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Monthly Magazine of The Institute of Marine Engineers (India)





The Institute of Marine Engineers (India)

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From the Editor's Desk

Dear Esteemed Readers,

As we navigate the dynamic waters of the maritime industry, iMélange remains your ever dependable source of information, awareness and camaraderie. With great pleasure, I present our latest edition, filled with enriching topics that capture the diverse aspects of our field.

In our ongoing commitment to highlighting the invaluable contributions of women in maritime, we explore the myriad challenges and triumphs they face. "Women in Maritime – Trials and Tribulations" covers the seminar held on the topic by CMMI jointly with IME(I) and INA(India) which delved into the obstacles that women encounter in this traditionally male-dominated field and celebrates their resilience and perseverance.

Then again, we shine a spotlight on the grand celebrations honoring the trailblazing women in our feature, "Celebrating Women in Maritime:

A Grand Observance." This piece captures the spirit of the commemorations and the inspiring stories of those who have paved the way for future generations.

Our focus then shifts to the educational sphere with "Maritime Trainers Guild: Notable Contributions to Maritime Education and Training". This article provides the highlights of the recent seminar on two vital themes – first being STCW Revision and second on embracing AI & digital tools in maritime education & training.

In "Head of Training, IMEC Encourages and Motivates Budding Marine Engineers" we bring you insights of recent well attended GME passing out parade where Head of Training at IMEC and Chairman of FOSMA & IMEC Indian Representative mentor and guide the talents of aspiring marine engineers, providing them with the motivation to excel.

Our global voyage continues with a cultural sojourn in "Hello Vietnam," where we explore the rich maritime heritage and vibrant traditions of Vietnam. This travelogue invites you to experience the rich culture and scenic beauty of this fascinating country.

On a different note, we introduce a bit of levity with "Practical Jokes," in which a marine engineer narrates his experiences in a lighter vein. These tales remind us of the camaraderie and shared experiences that make life at sea both challenging and rewarding.

From humour, we turn to practical problem solving with "When Bellows Rupture and Gas Leaks Engine Room and Smoke: Mitsubishi V Type 4 Stroke Engine." This article not only provides analysis of the problem but also offers valuable insights to the marine engineers to prevent and manage incidents to ensure the safety and efficiency of maritime operations.

As we sail through the tides of change and progress, let us passionately embrace the spirit of collaboration, innovation and excellence that defines our vibrant maritime community.

We eagerly await your contributions and reflections, which can be shared with us at <u>editornewsletter@imare.in</u> by the 7th of June 2024, ensuring your voice resonates in our upcoming June issue.

Your steadfast support and enthusiastic participation propel us forward, steering us toward a splendid and sustainable future.

SUNIL KUMAR Honorary Editor – iMélange



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Mumbai

Women in Maritime – Trials and Tribulations



Branch News

The Company of Master Mariners India in association with The Institute of Marine Engineers (Mumbai Branch) and The Institution of Naval Architects India, successfully hosted the seminar "Women in Maritime – Trials and Tribulations" at the Kohinoor Continental Hotel, Mumbai on Saturday, 11th May 2024. This event was held in line with the vision of the International Maritime Organization's International Day for Women in Maritime, which is celebrated on 18th May every year.

Ms. Vaishnavi Narvekar from GE Shipping as Emcee for the event commenced the proceedings and welcomed the dignitaries on the stage including Shri. Shyam Jagannathan, IAS, Director General of Shipping, Smt H. K. Joshi, ex CMD Shipping Corporation of India, Capt. M. P. Bhasin, Chairman, CMMI, Mr. Rajeev Nayyer, President IME(I) and Mr. J. Dasgupta, President, Institution of Naval Architects India. Capt. Bhasin welcomed the guests and the attendees to the seminar in his address.

The seminar commenced with the traditional "Lighting of the Lamp" ceremony, symbolising the inauguration of the event. The Director General of Shipping, Shri. Shyam Jagannathan, IAS graced the occasion as the Chief Guest. In his opening address, he highlighted a significant statistic: women represent less than 2% of the global maritime workforce, with an even smaller proportion from India. He stressed the urgent need to increase Indian women's participation in maritime industries to achieve a more gender-diverse and neutral workplace. He also detailed the Government of India's initiatives, such as "Sagar Mein Samman," part of the Maritime India Vision 2030, aimed at enhancing women's participation in maritime sectors. The keynote address was delivered by Mrs. Joshi, who inspired the audience with her message on finding opportunities in adversity and turning challenges into successes through determination and the right attitude. She shared her experiences and the importance of tenacity, earning her the title "The Iron Lady of Shipping." It was truly a hard hitting and significant element of the seminar.

The seminar featured several notable speakers:

- Ms. Sapna Dipu, Manager MDL, who discussed her pioneering experiences and the shipbuilding process.
- Ms. Janene Vishwanathan, IRS Surveyor, who spoke on ship construction, classification, and her personal journey.
- **Ms. Reshma Nilofer**, Maritime Pilot at S.P. Mukherjee Port, who shared the challenges she faces in pilotage.
- Ms. Sandhya Pillai, Maritime Lawyer, who highlighted maritime claims issues and her career path in maritime law.

Just prior the second session we had **Ms. Sanjam Sahi Gupta** speak about the survey she is conducting for the women seafarers and requesting for participation from one and all so that a correct conclusion can be drawn from the survey.

The second session included a dynamic Fireside Chat moderated by **Ms. Sonali Banerjee**, Principal Surveyor at IRS and India's first female Marine Engineer. The panelists included:

- Ms. Rupali Raj Joshi, IRS Surveyor and former HOD of New Mangalore Port Trust.
- **Ms. Bhagyashree Ogale**, MEO Cl-1 Engineer and First Engineer with Teekay Tankers.





- Capt. Anuradha Jha, Safety and Nautical Compliance • Superintendent at APM Maersk.
- Capt. Aswathi Pillai, Voyage Manager/Commercial • Operations with Maersk Tankers, Mumbai.

The panel discussion sparked vibrant conversations on the unconscious biases and intangible challenges women face in the maritime industry. The panellists addressed key issues, such as working across differing opinions, challenges in promotion within seafaring professions, building confidence and resilience, and dealing with biases from top management. They also called for empathy and openness to change within the industry.

Mr. David Birwadkar, Chairman, IME(I) Mumbai Branch, summarised the day's sessions, and the event concluded with a vote of thanks from Mr. Dasgupta.





















Celebrating Women in Maritime: A Grand Observance

The National Maritime Day Celebrations Committee, under the aegis of the Directorate General of Shipping, Ministry of Ports, Shipping & Waterways, marked the 'International Day for Women in Maritime' with a grand event on 18th May 2024 at the Maritime Training Institute, Shipping Corporation of India, Powai, Mumbai. This year's theme, 'SAFE HORIZONS: Women Shaping the Future of Marine Safety,' underscored the pivotal role of women in advancing maritime safety and innovation.

Shri. Shyam Jagannathan, IAS, Director General of Shipping, Government of India, and Chairman of the NMDC (Central) Committee, graced the occasion with his esteemed presence. The event also welcomed Smt. Kalpana Srivastava, wife of the late Shri P.K. Srivastava, CMD of SCI, and daughter of the late "Sir" C.P. Srivastava, longest Secretary General of IMO, as the Special Guest. Other distinguished attendees included Capt. B.K. Tyagi, CMD of SCI and Vice-Chairman of NMDC Central Committee. Shri. Atul Ubale, Director (B&T), SCI and Chairman Organising Committee, Dr. Pandurang Raut, Dy. Director General of Shipping and Secretary NMDC Central Committee, Shri. S.M. Rai, Senior Member of IME(I) and Treasurer & Convener of NMDC Central Committee, Mr. David Birwadkar, Chairman, IME(I) Mumbai Branch and Mr. Sanjeev Mehra, Secretary, IME(I) Mumbai Branch, among various stakeholders from the maritime industry.

The celebrations commenced with the traditional Lighting of the Lamp ceremony, involving all dignitaries. Following this, a special video message from **Mr. Arsenio Dominguez**, Secretary-General of the International Maritime Organization, was projected. In his message, Mr. Dominguez highlighted the significant contributions of women in the marine and shipping sectors.

A central feature of the event was a panel discussion themed 'Journey so far... Challenges and Opportunities in Maritime.' The panel included prominent figures such as Ms. Kalpana Desai, Board Member of MbPA; Ms. Nyari Nayan, Superintendent of Maersk India; Ms. Archana Saxena of IWSF; Ms. Sindhura Polepalli, Maritime Legal Consultant, DGS, Mumbai; and Ms. Lakshmi Neti, Naval Architect and Surveyor, Indian Register of Shipping. The discussion was expertly moderated by Ms. Saleh Shaikh, Founder & Head of MUI Women's Wing and delved into the progress, challenges, and future opportunities for women in the maritime industry.

> Adding a cultural touch to the event, cadets and shore women employees from various marine companies and institutes presented a vibrant cultural programme. Senior Lady Employees from MBPT presented themselves and acted in popular professional attire of some of the leading women in maritime and history of India. Function also honoured few distinguished maritime ladies for their services to the sector – **Smt. Sangeeta Sharma**,

(Retd.) Director, SCI; Smt. Kruti Jobanputra, Director, JWC Logistics Park; Smt. Ishita Chattopadhyay, MD/CEO, Confidence Shipping and Smt. Charusheela Golapalli, General Manager, SCI.

Shri. Shyam Jagannathan, IAS, in his address highlighted several initiative taken by the government and DGS to promote and provide assistance to the women in the Maritime Sector. He reiterated and emphasised on Gender Sensitization and enforcing a zero-tolerance policy towards gender discrimination.

Smt. Kalpana Srivastava shared her personal journey and role she played by motivating women to join Maritime, drawing inspiration from her distinguished family background in maritime and shipping. Her heartfelt message resonated with the audience, reflecting on the legacy and influence of her parents and husband in shaping her path.

Entire function was well planned by the team of Women and compered by **Smt. Ambika Singh**, Senior Marketing Manager, Jawaharlal Nehru Port Authority. The event concluded with the recitation of the national anthem, leaving attendees inspired and motivated to continue supporting and advancing the role of women in maritime.

Glimpses of the Event













































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Maritime Trainers Guild: Notable Contributions to Maritime Education and Training

he seminar of the Maritime Trainers Guild held in Kolkata on the 23rd of February 2024, proved to be a significant event, marked by the MTG Launch Day Celebrations among the presence of notable individuals contributing to the dialogue on pressing matters in maritime education and training.

The MTG Founder-President, **Capt. Prabhat Nigam**, who Heads the School of Maritime Studies at Chitkara University in Punjab State, opened the seminar with his welcome address. He spoke of the history of MTG, a young association of maritime teachers & trainers. He said, "MTG is playing a very significant role in developing the nation's maritime faculty and modernizing teaching, with an emphasis firmly on technology."

The seminar was distinguished with a keynote address by **Dr. Malini Shankar, IAS**, Vice Chancellor of Indian Maritime University; a prominent figure whose insights were very valuable to the attendees. The keynote

speech served to set the tone for the seminar, addressing overarching themes and significant issues facing the MET sector.

Mr. Ajoy Chatterjee and Mr. Sunil Kumar spoke on the revision of the International Convention on Standards of Training, Certification, and Watchkeeping for Seafarers (STCW), addressing the changes in key regulatory and compliance aspects of maritime training. The STCW Convention remains fundamental to ensuring that seafarers are properly certified and trained, and its revision is crucial for adapting to evolving maritime challenges and technologies.

Mr. Vivek Kumar of the Applied Research International (ARI), speaking on "Embracing AI & Digital Tools in Maritime Education & Training" reflected the industry's move towards digitisation and the incorporation of advanced technologies. This topic is particularly relevant as AI and digital tools can greatly enhance the efficacy, accessibility, and personalisation of maritime training, preparing professionals for a technologically advanced maritime environment.

Led by **Mr. David Birwadkar**, the Panel Discussion on the STCW Revision allowed for an exchange of diverse perspectives and in-depth examination of what revisions are being proposed. The discussions proved to be a great opportunity for industry experts, which included **Capt. Himadri K Ray, Capt. Shri Prakash, Dr. Sanjeev Vakil,** and **Mr. Easwara Arun Kishore**, to debate and provide insights on complex issues, paving the way for informed decision-making and strategic initiatives related to maritime training and standards.

This seminar served as a platform for maritime professionals to gather and discuss the future direction of maritime education and training, with a clear emphasis on adapting to regulatory changes and embracing

> new technologies such as AI. Such events, which MTG actively promotes, are critical for aligning industry practices with modern-day requirements and ensuring a welltrained and competent maritime workforce for the future.

> **Capt. Nalin B Pandey,** the Cardinal Head of the East Zone, in his address said, "I am very fond of Kolkata, and have very good memories of visiting this city time and again throughout my career at sea. My best wishes for a successful seminar."

> The MTG General Secretary & Treasurer, **Capt. Kamal Chadha**, in his concluding remarks said, "This meet here, attended by over 60 delegates, marks the successful completion of MTG's conclaves in all 4 cardinal centres, viz Mumbai, New Delhi, Chennai & Kolkata. This is as per MTG's goal of reaching out to new members, as well as consolidating relations with existing MTG members."

> > Courtesy: Marex Media



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Glimpses of the Event









Industry News

Head of Training, IMEC Encourages and Motivates Budding Marine Engineers



On the 18th of March 2024, **Mr. Robert Gale**, Head of Training at The International Maritime Employer's Council (IMEC) served as the Chief Guest for Passing Out Parade of the recent GME Batch, HIMT. **Capt. Sankalp Shukla**, Managing Director of Bernard Schulte Shipmanagement (India) Pvt. Ltd., and Chairman of FOSMA & IMEC Indian Representative, joined as Guest of Honour accompanied by his distinguished mother, **Mrs. Abha Shukla**.

The event, which also included a Career Fair Program, attracted over 100 students from renowned engineering institutions like SRM University and SVCE. Inside the auditorium, proceedings commenced with a sense of tradition, marked by the ceremonial lighting of the Kuthuvilakku and the presentation of traditional Ponnadai to the Chief Guest and Guest of Honour by representatives of HIMT College.

Dr. Sanjeev S Vakil, CEO of HIMT, extended a cordial welcome, acknowledging the presence of esteemed guests whose insights enriched the occasion. A highlight of the event was the enlightening addresses by Mr. Gale and Capt. Shukla, offering valuable perspectives on the maritime industry.

Mrs. Abha Shukla's heartfelt remarks and the tokens of appreciation presented to all guests further underscored the significance of their attendance. The event concluded with reflections from Cadet Leroy Andy Amanna and a gracious vote of thanks, recognizing the collaborative effort behind the success of the occasion.

Transitioning seamlessly into the Career Fair Program, attendees engaged in informative sessions and interactive discussions led by industry experts. The day ended on a convivial note, fostering connections and gratitude amongst participants, signaling a promising future in the maritime sector, buoyed by the esteemed presence and contributions of industry dignitaries.



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A Sailor Scripts his Sails

During my school days, the Vietnam war was a hot topic. Depending on your ideologies and sentiments you were either an American supporter read pro-war or supported the Viet Cong read pro-peace supporter. Ironically both sides spewed hatred and advocated war against each other.

Indians' memories of 1971 – the USA actively supporting West Pakistan – that committed genocide in East Pakistan now Bangladesh, and sending the 7th Fleet to the Bay of Bengal to threaten India was still fresh in our minds, so were the memories of the Soviets unstinting support to India during the War – our loyalties and support in all forms to the Vietnamese war of liberation was natural.

After over four decades, visiting Vietnam and seeing this flourishing country and its dynamic people it feels great to know that you were on the right side of the angels.

Another incredible link between India and Vietnam – Chatrapati Shivaji Bhosale was the General whose tactics they studied to fight the Americans – the similarity is uncanny, Shivaji's fight against the Mughals finally led to the defeat and subjugation of the Mughal Empire by the Mahrattas. My one regret – I could not visit Shivaji's statue in Ho Chi Minh City.

The trip was planned by my sons Aniruddh and Akshay, in fact Akshay was the prime mover as all of us had to coordinate to fit in his leave schedule. Easha was the next to join in, she was to be accompanied by her sister and a doctor colleague/friend. Yogi and Sharbani (Tukun) joined us on a chance WhatsApp chat in the first week of January 2020.

Yogi and I go back over four decades, we both joined DMET in September 1974, graduated as Marine Engineers in 1978. Surprisingly though we lived within a few hundred meters of each other for years, thanks to our professional commitments we rarely interacted, however as we retired, we have been able to reconnect and enjoy each others company making up for lost decades.

Yogi and Tukun, were planning a trip to Thailand and when I told Yogi that we were planning on a Vietnam trip, he immediately said yes and before the evening was over he had already booked flight tickets coinciding with our plans.

Our trip started by identifying a tour operator, Easha did her research and she selected VIETNAM AMAZING TOURS, this was probably the best decision we could take. Based on our experience, I personally recommend them,

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contactable at vietnam.amazingtours@gmail.com or info@vietnamamazingtours.com, Sam Duong, our tour manager, was really amazing. He took such great care of us, putting up with our idiosyncrasies regarding food – veg, non-veg, fishy non-veg, allergies etc., and our tour guides at each location were friendly and well informed.

Hello Vietnam

After various combinations, revisions – we finally arrived at our itinerary, Yogi and Tukun would part company with us on Day 6, they would stay on for another 10 days and explore more of the country thanks to COVID 19, but that is another story.

The night before we left for Vietnam, we got together with another two of our batch-mates Stephen and Manoj, and their wives Reena and Deepa, at Stephen's place at 23 Soi, Sukhumvit.



From left Stephen, Yogi, Reena, Tukun, Deepa, Manoj, Revathi & I, seated Manoj's mother



The night before – from left – Yogi, Anil, Tukun, Akshay, Aniruddh (front), Omkar, Revathi, Ashutosh and Easha

Preceding the dinner, we also had a group photograph with Aniruddh's friends Ashutosh and Omkar, who had accompanied Aniruddh on a Scuba diving trip at Phuket.

Our itinerary starting the next day was as follows:

Day 1: Hanoi arrival + Hanoi walking and street food tour

Day 2: Hanoi – Ninh Binh – Mua Cave Day 3: Hanoi – Halong Bay Day 4: Halong Bay – Da Nang – Hoi An Day 5: Hoi An Old Town Day 6: Da Nang – Golden Bridge – Bana Hill – Ho Chi Minh Day 7: Mekong Delta Day 8: Ho Chi Minh city tour in the morning and departure

We had an early morning flight on 11th and left home at 0400 hrs, the booked mini-van arrived late – took a major detour and in the confusion, of arriving just in time at the airport, I lost my Indian mobile – fortunately did not realize this until the last day and as such was spared the blues of a bad start.

We also said goodbye to Ashutosh and Omkar, who were returning to Mumbai later in the day, as always meeting Aniruddh's friends reinforces my belief that our nexgen will take better care of the world around them than we did.

DAY 1

Arrival Hanoi:

Hanoi is the capital of Vietnam. It covers an area of 3,358.6 square kilometres (1,297 sq mi). With an official population of 8,053,663 million, it is the 2nd largest in Vietnam. The metropolitan area, encompassing nine additional neighboring provinces in the Red River Delta, has an estimated population of 20 million. Located in the heart of the Red River Delta, Hanoi is the commercial, cultural, and educational centre of Northern Vietnam.

Hanoi has been inhabited since at least 3000 BC. The Co Loa Citadel in Dong Anh District served as the capital of the Au Lac kingdom founded by the Thục emigrant Thuc Phan after his 208 BC conquest of the native Van Lang. Hanoi history is incredibly complicated and worth reading. In recent times, it was occupied by the Imperial Japanese in 1940 and liberated in 1945, when it briefly became the seat of the Viet Minh government after Ho Chi Minh proclaimed the independence of Vietnam. However, the French returned and reoccupied the city in 1946. After nine years of fighting between the French and Viet Minh forces, Hanoi became the capital of an independent North Vietnam in 1954.

During the Vietnam War, Hanoi's transportation facilities were disrupted by the bombing of bridges and railways. These were all, however, promptly repaired. Following the end of the war, Hanoi became the capital of a reunified Vietnam when North and South Vietnam were reunited on 2 July 1976.

My third trip to Vietnam but first time to Hanoi, the cool breezy weather was a pleasant introduction to the start of an incredible trip.

Were met by the Tour driver, who then dropped us at the hotel.

We were met at the hotel by our guide Mr Quang, who took us on a walking trip around Hanoi city, our first stop was at a local eatery, when we had the famous Banh Quon, it was unbelievably delicious – more so as we were famished.

Our Hotel, the MK Premier Boutique hotel was a quaint little hotel in the old quarter. It was set in a bustling street that was obviously a favorite with the tourists.

After a stroll through the old quarter, we visited the Temple of Literature & National University, **Văn Miếu** (Vietnamese: *Văn Miếu*, literally *Temple of Culture* or *Temple of Literature*, Han tu is a temple dedicated to Confucius in Hanoi, northern Vietnam. The







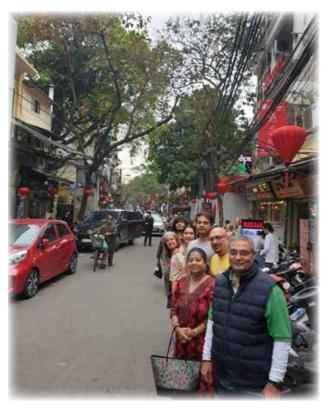




Quang, our tour guide during our stay in Hanoi

temple also hosts the Imperial Academy (*Quốc Tử Giám*), Vietnam's first national university. The temple was built in 1070 at the time of Emperor Ly Thanh Tong. It is one of several temples in Vietnam which is dedicated to Confucius, sages and scholars. The temple is located to the south of the Imperial Citadel of Thang Long. The various pavilions, halls, statues and stelae of doctors are places where offering ceremonies, study sessions and the strict exams of the Dai Viet took place. The temple is featured on the back of the 100,000 Vietnamese dong banknote. Just before the Vietnamese New Year celebration Tet, calligraphists will assemble outside the temple and write wishes in Han characters. The art works are given away as gifts or are used as home decorations for special occasions.





The manner in which the thousand year old temple is maintained, is in sharp contrast to how we Indians have not even tried to reconstruct the destroyed Nalanda University, one of the world's oldest university, destroyed in the 13th Century.

I also learnt why the corners of the tiled roofs are curved upwards at the ends – apparently this gives an impression of enhanced size.

We finished the guided tour with a walk around the lake and a round of beer at one of the quaint roadside taverns, and finished off the day in style by dining in a Vietnamese restaurant, close to our hotel.





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DAY 2

Our tour guide Quang, collected us from the Hanoi hotel, we enjoyed a scenic drive to Hoa Lu, where we visited two temples built in honour of the emperors Dinh and Le. We went to the Mua Cave, halfway up the hill. Revathi decided not to risk aggravating her knee problem - climbing to the top of the hill. Tukun had very prudently dropped out earlier. Yogi and the kids clambered to the top in no time, while it took a bit longer for me to haul my 100 kg to the top. I even made it to the absolute top but was prevented climbing the last couple of feet by a group of raucous young European kids, I had to be content with peering between two rocks to be recorded for posterity you can see in one the photos below - taken by Quang, I am circled in red. From on the top, we could see all the way to Tam Coc, a stunning panoramic view of the countryside and the Ngo Dong river.



Lunch, was at a delightful Indian restaurant where we were served, hot steaming delicious dishes but in keeping with the ambiance and atmosphere we would have preferred a traditional Vietnamese lunch.

Post Lunch , we got into small boats (sampans), a unique feature being paddles operated by feet and not by hands. The ferryman's job being one of equal opportunity – equal amount of male and female operators. The sampan took us through the scenic landscape of the heavily forested mountains, the fields in the triangle cups along the Ngo Dong river. There was also an option (that we did not exercise) of cycling for half an hour on quiet roads through villages, rice fields, rivers and rocky outcrops inside the village.

We had dinner in another delightful Vietnamese Hotel – the Garden House, we located this through the trip advisor, I have written a review for this restaurant – the ambiance, food and service was amazing.





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DAY 3 & DAY 4

After breakfast, we boarded a Bus to Halong Bay, for an overnight cruise.

Ha Long Bay, in northeast Vietnam, is known for its emerald waters and thousands of towering limestone islands topped by rain-forests. Junk boat tours and sea kayak expeditions take visitors past islands named for their shapes, including Stone Dog and Teapot islets. The region is popular for scuba diving, rock climbing and hiking, particularly in mountainous Cát Bà National Park.

The bay consists of a dense cluster of some 1,600 limestone monolithic islands each topped with

thick jungle vegetation, rising spectacularly from the ocean. Several of the islands are hollow, with enormous caves. Hang Dau Go (Wooden Stakes cave) is the largest grotto in the Ha Long area. French tourists visited in the late 19th century, and named the cave "Grotte des Merveilles". Its three large chambers contain large numerous stalactites and stalagmites (as well as 19th-century French graffiti). There are two bigger islands, Tuần Châu and Cát_Bà, that have permanent inhabitants, as well as tourist facilities including hotels and beaches. There are a number of beautiful beaches on the smaller islands.



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Mr Loi, the SAPPHIRE Cruise Manager



It was a beautiful four hour drive to reach the jetty, where we boarded a tug to reach the designated cruise vessel SAPPHIRE.

The cruise vessel SAPPHIRE lived up to our expectations, the vessel was clean, well maintained and the crew were well trained and friendly.

The cruise manager, Mr Loi, introduced us to vessel and crew and our program while on board.

Our one night Cruise plan on board the SAPPHIRE.

Our stay on board the Sapphire – flew – what with a scrumptious lunch, brief rest and on to about of kayaking and swimming in the bay, return to night cap and dinner, the next morning – we participated in a Tai Chi session –



those slow movements are not as easy as they look. Then we had a trip to the Bright Cave by bamboo boat – rowed by an extremely entertaining young man, and before we knew it – it was time for us to disembark and catch the bus back to Hanoi.

The bus drive back to Hanoi, was quiet as most of us dozed off after the exertions of the past day and half.

After a brief halt at a Japanese hostel to freshen up, we left for Hanoi Airport for our next leg, to Hoi An, the ancient city.

We arrived late and checked in at the hotel Golden Holiday Hotel & Spa, we were famished, fortunately there was roadside tavern, where we managed to get delicious, steaming noodles.



To be continued in the next issue...



Course Dates:

Basic IGF: 3rd June 2024/ 17th June 2024/ 01 July 2024/ 22nd July 2024/ 05th August 2024/ 26th August 2024/ 02nd September 2024/ 23rd September 2024 Advanced IGF: 11th June 2024/ 09th July 2024/ 20th August 2024/ 17th September 2024

Time: 8:30am - 4:30pm Registration Link: <u>https://imeimum.marineims.com/course/register</u>

		01st July 2024 / 02nd Sept 2024/ 01st Nov 2024		
MEO CL-I (FG)	2 months	018t 1807 2024	Rs. 30000/-	<u>CLICK HERE</u>
MEO CL-III NCV-CEO	2 months	01st July 2024/ 01st November 2024	Rs. 25000/-	CLICK HERE
MEO CL-II (FG) - NEW	4 Months	01st June 2024 / 01st July 2024	Rs. 40000/-	CLICK HERE
MEO CL-III NCV-SEO PART - A	2 months	1st August 2024	Rs. 25000/-	<u>CLICK HERE</u>
MEO CL-III NCV-SEO PART - B	4 Months	Commencing Soon	Rs. 38000/-	<u>CLICK HERE</u>
MEO. CL-IV NCV	4 Months	01st July 2024	Rs. 31000/-	<u>CLICK HERE</u>
Diesel Engine Gas Combustion Simulator for MEO Class I	3 Days	27th June 2024/ 1st July 2024/ 4th July 2024/ 29th August 2024/ 2nd September 2024/ 5th September 2024/ 29th October 2024/ 4th November 2024/ 7th November 2024/ 28th December 2024	Rs. 12000/-	<u>CLICK HERE</u>
Engine Room Simulator Management Level for MEO Class II	5 Days	27th May 2024/ 1st June 2024/ 25th June 2024/ 1st July 2024/ 26th July 2024/ 1st Aug 2024/ 27th Aug 2024/ 2nd Sep 2024/25th Sep 2024/ 1st Oct 2024/ 26th Oct 2024/ 1st Nov 2024/ 26th Nov 2024/ 2nd Dec 2024/ 26th Dec 2024	Rs.14000/-	<u>CLICK HERE</u>
Engine Room Simulator Operational Level for MEO Class IV	3 Days	10th June 2024	Rs. 7500/-	<u>CLICK HERE</u>
Refresher Updating Training Course for all Engineers (RUCE)	3 Days	10th June 2024/ 24th June 2024	Rs. 7000/-	<u>CLICK HERE</u>
Basic Training for Ships using Fuels covered within IGF code Course	5 Days	3rd June 2024/ 17th June 2024	Rs. 15500/-	CLICK HERE
Advanced Trg. for Ships using Fuels covered within IGF code	5 Days	11th June 2024	Rs. 21500/-	<u>CLICK HERE</u>
Assessment, Examination and Certification of1015th July 2024SeafarersDays		Rs. 15500/-	<u>CLICK HERE</u>	

Obituary

Ashis Basu (F 171) (21st December 1941 – 25th March 2024)



Ъ

Shri. Ashis Basu (F 171) a seniour member of IME(I) departed the world on 25th March 2024 at Kolkata.

Mr. Basu was from DMET 1960-64 and an active member of Brahmo Samaj. He headed the office of Cathelco Mumbai providing Anti corrosive solutions for the Ship side and pipelines and later started his own company ARICO MARINE.

He is survived by his wife Mrs. Snigdha, soul mate for 58 years and son Mr. Arindam Basu.





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A fter I got up, I took a shower and went out. From the General Post Office, which was just outside the port, I called home and told my parents not to worry, I was fine, the ship was excellent, all the officers and crew were very friendly, and the food was excellent.

I was ravenously hungry since I had skipped lunch for sleep. I went to Saravana Bhavan and had sumptuous food and returned to the ship. I changed into a boiler suit and went to the engine room. Pal was very amiable and witty. There was no hint of his earlier crankiness. My heart sank when he gave me a list of jobs 2/E wanted me to complete.

'If you don't want to be called after the watch, better complete all the jobs he has given,' he advised. I panicked. 'It is impossible how I can complete all these jobs?' I asked, desperately.

Pal gave a few tips. All pipeline drawings were in a file in ECR.

I could use them for guidance. To avoid creating a bad impression, he said it is advisable to report to 2/E at

7 a.m and explain to him the reasons for not completing any jobs left out. By the time I finished dinner and had completed the minor jobs, it was 8 p.m., and oiler Patel came for the watch, yawning. I showed him the list of jobs 2/E had given, and he was very upset. He felt he was being persecuted. He opened crankcase doors of one side of the main engine and told me he had done more than his share of work and went to sleep in his corner.

I opened the crankcase doors on the other side and looked at 2/E's job list. The second item was, tracing of pipelines and valves of the bilge system. I thought I should be able to finish it in half an hour. There would be a few pipelines and valves leading to the pump and the pump discharge going into a tank. Nothing simpler, I thought.

I took a flashlight and started from aft of the engine room. I crawled on my knees and identified the pipe from the bilge well to the bilge pump and the pump discharge line going into the bilge holding tank. I felt happy; this seemed to be an easy task, almost like a cakewalk.



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The pump suction valve chest had a number of valves and each had a line going in different directions. I did not want to get my hands or boiler suit dirty, so I wanted to complete tracing lines from above. I randomly selected one pipeline and traced it. It went straight and then took a right turn. I bent and checked it with a flashlight. It went underneath some pipes and came up. I started checking; it was going vertically up. I was puzzled as it kept going up and up and emerged on the main deck. When it ended up as an air vent of the cofferdam tank, I realised that the bilge pipe had fooled me and sent me on a wild goose chase.

I went back, removed my shoes, put on gumshoes, and lowered me into the oily mess of engine room bilges and ran my hand along the errant pipe and found it took a left turn unobtrusively, acting falsely as if it was going up. This time I was not going to be fooled, so I ran my hand on it and moved along until it went crazy and developed many branches like a banyan tree.

After one hour, I was sweating like a police inspector general (PIG), tired, dirty, angry, and hungry. My sketch of pipelines resembled an octopus which had badly knotted, entangled, and twisted its tentacles. The ship was Polish built, and the Polish are renowned for their love of vodka, so either the foreman had laid pipes when sozzled or had a pathological loathing for 5/Es. There was no other explanation for the senseless twists and turns.

The pipeline would go zigzag like a drunkard and for no apparent reason duck beneath a huge pipe, and I had to crawl in oily bilges to see what it was up to. After a few feet, it would again resurface. It seemed to wander aimlessly without any destination in mind, smack its brow for being foolish, and take a U-turn for a few feet and then turn right and vanish in a jungle of other pipes. One by one, I tried tracing the pipelines and abandoned them after a few meters. Only one pipeline seemed to be a teetotaler and sober; it went straight like an arrow and ended in port side forward bilge well.

I took a well-deserved tea break, and as I finished my tea, the phone rang. I picked it up.

'Good evening, engine room,' I said. 'Girisam, this is C/E. Take a flashlight and screw spanner and come to accommodation A/C plant room,' C/E instructed, and disconnected the phone. I had taken those items and was in a fix since I didn't know where the A/C room was. I only knew it was not in the engine room. I searched for Patel. He was not sleeping in his regular nook; he must have shifted elsewhere so that I wouldn't disturb him. I went to the crew recreation room, where a movie was playing on the TV screen and one fitter was dozing. I tapped him lightly on the shoulder and he woke up startled. I apologized and asked him for directions to go to the A/C plant room. He told me and went back to sleep. C/E beamed happily when he saw me and nodded approvingly at my dirty boiler suit and disheveled appearance, when I entered the A/C room.

'I didn't expect to see you so soon; I thought you would be going in circles to find the A/C room,' he said as he took the flashlight and screw spanner from my hand. He fiddled around with some valves and nodded, satisfied. I was staring at his wig. It was grotesque. He hadn't even donned it properly; it was skewed. I dragged my eyes away as he looked at me.

'Now, listen carefully. You should not breathe a word about this to anyone. Understood?' he asked me sternly. I did not understand, but I nodded. 'I will behead you and give your head to my son to play if you say a word to anyone.' He stressed the need for secrecy. I assured him that my lips would be sealed, though I wondered what he had done. Next day there was a big hue and cry. All the engineers' and engine crew's cabins were on the port side and the deck officers' and crew's cabins were on the starboard side. While port-side cabins were cozy and comfortable, the starboard side cabins had become warm from midnight.

Since I was on watch, I was grilled by the captain and C/O and let off the hook as I told them that I did not even know the location of the A/C room. For the next three days, it remained a mystery why their cabins were comfortable in the daytime but became warm after midnight. C/E got tired of his prank after three days since it lost its novelty and also it was tiresome for him to move about stealthily at midnight for this errand.

Engineers and navigating officers (deck officers) are strange bedfellows. They are like cats and dogs. They







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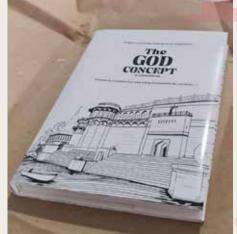
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dislike each other immensely and lose no opportunity to deride each other. Yet they accept each other as a necessary nuisance. The animosity has its origins from the days when ships with sails were replaced by ships powered by steam and diesel engines. Navigating officers join as cadets after completing the tenth standard. So, their academic qualifications are a butt of ridicule among engineers. But engineers, especially chief engineers, have to learn to eat humble pie as captains have full authority and command of the ship. Engineers are jealous of deck officers because of the glamorous nature of their job.

Any book, movie, or novel about ships will have deck officers dressed in spotless white uniforms and epaulets as heroes. Engineers in dirty boiler suits are ignored. The only exception was the movie *Sand Pebbles* starring Steve McQueen. I have seen that movie many times since the hero is an engineer. Navigating officers are envious of engineers. Engineers can shift to shore jobs as there are many job opportunities for their skills.

Deck officers have very limited jobs ashore. Most of them have no option but to sail.

This situation could be compared to airlines. Pilots in their imperious uniforms dragging their luggage evoke awe and respect. No doubt they have the huge responsibility of hundreds of passengers' safety. But their lives also depend on the correct functioning of the equipment, which is ensured by maintenance engineers, the unsung heroes. They are never thanked for their excellent work, nor is their dedication acknowledged. All the credit is gobbled by the pilots like Bollywood stars getting all the accolades while the lyricist, choreographer, spot boys, are ignored.

Anyway, after I returned to the engine room, I gave up the unequal struggle to trace the bilge line. In an exam, in spite of your best efforts, when you are unable to answer questions, in desperation you seek help from the friend in front of you and copy from his answer sheet, as a last resort. In the same fashion, I copied the bilge line diagram from the plan Pal had shown me.

The next day, at 7 a.m I entered ECR. All the engineers were having tea and planning their work for the day. The 2/E asked me if I had completed the assigned jobs and asked me for the bilge line diagram. I gave him the copied diagram. He smiled and passed it on to others. They burst out laughing. I watched baffled, as they roared. 'Are you sure this is the layout of the bilge line?' 2/E asked me with a smile. I said yes.

Again, they roared. 'Pal fooled you. He told us he would pull this prank. He made a fake drawing and was sure you would copy it,' 4/E said between peals of laughter. I had no choice but to apologize and produce my entangled-octopus- leg drawing and explain that I had tried and failed. The 2/E told me to come daily after breakfast and work till 9.30 a.m until I traced all the pipelines. He would assign one man to lift up the floor plates and to assist me.

Until then, I was alone in the engine room with one oilman. When I went to the engine room after breakfast, I was amazed to see the engine room teeming with people like bees in a beehive. When I was chief engineer of the second-largest bulk carrier in the world at that time, the ship's overall length was 324 meters. It could load more than 300,000 tons of iron ore and had a total complement of only 22 persons. Break up was like this:

Engine Department-C/E, 2/E, 3/E, E/O, two oilers, fitter, wiper

Total-8

Deck Department-Capt., C/O, 2/O, 3/O, bosun, 5 AB seamen

Total-10

Catering Department-Chief cook, second cook, two stewards

Total-4

In contrast, this ship, about 1/7 of the size, had 53 people.

Break up was like this:

Engine Department—C/E, 2/E, 3/E, 4/E, 5/E (3 nos), E/O (2 nos), engine serang, engine cassab, three fitters, three oilers, five firemen

Total-21

Deck Department—Capt., C/O, 2/O, 3/O, three cadets, R/O(2 nos), purser, deck serang, deck cassab, carpenter, three Sukhani, Five seamen

Total-21

Catering Department—Chief steward, pantryman, chief cook, second cook, third cook, Bhandari, Asst. Bhandari, 5 stewards

Total-12

I gave these statistics just for fun and for no other reason. The other ship was the latest with automation and UMS (Unmanned Machinery Spaces). Even so, 2 E/Os and 2 R/Os were superfluous in this ship. After three days we sailed out to Rostock, which was in East Germany then.

(Excerpt from 'Whispers of the waves' by A.K Girisam)

About the Author

Mr A. K. Girisam is a retired Chief engineer with over 3 decades experience in rank and 36 years sailing experience on different types of vessels including Diver Support vessel and has been a HOD of CAAMN, Marine training institute. He published a book, 'Whispers of the waves', narrating his experiences in a lighter



vein. He featured in Ric Bratton's "This week in America'. https://youtu.be/nSjzdHyj01Y.

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When Bellows Rupture and Gas Leaks Engine Room and Smoke: Mitsubishi V Type 4 Stroke Engine



had just joined the ship at Sheerness, UK.

My first round of the Engine Room was rather disappointing, as I expected more from the Second Engineer, who was my protege'. The Engine Room bulkheads and all machinery, including the Main Engine, were greyish black, giving a rather dismal look to the Engine Room. Although all tube lights were 'on', the lighting was poor. It was as if I had entered a dungeon.

Before departure, the aft crane luffing wire parted and the jib came crashing down.

At departure Sheerness, after the Main Engine was started, I saw all the Engine Room staff wearing Ear Protectors - perfectly understandable - and also masks to cover the nose - ????.

I was told that there would be too much of exhaust gas in the Engine Room with the Main Engine running, even though one of the four Engine Room Blowers was on 'Exhaust' mode. I was also told that exhaust gas was leaking from the exhaust pipe banks into which each cylinder was exhausting into. I said "Show me".

After we were in the open sea, with the Main Engine running at full, we opened four of the covers (like on the silver painted casing in the *image 1 below*) to see what was happening. It was hot and we were like cats on a hot tin roof. But unless we pinpoint the location of the leakage of exhaust gas, which can be done only with the Main Engine running, we would not be able to move forward in eliminating the problem.

There were 2 sets of exhaust pipes, leading to 2 turbochargers. Being a V type engine, the layman would think that one bank exhausts into one pipe and the other bank into the second exhaust pipe. But that is not so. Exhausting into the 'A' exhaust pipe or 'B' exhaust pipe all depended on the firing order and the timing. The two main banks of exhaust pipes are, therefore, side by side but on different planes in order to facilitate maintenance. There were probably 18 or 19 expansion bellows on the exhaust pipes' arrangement, maybe more - I could be wrong.

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Charles Dickens comes to our minds as we reflect upon the state of shipping today. Juxtaposed between Trade Wars, Galloping Technology, Regulatory Challenges and Climate Change issues, we could be looking like a deer caught in the headlights, unable to comprehend where our future lies.

The Lehman Brothers crisis of September 15, 2008, now close to 15 years ago; yet we have not been able to overcome its impact, just as we have never been able to avoid the odd bout of flu every winter, and of course the Covid-19. There has been a continuous stream of regulations, in the wake of galloping technology, escalating political gamesmanship across nations, and also with safety management continuing to be an issue, duty of care towards crew remains questionable.

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On behalf of the Organising Committee and The Institute of Marine Engineers (India), Chennai Branch, we extend a warm invitation to you and your organisation to actively participate and support the three day event, between December 4-6, 2024 in Chennai. We provide you in attachment, a copy of the canvas, and we hope to engage you in cool pre-winter periods in India.

World Maritime Technology Conference (WMTC - 2024)

"GLOBAL SHIPPING – A BATTLE FOR SURVIVAL OR A TORCHBEARER OF HOPE"? {AMIDST TECHNOLOGY, REGULATIONS, GEO-POLITICS & CLIMATE CHANGE}

Is Shipping a good story? Let us debate.

Looking forward to meeting you in Chennai On behalf of the Organising Committee, WMTC 2024

Hompital Naranash.

Hrishikesh Narasimhan Convenor

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Courtesy dieselduck.net // A 16 cylinder V type Engine (Image 1) Image 1 as referred to in text

The leaks were from several ruptured expansion bellows, from which there was steady leakage / flow of exhaust gas. We marked all the ruptured bellows for renewal when possible. 2 of the units' individual expansion bellows were leaking while 5 of the main line bellows were leaking profusely.

Along with the Second Engineer, I went through the Maintenance Records. There had been regular changes of cracked exhaust pipe expansion bellows from the time Barber's took over. Chief Engineer's report on taking over from the Japanese also indicated they had been plagued with the same problem. We had more than 16 of these bellows as spare, an unusual excess for this spare part.

The Second Engineer was an excellent, experienced one, my protege', who, by all rights, should have been on the list for promotion to Chief Engineer. Considerations other than the strictly professional - long hair, gruff attitude, not very articulate and hardly spoke - were all negatively portrayed by successive Chief Engineers made a case for him to be left out of the 'promotion category' list. I changed that perception in the Office's mind and, very soon, got him promoted.

As far as this exhaust gas leakage was concerned, he and I started from scratch. I went back to the knowledge I had gained in Sisco - "When there is a recurring problem, go back to first principles."

I asked the Second how many bellows he had changed by himself after he joined this ship - he said 'two', I asked him to think back and tell me, in detail, every stage of the work that he had done when changing the damaged bellows. He gave me a full run down of the procedure he had followed.

The flat strips welded across the two flanges serve two purposes.

One, they prevent the corrugated bellow from getting distorted when in storage.

Two, they keep the bellows marginally compressed in order to allow the bellows to be easily inserted into what would otherwise be a very tight, difficult, fit. There will be no damage to the bellow. Once the bolts are inserted into the bolt holes, the strips are to be gently cut out after installation and before tightening the bolts and nuts.



Courtesy Youtube // Shows an 18 cylinder engine - ours was 16 cylindered // Image 2 as referred to in text



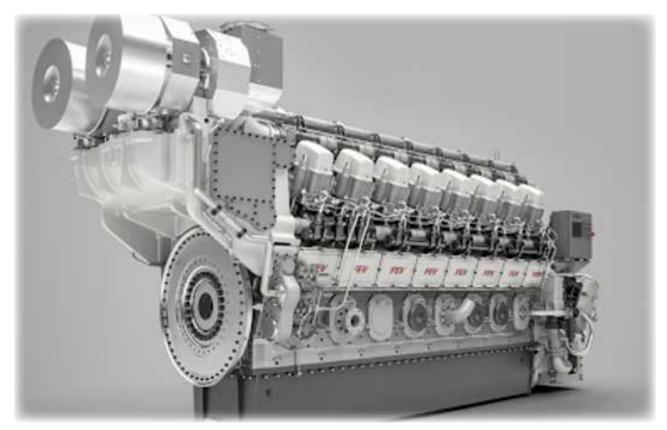
Image Courtesy indiamart // Note the stainless steel sleeve in the interior and the corrugated bellows on the outside. // The free, unwelded end of the sleeve is clearly visible, which allows for longitudinal expansion. // This stainless steel sleeve is free at one end (gas outlet end) and welded to the flange at the other end (gas inlet end) // Note both flanges are the same size, same number of bolt holes, so they can be fitted either way. // Note the flat strips welded to each flange.

I asked him to recollect how the bellow was placed, as it could be turned around 180 degrees and still be a perfect fit. He explained that the direction was the same as the one they had removed. Also, the correct procedure of inserting the new bellow in place, locating it properly, inserting - but not tightening - the bolts, then only cutting away the 'holding' strrips - which keep the bellows from getting distorted while in storage while, at the same time, keeping the bellows slightly compressed in order for ease of insertion of the bellow into place - was not followed.

If the 'holding' strips are not removed prior tightening the bolts, there is likely to be some strain on the corrugations of the bellow, as the tightened bolts are trying to expand the bellow, while the 'holding' strip is trying to contract the bellow. This could cause a tear along the corrugation.

Many Engineers fit back items exactly as they found it when opened. Because of this, a recurring problem often gets carried over and, sometimes, is never resolved.

These Expansion Bellows are a marvelous testimony to a near-genius invention that revolutionised engineering and piping systems. Pipes expand not only outwards but also longitudinally, when carrying hot liquids or hot gases. During construction, if no allowance space is given to the pipe line to expand, it will rupture pretty soon at its weakest point, possibly a welded seam. These kinds of Expansion Bellows take up mainly longitudinal expansion. Using the Coefficient of Expansion, different bellows are made to suit different metals. The design of the bellow is where it gets into the realm of inventive genius. Only catch, it has to be installed correctly or it becomes counter productive.



Courtesy FEV Group // Note the two Turbochargers at top left, each run by one exhaust bank // For reference only

Expansion Joints are also installed for liquids at normal temperatures, the design being different from Expansion Bellows for hot products.

In this case, the bellows were made of stainless steel, with a higher percentage of nickel.

(On later ships, I was glad to find that the number of bolt holes on the two flanges were different, with PCD -Pitch Circle Diameter - for the bolt holes also being different, which eliminated the possibility of wrong fitment). On older ships, European built, OEM spares, an arrow is punched on the flange, indicating how it should be fitted.

We went from there to a spare bellow, where I explained to him that the gas flow *has* to be only one way. I showed him how the interior circular stainless steel sleeve was welded at one end and free / open at the other. The bellows *must be fitted* so that the gas flow is from the welded side to the free side of the sleeve.

If fitted the other way, exhaust gas will find its way through the gap in the stainless steel sleeve and fill the gap between the sleeve and the - comparatively thin corrugated / concertinaed bellow. The frequent pulsations in the pressure of the exhaust gas will cause this accumulated gas to flex the bellows at the pressure of every stroke of the engine and soon the bellows will rupture.

I also explained to him the importance of the 'holding' strip and the procedure for its removal, once the bellow is positioned in place.

The material of the concertinaed, corrugated bellow is very thin and is meant to gently expand or contract in accordance with rise or fall of gas temperature. It is not meant to pulsate and take up the pressure fluctuations of the exhaust gas.

We were now sure that the damaged bellows were wrongly fitted, direction wise or the fitting procedure was wrong.

In order to prevent wrong fitting of future ones, we drew a large diagram of the exhaust pipes, naming them A and B banks. Then we numbered each below in the line as A1, A2 B1, B2 etc., all the while using the Instruction Manual as reference.

Gas flow has to be towards the Turbochargers, so the placement of the bellows has to match the flow of exhaust gases. We were certain that a number of them had been wrongly fitted.

As each bellow renewal could take as many as six hours or more (depending on the frozen bolts), we tackled the most damaged one first at the next port, took it out, found it facing the wrong way, changed it to a new one, allowing the gas to flow correctly.

At the same time, in that first port, two others of the engine staff were set the task of easing up each bolt of the others that were going to be changed as time permitted. There were 24 bolts at each end, 48 per bellow, which was the main time consumer. One by one, the bolt was removed, anti seize compound applied and fitted back. It was a difficult task, especially the bolts underneath, with the work space extremely restricted. With some ingenuity, we fabricated tools to make it easier to reach the bottom 1/3rd of the bolts.

This way, we could change two more bellows in the next port and three in the following port. The seventh was changed in the next port.

All leakages stopped.

The masks came off as there was no more exhaust gas in the Engine Room air.

Two weeks time taken.

The blackened areas of the Main Engine, other machinery and also bulkheads were washed and painted.

By the time we reached Singapore, the Engine Room had transformed itself from a gloomy, dark dungeon to a bright looking machinery space, especially with Bathi Saab changing tube lights and cleaning all the shade casings.

The compactness and design of the V-type engine made it easy to keep not only the Main Engine clean, but also the whole Engine Room, unless we have exhaust gas leakages as seen on this ship. Once we got rid of the leakages and painted the bulkheads and machinery, one could never say she was a 11 year old ship. At best, one would surmise, from looking at the Engine Room, that she was about 1 or two years old.

My Observations on V - Type Engines:

No Engineer's education is complete without having worked on V type engines. They are a bit complicated to maintain. Overhaul of each unit can be a problem if one does not understand the mechanics of removal and replacement of the cylinder head and piston. Also the cramped space in the crankcase, the recognition of how to fit either the driving connecting rod or the slave connecting rod is dependent on the experience of the engineer. Not all can do it.

The more older, experienced Engineers would also swear by the fact that no Engineer's education is complete without having worked on Opposed Pistons' engine.

About the Author

Mr. A. Ranganathan, 1970 batch of DMET, now retired worked in Sisco and Barber SM. Of the 38 years at sea, 28 where as Chief Engineer, served on Car Carriers, Container Vessels, Bulk Carriers, MPCs and Self Unloaders. After leaving sea, he has been a Consultant and Vessel Manager with Maersk USA for 6 years.



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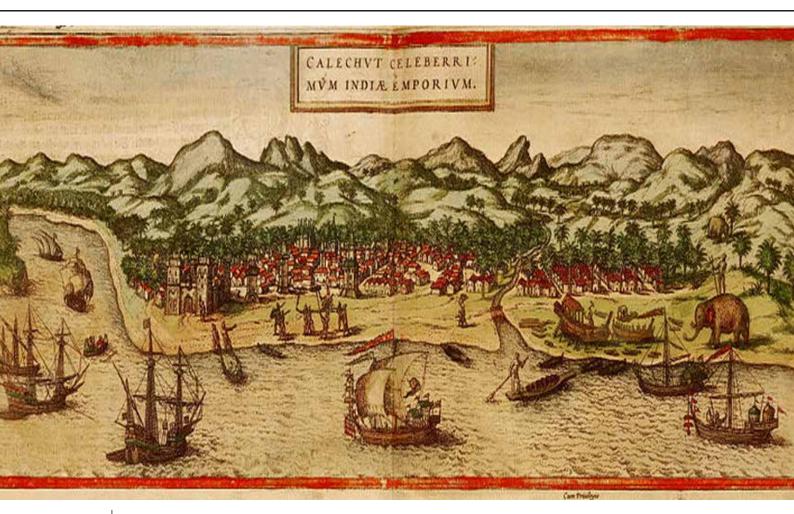
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