - Sulzer '*1S100*', with a bore of 1 meter, it holds the title of the largest bore engine for almost 60 years.

1912 Sulzer tinkers with their '*1S100*', an experimental engine. It has a bore of 1 meter and holds the title, engine with the largest bore, for almost 60 years.

1912 *Otto F. Persson* of the United States patents the tight fitting plunger and barrel design for high pressure fuel pump, elimination the packing glands used to seal high pressure fuel injection pumps.

1913 Vickers, Ltd. develops the common rail system.

1914 Sulzer develops piston cooling and scavenging for their two stroke engine.

1914 The Diesel powered German U-boat, '*U-9*', meets and sinks the British cruisers '*Aboukir*', '*Cressey*', and '*Hogue*' off the Dutch coast in less than one hour. The Diesel powered submarine could no longer be ignored.

1915 Swiss engineer *Dr. Alfred J. Büchi*, Chief Engineer of Sulzer Brothers Research Department, proposes the first prototype of a turbocharged diesel engine. He had been working on the design since 1909. Even with a 40% increase in an engine's efficiency, his idea was not well received.

1919 Atlas Imperial Diesel Company of Oakland, California builds the first American Diesel engine with common rail injection system.

1922 Robert Bosch Company of Stuttgart, Germany, focuses its business activities to specialized in the design and manufacturing of fuel injection equipment. In 1927, they introduce a jerk pump, with helix control, for which *Ottmar Bauer* is granted a patent in 1931.

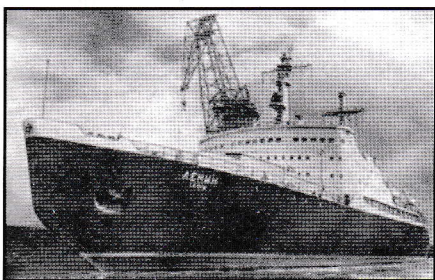
1924 Fairbanks Morse builds its first commercial, high-compression, cold-start, full Diesel engine, the '*Y-VA*', without resort to any foreign patent acquisition. Fairbanks Morse begin supplying the US Navy with marine propulsion plants in 1932, and supplied marine Diesels to the Navy during WWII, especially for submarines.

1934 M.A.N. Begins development on their exhaust gas turbine.

1935 B&W builds the first four stroke engine to burn Heavy Fuel Oil.

1942 The natural gas powered Danish fishing boat, 'Frank FN282' is launched. The vessel is equipped with a 2-cylinder, 90/100hp, Alpha Diesel type 342 engine, customized for 'dual fuel' operation, with oil injection as the pilot fuel igniting the gas charge.

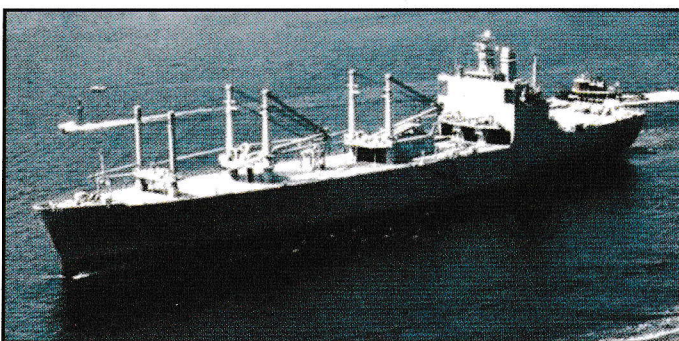
1950 M.A.N. unveils the first four stroke supercharged engine to reach 45% efficiency.



1957 The large icebreaker 'Lenin' is launched in the Soviet Union; first civilian ship to use nuclear propulsion. The original power plant, consisted of three 'OK-150' reactors, delivering 90 megawatts of power each. In 1970, the original reactors are replaced, due to physical damaged to the reactor from refueling work, with two 'OK-900' reactors putting out 171 MW each. Steam generated by the reactors produced electricity in four turbo generators, driving three propellers.

1957 The nuclear powered icebreaker 'Lenin' is launched in the Soviet Union & Wilcox nuclear reactor, producing 74MW of thermal power. powered cargo ship. 'NS Savannah' is a beautiful ship, and powered by a Babcock

The single propeller driven by two steam-turbines, produces 20,300 shaft horsepower, to propel the nearly 600 feet, 13,599 dwt ship at a top speed of 24 knots. Built at a cost of \$80 Million USD, she had accommodations for 60 passengers, and cargo room for 14,040 tons, and could sail at 20 knots for 300,000 km without refueling.

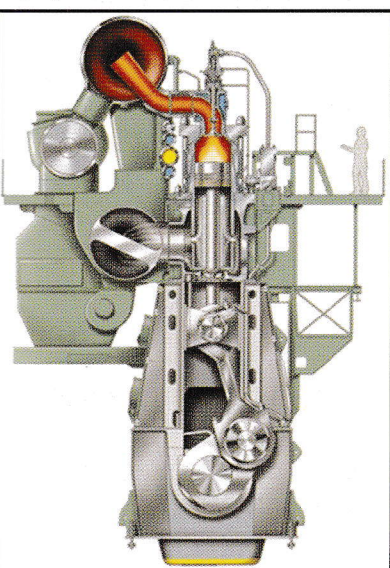


1967 The first merchant ship to be powered by an aircraft type gas turbine, the 'Admiral William M Callaghan', is launch by Sun Shipbuilding in the United States. The US military sealift ship is powered by two General Electric LM2500 gas turbines, which propelled the 24,500 ton ship to more than 21 knots.

1967 The first merchant ship to be powered by an aircraft type gas turbine, the 'Admiral William M Callaghan', is launch by Sun Shipbuilding in the United States.

1984 M.A.N. and B&W merge to become MAN B&W Diesel A/S, Copenhagen.

1984 The 'Fair Sky' is launched by French builders, for Italian cruise line Sitmar. The ship is the last passenger ship to be built as a steam ship. Her power plant consists of three boilers, and three steam turbines, producing 29,500 bhp, for a top speed of 21.8 knots, while consuming 220 tons of fuel a day.



1987 The world's largest Diesel electric propulsion plant is installed in the passenger liner 'Queen Elizabeth II'. The steam systems is removed and nine, four stroke MAN L58/64, super charged, nine cylinder engines are installed, delivering a total of 94.5 MW. The engines drive alternators producing electricity for hotel service and the two 400 tons, 44 MW propulsion motors.

2006 February, the first diesel engine with more than 100,000 bhp goes into service on February 22. MAN B&W Diesel licensee Hyundai Heavy Industries in Korea built the 12K98MC engine (pictured) with 101,640 bhp (75,793 kW) output. The engines are installed in series of 9,000 teu container ships for Greece based 'Costamare'.

2006 August, AP Moller Maersk Group launches the 'Emma Maersk' from their Danish "Odense Steel Shipyard" at Munkebo, by far the world's largest container ship; the first in a series of eight 11,000 TEU ships (officially - 14,500 TEU). It is powered by a 14 cylinder Wärtsilä-Sulzer RTA96-C flex type Diesel engine developing just over 107,000 hp (80,000 kW) of propulsion power.

2009 The European Union approves the HERCULES-Beta Project; with Wartsila and MAN Diesel leading the project. It is a major international cooperative effort to maximize fuel efficiency, lower the emissions, and to develop future generations of optimally efficient and clean marine diesel engines.

2006 - MAN B&W Diesel licensee Hyundai Heavy Industries in Korea built the 12K98MC engine with 101,640 bhp (75,793 kW) output.

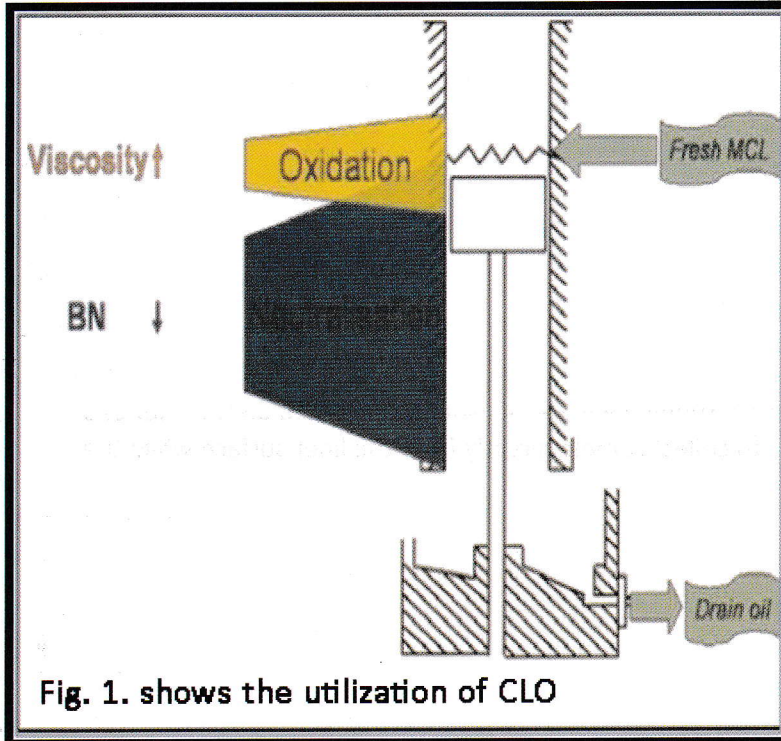
MARINE IC ENGINES

"A person who never made a mistake, never tried anything new."
~Albert Einstein

Cylinder Lubrication for Large Two Stroke Cross Head Marine Propulsion Engines

- Sankar K. Subramanian (Sr. Associate Professor, TM)

To achieve good Cylinder lubrication for a large 2-stroke X-head engine had been a challenge, both for the engine manufacturers and the oil manufacturer. For the engine manufacturer it was how to determine the optimum lubrication quantity and timing to reduce wear in liners at the same time keep oil consumption as low as possible, to achieve a low operating cost. For the lubricating oil manufacturer it was a challenge to produce a good lubricant which not only satisfy all operation condition required for the application but also give good performance by reducing liner wear. The Fig 1 shows how the fresh cylinder oil enters the liner & is utilized in the cylinder before it drains out through the scavenging drain.

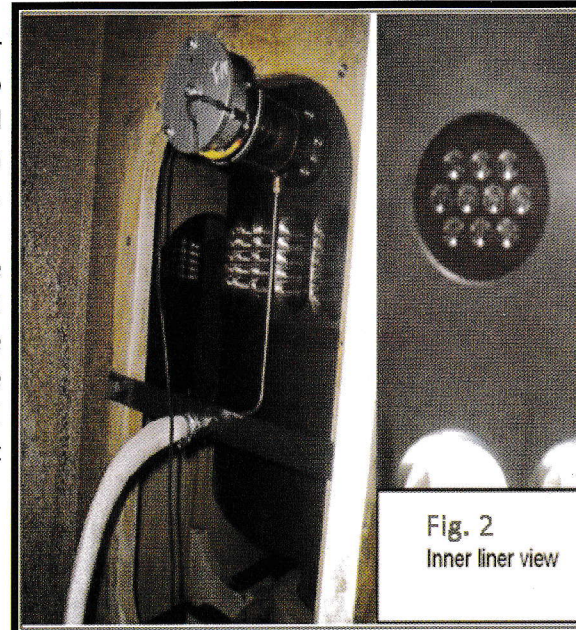


With the changing paradigm in the engine design have lead to reductions in engine size to produce more compact and energy-efficient engines leading to increased temperature and pressure inside the cylinders. Hence CLO is subjected to more severe lubrication conditions.

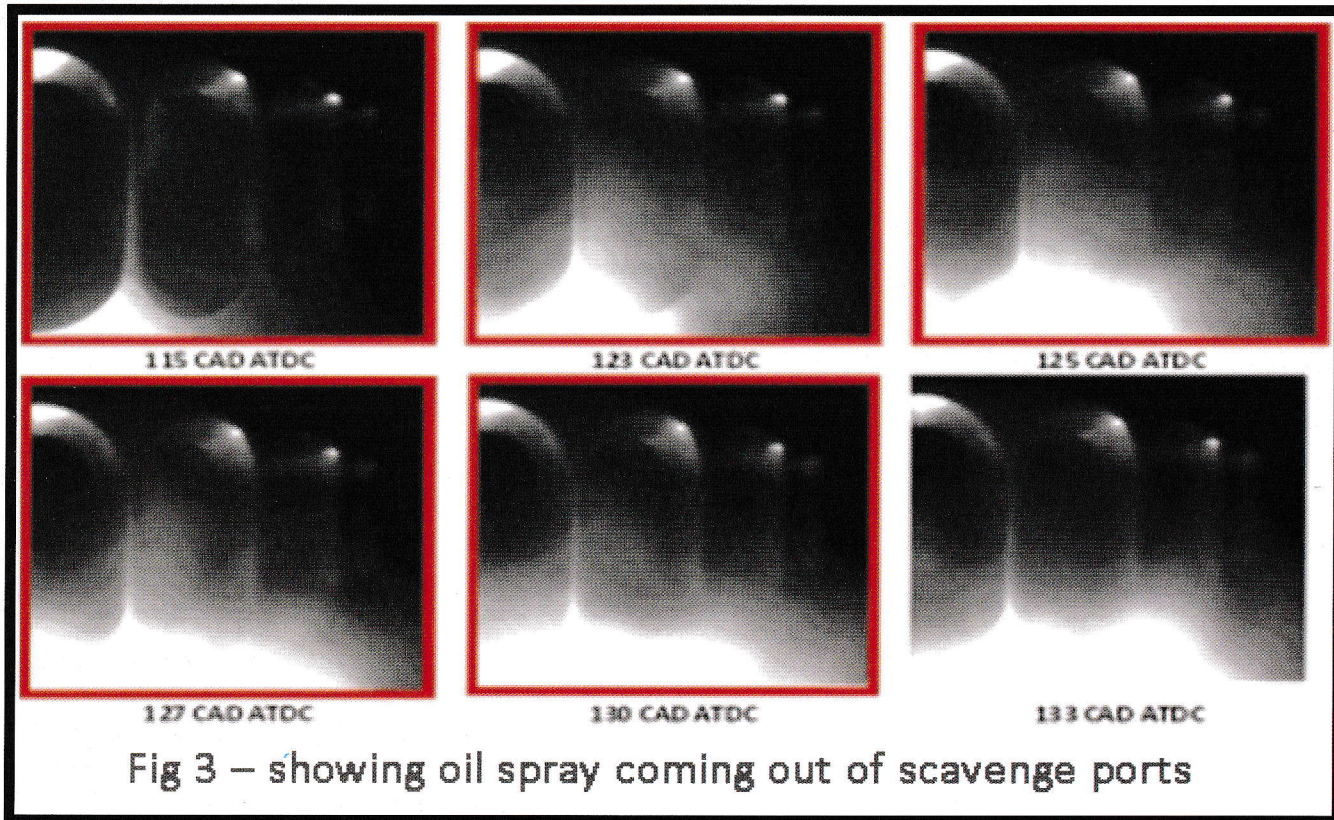
Due to the electronically controlled engines which provide more flexibility in engine operating conditions, such as low load & very low load operations for a prolonged period of time. Has led to a very wide range of lubricant operating conditions inside the cylinders. Fig 1 shows the utilization of CLO, Lastly due to Air pollution regulations on both SOx and NOx emissions directly affect the nature of the lubricant and its performance thus driving the lubricant manufacturers & engine manufacturers to innovate to satisfy the above requirement.

To address the above requirements the oil manufacturer companies along with the engine manufacturers are racing to develop new products like Universal cylinder oil. This will cater to all percentages of sulphur in the fuel and giving good performance in all engine load conditions.

In order to understand how the cylinder oil is stressed under the engine operating conditions, new techniques for collecting used cylinder oil samples had to be devised, breaking away from the traditional method of Drain oil samples (shown in Fig 1). As the drain oil sample did not provide the true picture of the used oil conditions, due to dilution of unused excess oil with the used oil at the drain.



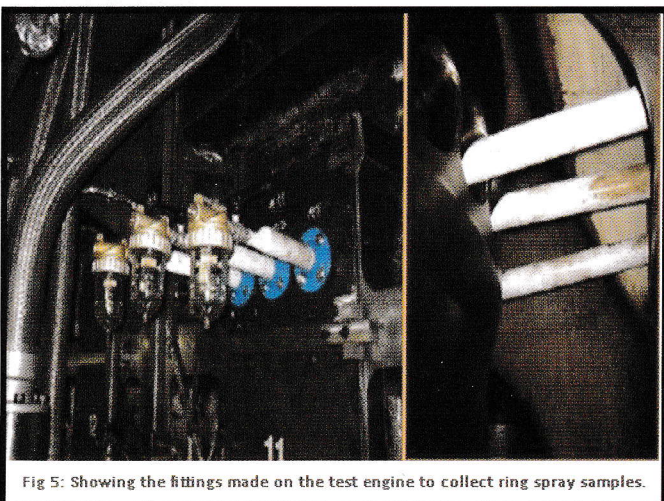
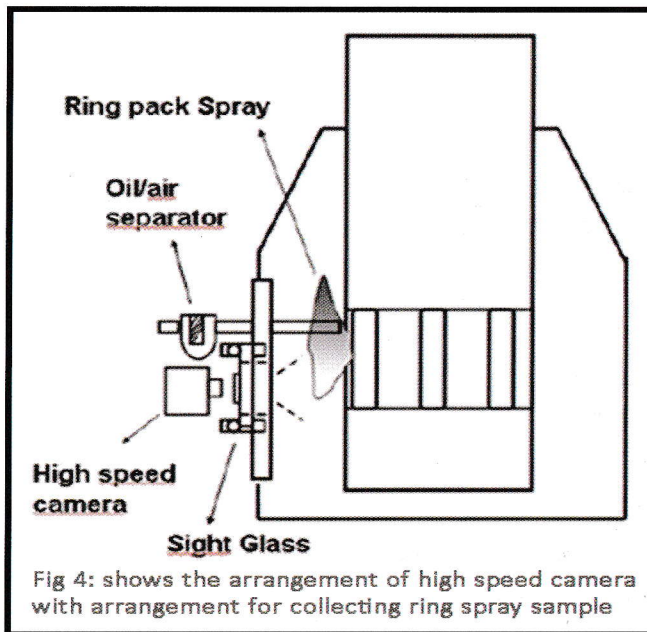
Technical Tang



To get a more representative sample of used oil from a running engine. Sensors were fitted on the liner of a test engine at suitable locations between the quills to collect sample directly from the liner surface while the engine is in operation (Fig 2).

Further when they placed a high speed camera at the scavenge ports and took series of pictures (Fig 3) which revealed that, every time the piston uncovered the scavenge ports a spray of cylinder oil came out of the scavenge ports.

A method was devised to collect the ring pack oil samples (Fig 4 & 5). Analysis of these samples revealed a whole new understanding on how the cylinder oil works on liners helping the oil



manufacturers to develop new products which will better address the lubrication needs of the engines & for the engine manufacturers to determine the optimum quantity & timing of the cylinder oil.

MARINE IC ENGINES

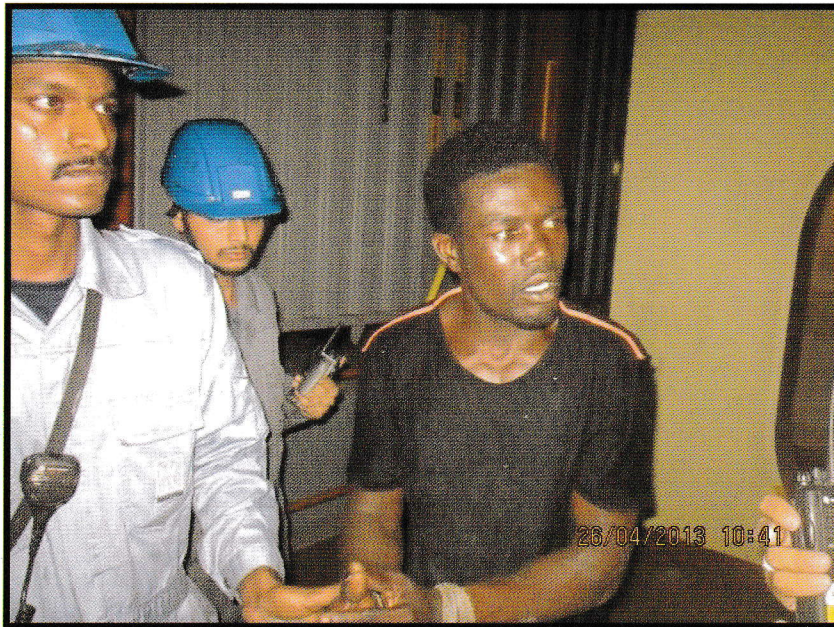
*"Remember that happiness is a way of travel, not a destination."
~Roy L. Goodman*

Stowaway Case

-Kashish Anand

Merchant shipping is a global business. It is truly international in every sense of the word. It touches the lives of hundreds of millions of people around the globe, who are directly or indirectly dependent on the smooth functioning of this industry. Not only to earn a decent livelihood but in many instances even to merely obtain some of the most primary requirements for human sustenance such as food crop, oil and maybe even water. It is therefore but natural that an industry which operates on such virtuous principles for a core objective policy combined with such magnanimous reach. Over the years it has churned out some of the biggest and most unparalleled success stories in the form of traditional maritime powers such as the British, the Spanish, the French and in most recent, modern times multinational corporate conglomerates such as Exxon, Shell, NYK, Maersk and many more, which are humongous not only in the expanse of their operations but also in terms of the economic power they wield over nations and their hence derived capability to single-handedly swing the fortunes of the countries that fall within the purview of their of their influence. It is therefore inevitable for such a business to have to deal with its share of problems. The one discussed in this issue of Maritimes comes from one of our own, Cdt. Prateek Kale of 4th year BSME, currently working as an intern on Maersk Contonou; he has been kind enough to share with us a recent incident of stowaway on his vessel, providing us with his first hand experience of dealing with such situations as being the first one to take initiative to mitigate the situation.

The above mentioned incident took place at an anchorage in Abidjan, Ivory Coast, West Africa. On receiving a 20 minute notice for Piracy Watch, the cadet at 0200 hours proceeded to relieve the latter. This being his first piracy watch, the cadet on arriving at his station, inquired the fitter regarding what all had to be done, and what all precautions and measures were required of him while performing such a job. The fitter then explained that the entire mid-ship area including both port and starboard sides of the accommodation had to be looked after by him, and that in all three people including the cadet were on watch at that point of time, the others being at AB at aft station and as OS at fore castle. The fitter thereafter handed over his duty to the cadet and left the scene. There were no search lights given to any of the three lookouts and all had been instructed to keep lookouts on round.



A few minutes into his lookout duty, the cadet noticed three people running with sacks from aft to forward, on the port side of the vessel. He immediately alerted the bridge about the incident. He was asked to keep a watch on them and their activity. The cadet, thinking on his feet swiftly, followed them at a brisk pace while maintaining a safe distance simultaneously keeping the bridge informed of his location and situation to the Second Officer. While this cat and mouse chase went on for some time, suddenly all three intruders stopped near the number 2 crane. At that point the cadet was about 3-4 meters away from the intruders, when he noticed that all three of them were of African origin as he could make out from their skin tone as they

were staring right into his eyes. He didn't have anything to protect himself and thus kept a safe distance so as to run back to the situation so demanded. Gathering all his courage, he shouted at them to the best abilities hoping that they would get scared rather than attacking him in their self defence. The cadet bravely stood his ground, didn't budge an inch, kept his voice high and his play finally worked. A few minutes hence, he was able to discern a sense of panic in their movements as one of them climbed down a hatch and started running to the starboard side.

20

"Logic will get you from A to B. Imagination will take you everywhere."
 ~Albert Einstein

The other two followed suit as they callously threw their sacks and subsequently jumped into the sea. The cadet then got even more confident and started throwing twist locks to scare them further away. Meanwhile in the sea, just adjacent to the vessel, another person who must have been waiting in a boat, stationed to aid the stowaways, so as to be sure of their successful departure; then sprung into action as he helped the two who had just moments ago jumped into the water, climb up the motorboat, which thereafter quickly moved out at a very fast speed.

It's important to appreciate the time frame within which it all went down. At around 0230, within just a few minutes, two of the three intruders trying to board the vessel, jumped back into the sea as a cadet wouldn't let them any further. Thereby it can be said that it didn't take long for the AB at the aft station to become cognizant of the situation even though he arrived on the scene to help the cadet only after two had successfully escaped.

Together they started looking for the third person; the wet footsteps of whom were found to be ending at number 2 crane. The same was informed to the Captain who was for obvious reasons awake by that time. The cadet and the AB in the meantime heard some usual noise from port side; it seemed as though the boat was back and this time contained four people including a woman, with one of them trying to climb up with the help of a bamboo stick having a hook at one end. The AB by that time had lost its cool, shouted at them and scared them away. Finally, the ship's emergency alarm was raised and both the cadet and the AB were much relieved at the sight of engineers who came running towards them. They were shown the footsteps, leading to crane number 2. Chief Officer was the first one to enter the crane. He successfully caught the stowaway and tied him up with the help of other crew members while the local police of Ivory Coast was also informed. The stowaway was inspected and was found to be carrying dry food, watch and clothing in his sack. He apparently was frustrated by the ongoing civil war in his country and wanted to escape to the States.

The stowaway was finally taken away by the police and things became normal after one more search. The cadet, much relieved, continued his watch till 0600 hours. The Captain thereafter praised the cadet with words of encouragement, "Well Done Cadet!!", spoken over the radio. The cadet has thanked the faculty of TMI for teaching him the correct attitude and approach for taking critical decisions in life.



This report echoes the concerns of many a seafarers today who are at perennial risk of life, or getting kid-napped and tortured when working in or near the African shores. The stowaways in this instance were harmless civilians and it seemed that fortune favored our cadet. But it may not go down this way every time in the future. What if they were real pirates and it had turned out to be an actual emergency threatening his life. Since time immemorial, crime against merchant shipping has been as much a part and parcel of sea life as is the never ending evolution of the great ol' ship itself and thus the ongoing battle against such crimes which more often than not result in huge monetary losses to the shipping companies while also putting the life of seafarers at a grave risk, is a never ending process and today in times when piracy and other forms of crimes at sea are at their peak; it finds its place at the very center of the global efforts to ensure safety and security of life at sea.

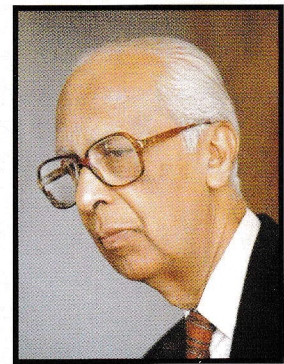
The Breaking Dawn

*"In matters of style, swim with the current; in matters of principle, stand like a rock."
~Thomas Jefferson*

Global Maritime News Bulletin

Obituary

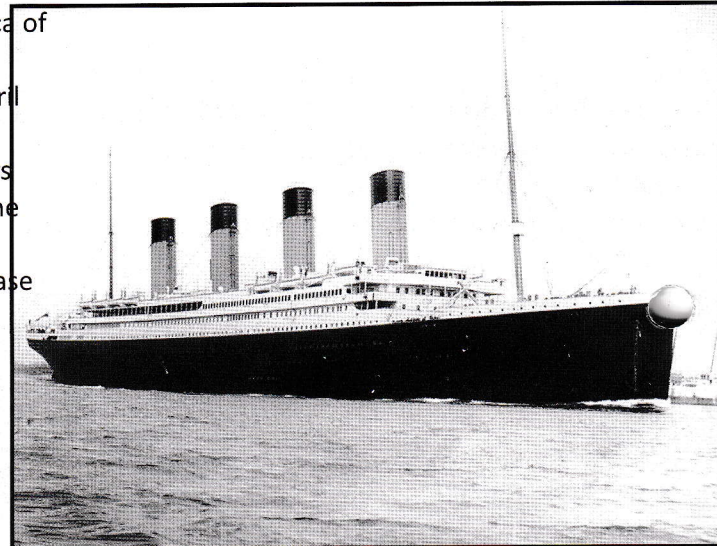
On 23rd July, 2013, a condolence meeting was held in the TMI auditorium to grieve the sad demise of Sir C. P. Srivastava, Chairman Emeritus, TMI Governing Council and undoubtedly one of the most prominent and well known personalities in Indian Shipping Industry as well as in Global Shipping. We at TMI have lost not only an advisor, but also a well wisher whose foresight was instrumental in guiding the development of TMI and its campus.



Sir C. P. Srivastava

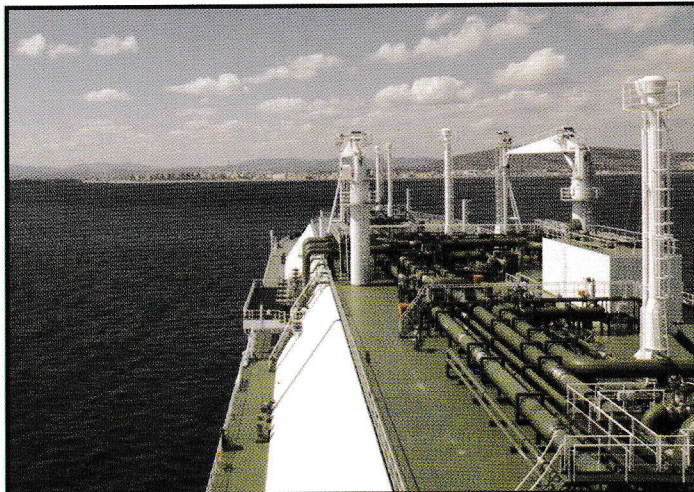
1) Titanic 2!

Titanic II is a planned ocean liner, to be built as a replica of the Olympic-class RMS Titanic. The project was announced by Australian billionaire Clive Palmer in April 2012, as the flagship of his cruise company Blue Star Line. The intended launch date is set in 2016, 104 years after the original voyage. The concept of a replica of the Titanic has been explored several times, especially following the resurgence of interest following the release of the film Titanic in 1997.



Clive Palmer first announced the project in a press conference on 30 April 2012, following the signature of a memorandum of understanding with state-owned Chinese shipyard CSC Jinling. Later it was announced that Finnish naval architecture firm Deltamarin Ltd. had been commissioned to undertake the design of the ship and a preliminary general arrangement was published. The design for the Titanic II was unveiled at worldwide launch events in Macau (China), New York (United States), Halifax (Canada), London and Southampton (United Kingdom). On July 17, 2013, Blue Star Line announced that the classification society Lloyd's Register has joined the Titanic II project. The work carried by Lloyd's will make sure that the ship's design is compliant with the current SOLAS regulations. Model testing using a 9.3-metre (31 ft) wooden model will be undertaken in September 2013 at HSVA. Resistance and powering tests will be carried out in a 300-metre (980 ft) towing tank.

2) Chevron Confirms First Cargo from Angola LNG



First LNG project in Angola and one of the largest projects on the African continent demonstrates further commercialization of Chevron's natural gas resources. Chevron Corporation's (NYSE: CVX) subsidiary Cabinda Gulf Oil Company Limited confirmed on June 16, 2013 that initial production of Liquefied Natural Gas (LNG) has commenced at the Angola LNG project. Angola LNG is one of the largest energy projects on the African continent. The \$10 billion project will collect and transport natural gas from offshore Angola to an onshore liquefaction plant on the coast near the Congo River. The project has the capacity to produce 5.2 million metric tons per year of LNG, 63,000 barrels per day of

natural gas liquids for export and 125 million cubic feet per day of natural gas for domestic consumption.



*"The real opportunity for success lies within the person and not in the job."
~ Zig Ziglar*

3) Eco-friendly NYK Coal Carrier Honored as 2012 Ship of the Year



Soyo, a NYK-owned coal carrier, has been selected as the 2012 'Ship of the Year' by the Japan Society of Naval Architects and Ocean Engineers (JASNAOE). An award ceremony was held on July 25, 2013 and Mitsuhiko Sunouchi, the general manager of NYK's Technical Group was presented with the recognition by JASNAOE. Soyo was honored for its innovative air-lubrication system and its proven impact on CO₂ reduction. This new air-lubrication system reduces CO₂ emissions by taking some of the main engine scavenging air (combustion air) from the main engine's turbo charger and leading it to the vessel's bottom to reduce the frictional resistance between the vessel's bottom and the seawater. A system featuring this scavenging air bypass is expected to be

effective in reducing CO₂ on large vessels having deep drafts.

4) JV Golden Stena Bulk Expands Its Product Tanker Fleet

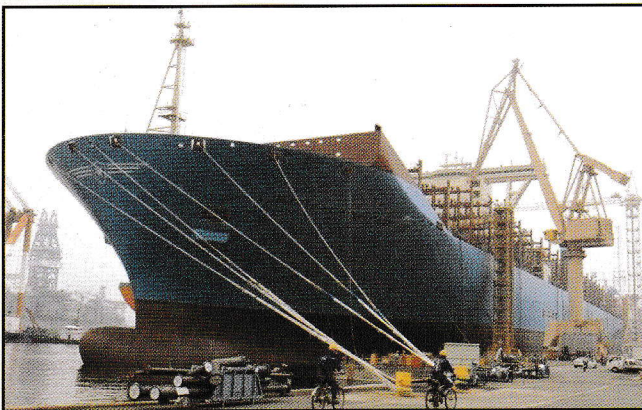
In early February 2013, Golden Stena Bulk, a 50-50 joint venture between Stena Bulk and Golden Agri-Resources (GAR), announced that it had taken over four innovative product tankers ordered by Stena Bulk in June 2012 for delivery in 2014 and 2015. Recently, the company exercised the options for a total of two product tankers of the same design.

Together with GSI, Stena Teknik is responsible for the development and design of these highly innovative vessels, which, among other things, will have specially designed hulls and propellers. With a focus on energy efficiency, the tankers' fuel consumption will be 10-15 percent lower compared with standard tonnage.



"In addition to very good fuel efficiency, the tankers will be extremely flexible and will be able to transport a large number of different types of cargo. This is a logical development of our fleet and a way of being able to satisfy new demands together with tougher competition", says Erik Hånell.

5) Maersk brings world's largest ship into service!



Shipping group Maersk brought the world's largest ship into service this month. The company has taken delivery of the first of 10 massive 'Triple E' container ships each measuring 1,312ft long and capable of holding more than 18,000 standard 20ft shipping containers. However, the new ship - named Maersk Mc-Kinney Møller - can be handled by just 16 ports in the world. With the Triple E class standing 20 storeys high, not all of these ports have cranes high enough to fully load the vessel. The Triple E class was designed to cut costs through economies of scale.

The Breaking Dawn

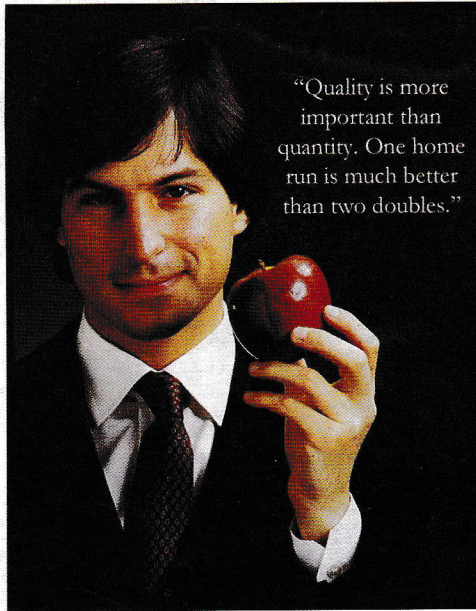
"The elevator to success is out of order. You'll have to use the stairs ... one step at a time."
 ~Joe Girard

WE CAN DO
NO **GREAT THINGS**
ONLY SMALL THINGS
WITH GREAT LOVE

Mother Teresa



"Quality is more important than quantity. One home run is much better than two doubles."



DO NOT PRAY FOR
EASY LIVES
PRAY TO BE
STRONGER MEN

John F. Kennedy



Vox Populi

The April Issue was incredible! Keep up the good work!
- Nifish Kr. Singh (DCC, BSME, Batch 2009)

'The Alumni Speak' featuring TMI's first lady Chief Engineer was very inspirational.
- Aditi Khilani (BSME, Batch 2009)

It would be a great idea to have Marine Propulsion as a theme for the next issue.
- Jay Somani (BSME III)

Last issue's News Bulletin was very good & very informative!
- Himanshu Tewari (BSNT II)

The previous issue's Graphics were damn good!
- Anubhav Dixit (BSME IV)

Col. G.P. Krishnamurthy sir's Travelogue was thrilling and enjoyable!
- Rahul P. Singh (BSME III)

Each and every word of Cmde. H.A. Gokhale sir's Rendezvous was to be learned from!
- Lucky Garg (BSNT III)

The Sports Chronicle section in the last issue was awesome!
- Rishikesh Kumar (BSME II)

Please add some technical articles related to marine field in the next issue.
- Nikhil Kaushik (BSME III)

It was good to see the all new and refreshed Offbeat section in the April Issue.
- Nicholas Lucas (BSME II)

The articles on 'Women Seafarers' were informative and motivational.
- Shivangi Bhalekar (BSME III)

The article on Transtech 2013 was good. I also liked the new look of Maritimes!
- Shashi Kumar (BSME II)

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