



Monthly Magazine of The Institute of Marine Engineers (India)

nna





# The Institute of Marine Engineers (India)

IMEI HOUSE, Plot No.94, Sector-19, Nerul, Navi Mumbai.

Tel: +91 – 8454847896/ 022-27711663 Email: training@imare.in. Website: https://imare.in/

### **REGISTRATION OPEN FOR Following DGS APPROVED COURSES**

- Basic Training for Ships using Fuels covered within IGF code *Course Id 5311* (OFFLINE) (5 Days) - 22nd July 2024/05th August 2024/26th August 2024/02nd September 2024/23rd September 2024
- Assessment, Examination and Certification of Seafarers Course Id 1062 (OFFLINE) – (12 Days) - Commencing Soon
- Advanced Training for Ships using Fuels covered within IGF code Course Id 5312 (OFFLINE) – (5 Days) - 20th August 2024/ 17th September 2024
- Advanced Training for Liquified Gas Tanker Cargo Operations (10 Days) 22nd July 2024
- Advanced Training for Chemical Tanker Cargo Operations (10 Days) 5th August 2024
   MEO CI. I (FG) : 2- months course (OFFLINE) 02nd Sept 2024/ 01st Nov 2024 (followed
- by Simulator course) **Discourt on combined bookings of Class I Course with Simulator**
- MEO (CEO\_NCV) STCW 2010: 2 month course (OFFLINE) 01st November 2024
- MEO (SEO\_NCV) Part-A STCW 2010: 2-month course (OFFLINE) 1st August 2024
- MEO (SEO\_NCV) Part-B STCW 2010: 4-month course (OFFLINE) 01st November 2024
- MEO Cl. IV (NCV) STCW 2010 4 months course (OFFLINE) 01st July 2024
- MEO (CEO NCV) BRIDGING COURSE: 15 Days (OFFLINE) 2nd September 2024/ 01st October 2024/ 16th December 2024
- MEO (NCV SEO) BRIDGING COURSE: 1 Month (OFFLINE) 01st August 2024/ 2nd January 2025
- MEO CL. II (FG): 4-month Course (OFFLINE) 01st Aug 2024 / 02nd Sept 2024 / 01st Oct 2024 / 01st Nov 2024 / 01st Dec 2024 (Discount on combined bookings of Class II Courses with Simulator)
- REFRESHER & UPDATING TRAINING (RUT 3 DAYS) COURSE FOR REVALIDATION OF COC FOR ALL ENGINEERS and ETOS (OFFLINE) – 22nd July 2024 / 7th August 2024/ 22nd August 2024
- ENGINE ROOM SIMULATOR MANAGEMENT LEVEL (3 DAYS) COURSE FOR MEO CLASS I (OFFLINE) – 4th July 2024/ 29th August 2024/ 2nd Sep 2024/ 5th Sep 2024/ 29th Oct 2024/ 4th Nov 2024/ 7th Nov 2024/ 28th Dec 2024
- ENGINE ROOM SIMULATOR MANAGEMENT LEVEL (5 DAYS) COURSE FOR MEO CLASS II (OFFLINE) – 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
- ENGINE ROOM SIMULATOR OPERATIONAL LEVEL (3 DAYS) COURSE (OFFLINE) 7th August 2024
- MEO CI. IV(FG) non mandatory course (2months duration) On request
- Familiarisation Training Course For Liquefied Natural Gas (LNG) Tanker Operations (Online) On request

For registration of Courses, click on: https://imeimum.marineims.com/course/register For Payment: Visit https://imeimum.marineims.com/ course/register

> For enquiries contact on training@imare.in

Features: Experienced Faculty, Individual Attention

# SINENCIS

07 Technical Seminar on Insurance- Addressing Shipowners concerns

**09** WMTC Advisory Board Meeting at IME(I) House

**13** Empowering Maritime Inclusivity: Gender Sensitization for Seafarers

**15** Technical Meeting on "Industry 4.0 for Marine Engineers"

> The Future of Indian Seafarers in Global Shipping

17

19

World Seafarers Day Celebration

Administration Office: **IMEI House** Plot No. 94, Sector -19, Nerul, Navi Mumbai 400 706. Tel. : +91 22 2770 1664 Fax : +91 22 2771 1663 E-mail: editornewsletter@imare.in Website: www.imare.in

Editor: Sunil Kumar

Editorial Board: S.M. Rai Ramesh Vantaram Jagmeet Makkar Hrishikesh Narasimhan Krishnamurthy Balaji Suneeti Bala Vivek D. Prasad (Hon. Sub-editor) Rashmi Tiwari (Sub-editor)

Edited and Published by: Sunil Kumar on behalf of The Institute of Marine Engineers (India). Published from 1012, Maker Chambers V, 221 Nariman Point, Mumbai - 400021.

- 21 Maritime Safety Committee - 108th Session
- **33** Successful Conclusion of AGMS 2024 and AGMA 2024
- **37** 'Beginning With Diesel Engines'
- **39** Day of the Seafarer: Navigating the Future Safety First
- **42** What Happens When A Prop Meets a Buoy

Printed by: Corporate Prints Shop No.1, Three Star Co-op. Hsg. Society, V.P Road, Pendse Nagar, Dombivli (E) - 421 201. District - Thane

Design and Layout: Kryon Publishing Services (P) Ltd., www.kryonpublishing.com

### DISCLAIMER

The views and opinions expressed in articles and content published by iMélange are solely those of the authors and do not necessarily reflect the official policy or position of the publication. Any content provided by our contributors, authors, or advertisers is for informational purposes only and should not be construed as professional advice. iMélange does not endorse any products or services mentioned in our articles or advertisements. iMélange assumes no responsibility or liability for any errors or omissions in the content or for any actions taken based on the information provided. No part of the publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior permission of the Institute of Marine Engineers (India).

# WE CARE

# ENGAGING EMPOWERING INSPIRING

Setting the standard manning.bom@angloeastern.com

ANGLO-EASTERN



# From the Editor's Desk

### Dear Esteemed Readers,

Welcome to the July'24 issue of iMélange, where we bring you the latest updates and insights from the maritime world. This month, we have a rich array of content covering technical seminars, industry news, and a gripping sailing memoir.

Our Navi Mumbai branch recently hosted a seminar focused on insurance concerns faced by ship owners. Experts delved into war risk cover, crucial insurance components and case studies providing invaluable insights to attendees.

The World Maritime Technology Conference (WMTC) Advisory Board meeting was recently held at IME(I) House on 29<sup>th</sup> June 2024 to review preparation for WMTC 2024 which will be held in Chennai from 4<sup>th</sup> to 6<sup>th</sup> December 2024.

Technical Meeting on "Industry 4.0 for Marine Engineers" was recently held at Vizag which focused on significant advancements of Industry 4.0

in marine engineering, particularly marine machinery.

A thought-provoking press conference was held in Pune in which emphasis was laid that with improved ship connectivity, enhanced safety measures, a robust educational structure, numerous training institutes, and a better understanding of international compliances, Indian seafarers are poised to play a more significant role in the global shipping industry.

IME(I) Pune Branch also hosted a vibrant celebration for World Seafarers Day on 30<sup>th</sup> June 2024 honouring the invaluable contributions of seafarers worldwide.

We have also covered in our pages the details 108th Session of the Maritime Safety Committee (MSC) at IMO Headquarters in London in which India was well represented by our delegation by in-person and hybrid participation. The 108th session of the Maritime Safety Committee brought forth crucial amendments aimed at enhancing safety and operational standards across the maritime industry. These changes reflect the ongoing commitment to ensuring the safety of vessels and seafarers alike.

Shri. Shyam Jagannathan, IAS, Director General of Shipping and Additional Secretary, Ministry of Ports, Shipping and Waterways, Govt. of India, attended the Global Maritime Summit and Global Maritime Awards in Chennai. Enriching panel discussion on Bridging the Gap between STCW Amendments for Resilient Seafaring and another one on Climate Change and Futuristic Technologies for Maritime Resilience were part of this mega event.

National Maritime Day Celebrations (Central) Committee [NMDC], under the aegis of the Directorate General of Shipping, Government of India, celebrated the 'Day of the Seafarer' on 25<sup>th</sup> June 2024, at Mumbai. 'Navigating The Future: Safety First,' was the theme adopted by the IMO for this year's celebration with 'Safety Tips at Sea' as the campaign hashtag.

We hope you find this issue of iMélange, informative and engaging. As always, we welcome your feedback and look forward to bringing you more updates and stories from the maritime world. We look forward to your insights and contributions, which you can send to us at editornewsletter@imare.in by 7<sup>th</sup> August 2024, to be featured in our August edition. Your steadfast support and active involvement drive us forward.

SUNIL KUMAR Honorary Editor – iMélange



**OUR VALUES** 



# Together All the way.

Industry Leader Timely Relief and Assignments Competitive Wages and Benefits Safe Working Condition Empowered Frontline Attractive Workplace Free Internet Across Entire Fleet

### MAERSK IS RECRUITING. Apply today.

### SECOND ENGINEER

Minimum 12 months rank experience on vessels with UMS

### THIRD ENGINEER

Minimum 6 months rank experience on vessels with UMS

### ETO/EE

Minimum 12 months rank experience, with COC Should have experience in handling minimum 250 Reefers

### FITTER

Minimum 12 months rank experience

### ORDINARY SEAMAN

Minimum 12 months rank experience

### WIPER

Minimum 12 months rank experience

### SECOND COOK

Minimum 12 months rank experience, with COC

Maersk Fleet Management and Technology India Private Limited 502 & 503, 5th floor, Godrej Two, Pirojshah Nagar Eastern Express Highway, Vikhroli (East), Mumbai MH 400079 Email: marinejobs.India@maersk.com Call: +91 22 5049 1725/ +91 124 628 7885

Web: www.maersk.com

RPS Licence no.: RPSL-MUM-490 Valid upto 30/05/2028



MAERSK



Navi Mumbai

# **Technical Seminar on Insurance-Addressing Shipowners concerns**

On June 22, 2024, the Institute of Marine Engineers India, Navi Mumbai chapter of Mumbai Branch, hosted a thought-provoking session on Insurance: Addressing Shipowners Concerns.

Branch News

A sizable number of maritime fraternity members attended the seminar, which was hosted at IMEI House in Nerul. To address the risks inherent in the shipping industry due to the constantly changing nature of maritime threats, such as natural disasters and geopolitical tensions, the seminar brought together industry experts, ship operators, and maritime professionals.

Mr. Arun Kumar Gupta, Chairman Navi Mumbai Chapter presided over the seminar. Capt. Manish Kumar, Nautical Surveyor-cum-Deputy Director General (Tech) Directorate General of Shipping, was the Chief Guest. It was also graced by the presence Capt. Shiv Nandan Halbe, CEO MASSA, Capt. Phillip Mathew from Seven Islands Shipping Ltd and other eminent dignitaries.

During his welcome speech, Mr. Gupta stated that young Marine Engineers are mostly not aware of the various nuances of marine insurance. He urged the audience to get the most out of the seminar and absorb the maximum. He stated that Insurance was nothing but a risk mitigating exercise and in the recent past had become very important due to geo-political challenges. After setting the tone of the Seminar Mr. Gupta requested Capt. Manish Kumar to address the audience.

The Navi Mumbai Chapter of IME(I) was commended by Capt. Manish Kumar for organising the seminar on a topic of great importance to the maritime industry, particularly shipowners. Capt. Manish mentioned a related incident regarding the challenges the administration has faced since a ship's insurance has expired.

Subsequently, **Mr. Tarique Q. Mulla** introduced **Capt. Naresh Kumar** as the first speaker. Vice President of Ace Insurance Brokers Pvt Ltd, Capt. Naresh Kumar, took the dais. During his presentation, he provided a brief explanation of war risk coverage as well as the advantages of having separate war risk coverage for P&I and H&M wars in the current situation. He also gave a briefing on numerous crucial insurance components.

Proceeding ahead Mr. Tarique introduced the second speaker Mr. Niladari Bandyopadhyay. Senior Vice President Mackintosh Management Services Pvt. Ltd. Mr. Niladari Bandyopadhyay briefed about P&I insurance cover, important clauses and he also discussed a few case studies

Below are Key Takeaways from the Seminar:

**War Risk** - Any physical damage to Ship or liabilities arising due to War or War-like Activities. The War Risk cover is an exclusion in both H&M and P&I.

War Risk Cover – Some important clauses to cover it- Institute War and Strikes Clauses Hulls - Time (Cl. 281) (1.10.83), War and Strikes Protection and Indemnity Liabilities and Crew War Liability for separate amounts equivalent to Hull Value (Cl.345) Missing Vessel Clause, Blocking & Trapping and Detainment as per the coverage of ITC Hulls 1/10/83 Hull war and strikes









clauses – 12 months. Navigation Limits for Hull War, Strikes, Terrorism and Related Perils Endorsement.

### Difference Between London Market & GIC Hull War Schemes -

- Geographical Limits are different
- No cover for Iran & Sanctioned Countries by UN/UK/US/EU + Sea of Azov / Black Sea / RUB Area in GIC Schemes
- No War LOH cover in GIC Schemes
- No NCB discounts in GIC Schemes
- No Bespoke Cover for 14/21/28 Days

**Recommendation for transiting in Gulf Of Aden**- It is recommended to follow BWMP 5 guidance, AIS to be kept at low frequency, consider armed security team, strict radar watches to be followed, if required Additional watches to be deployed ,Utilise the Maritime Security Transit Corridor (MSTC) and the Internationally Recommended Transit Corridor (IRTC), Attempt to voyage between 15°N and Point Alpha of the IRTC in the dark hours, Carry out crew briefings and lockdown drills, Maximise distance from the Yemeni coastlines, Consider light discipline, reducing the vessel's visual signature, If approached, increase speed and initiate evasive manoeuvres.

Interplay Between Primary War Risk Cover & P&I War Risk Cover - Primary risk cover limit the sum insured value or USD 500M (whichever is less) while P&I War Risk Covers in excess of sum insured value or USD 500M (whichever is less) up to the limit of USD 500M.

**BMP5** - Voluntary Reporting Area, IRTC, Reporting to Hull Insurance Company, register vessel in MSCHOA, Report to UKMTO, Prepare the vessel for



transit, Preparedness od ship to deter any boarding, Preparedness of the ship's Citadel, Preparedness of crew to detect and response to security threat.

**K&R piracy affected areas** - Gulf of Aden and Horn of Africa, Gulf of Guinea, Southeast Asia and South China Sea. The risks present in these areas, the limits per event and K & R Cover Rates were discussed

**P& I cover** - The legal liability can arise under the terms of contract, tort, or statute. As per Indian Port Act 1908 as per section 31(2) the master or shipowner can be held liable for damage to the port or its property

and as per section 14, if the vessel is wrecked, owner of the vessel is liable for its removal. As per MS Act 1958, Joint and several liability for pollution to environment under various sections.

It was recommended that the shipowner must take the separate war risk cover with separate limits for H&M war and P &I war. The P&I cover provided by the club is much more than the insured value of the ship. Primary war limit of combined hull and third-party damage may not be sufficient to cover all damages.

An exciting, captivating, and dynamic questionand-answer session rounded off the seminar. The honourable chief guest and our distinguished speakers received a token of gratitude from Mr. Arun Kumar Gupta, Mr. Vishal Varma, and Capt. Shiv N. Habale respectively. **Ms. Jyoti Nayak** organised the entire program with efficiency. **Ms. Archana Saxena Sangal** proposed the vote of thanks and also summarised the event candidly. On behalf of IME(I), Navi Mumbai Chapter she expressed gratitude to the honourable chief guest, the guest speakers and the enthusiastic audience.



# **()**Mélange

Branch News

### Navi Mumbai

# WMTC Advisory Board Meeting at IME(I) House



The World Maritime Technology Conference (WMTC) Advisory Board meeting was recently held at IME(I) House on 29th June 2024.

WMTC is a global event that focuses on advancements and innovations in maritime technology, bringing together industry professionals, researchers, and policymakers to discuss the latest trends and challenges in the maritime sector. It provides a platform for networking, knowledge sharing, and collaboration among stakeholders in the maritime industry.

WMTC 2024 will be held in Chennai from 4th to 6th December 2024."



# WORLD MARITIME TECHNOLOGY CONFERENCE Chennai, India 2024

GLOBAL SHIPPING – A BATTLE FOR SURVIVAL OR A TORCH BEARER OF HOPE ?





December 4 - 6, 2024 The Leela Palace, Chennai



### "You Get to Make Your Own Choices, but You Do Not Get to Choose Your Consequences"

"It was the best of times, it was the worst of times, it was the age of wisdom, it was the age of foolishness, it was the epoch of belief, it was the epoch of incredulity, it was the season of Light, it was the season of Darkness, it was the spring of hope, it was the winter of despair, we had everything before us, we had nothing before us, ..."

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.

Is it the first choice industry for an entrepreneur? For the hopeless romantics, it is!

We would like stakeholders in the industry to come forward to make a case for Shipping. We invite you to Chennai and fearlessly present views to make the industry safe, environment friendly and investor supportive. In Chennai, one of India's largest cities and its cultural capital, you would find the rhythm and the beat to speak your mind, with an unwavering conviction and unfounded joy.

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 Normanh.

Hrishikesh Narasimhan Convenor

SPONSORSHIP OPPORTUNITIES

C/Subba Poro CV Subba Rao Chairman

Sponsorships	Qty	Indian Co'S INR + GST	Overseas Co'S USD	Free Delegates	Feature Slot	
			SPONSO	RSHIP		Papers are invited from Financial
Knowledge & Technology Partner	1	33.6 Lakhs	42000	12	Strategic Forum Address - Plenary	Shipping Associations, Regulat
Platinum Sponsor	1	24 Lakhs	30000	12	Key Note Speaker 1-Plenary	Houses, Academic Institutions, S
Gold Sponsor	1	19.5 Lakhs	24000	9	Key Note Speaker 2-Plenary	Designers, Manufacturers, St
Silver Sponsor	1	15 Lakhs	18000	6	Key Note Speaker - Papers Panellist - Plenary	Noocame na Europe - Blockchai
Bronze Sponsor	3	10.5 Lakhs	12600	3	Anchor - Plenary Panel Discussion (2) Key Note + Panellist - in Sessions (1)	
Associate Sponsor	12	3.6 Lakhs	4500	1	Key Note Session or Panetlist	MANAGING AND HEDGING RISK - ASSET
Inaugural Dinner	1	10.5 Lakhs	12600	3	Panellist - Plenary	SHIP BUILDING AND REPAIRS - Can Inc
Conference Lunches	3	4.2 Lakhs	\$100	1	Key Note (3) Paper Session	SHIPPING MARKETS - Can we predic
Closing Dinner	I	10.5 Lakhs	12600	3	Paneilist - Plenary	
Conference Bags (420)	I	4.2 Lakhs	5100	1		Marine Money - Do Banks believe
Lanyards (420)	I	1.95 Lakhs	2040	0		DUTY OF CARE - Safety Manageme
		E	HIBITIO	N STALLS		REFORMING (OR ROMANCING) THE FUT
Exhibition (Stall Size A)	6	3 Lakhs	3600		Stall - Deluxe Location	Currentering Sectors - Austra of
Exhibition (Stall Size B)	18	2.4 Lakhs	3000		Stall - Standard Location	Classification Society - A volce of
			DELEGA	TE FEE		THE BUGLE OF GEO POLITICS - Sound
Member-IMEI, CMMI, ICS	90	4500	150		Conference Material + All Dining	SUSTAINABLE DEVELOPMENT - Is it only
Non Member	60	6000	195		Conference Material + All Dining	Designation According Designed - Health
Students	90	960	60	1	Conference Material + Day Dining Only	FOWERING ACADEMIC RESEARCH * FIUL
			MARINER	S NITE		THE CONNECTIVITY CONUNDRUM - Link
Mariners Nite	96	1500			Free for Delegates	ADVANCEMENTS IN PRODUCT TECHNOLO
		SOUVE	NIR ADV	ERTISEM	ENTS	Corr Leanencom as Managementer
Front Cover	1	3.6 Lakhs	4500	-	and the second second	COST LEADERSHIP IN PLAINTERANCE
Front Inside	1	2.4 Lakhs	3000	-	Nate Nav	MANAGING LEARNING - What can Sh
Back Cover	1	1.95 Lakhs	2400		1 2 1	A
Inside Back Cover	1	1.5 Lakhs	1950	5-1	1622	1 (31 23-
Colour Full Page	60	42000	510		11032010-	
Black & White Full Page	24	24000	300			

### PAPERS

apers are invited from Financial Institutions, Business Managers, Ship Owners and Managers, Shipping Associations, Regulatory Institutions, Classification Societies, Analysts, Brokerage Houses, Academic Institutions, Shipbuilding & Repair Yards, Professional Bodies, Engineers, Designers, Manufacturers, Students, Researchers, Recyclers, Salvors, Adjudicators etc.

NAMAGING THE FUTURE - Blockchain, Al, Data Analytics and Digital Transformation MANAGING AND HEDGING RISK - Asset, Cargo and Currency GNP BULDING AND REMARS - Can India grab a share of the market? GNPPING MARKETS - Can we predict the future? MARINE MONEY - Do Banks believe in Shipping? - The Basel and The Poseidon Narrative Dury of CARE - Safety Management and Crew Welfare Reforming (or Romancing) the FUTURE - Is Education the same as Schooling? Classification Society - A voice of Influence or just an IMO ally? The Bugie of Geo Pourics - Sounds of the 21<sup>st</sup> Century for Shipping Sustainable development - Is it only about climate change? Powering Academic Research - Hulls, Propulsion Equipment, Vibration & Underwater Noise The Connectivity Conundrum - Linking Rivers, Ports and Railways Advancements in Product Technologies - Fuel Lubricants, Paints, Chemicals & others Cost Leadership in Maintenance Managing Learning - What can Shipping learn from other Industries? The Institute of Marine Engineers (India)

Promoting Knowledge - Building Relationships

# IME(I) - iConnect Mobile App for Effective Communication Within the IME(I)



# Steps To Download The App

Step 1: To Download the Mobile App on Your Mobile Click on the link: <u>https://onelink.to/6xzk2d</u>

### Step 2: Install the App on Your Mobile

Depending on your OS, you will be directed to either the Google Play Store or the Apple App Store. Tap the "Install" button to download and install the IME(I)-iConnect Mobile App.

### Step 3: Enter Your Mobile Number

Once the app has been installed on your Mobile, open it and you'll be prompted to enter your mobile number. Please enter the registered mobile number associated with your IME(I) Membership account.

### Step 4: Receive OTP

After entering your mobile number, you will receive a One-Time Password (OTP) via SMS and your registered eMail. Please enter the OTP received in SMS or eMail in the app to verify your identity.

### Step 5: Access IME(I)-iConnect Mobile App

Once you have successfully entered the OTP, you will have access to the IME(I)-iConnect Mobile App.

### **Making Changes In Your Profile**

It is probable that you may wish to update your data in the app once you download it. This can be done by a "Change Request" - a feature that is available within the app itself. You may also enable / disable personal details e.g. your phone no. & email id.

India     Siris Parke     Siris Parke     Siris Parke	Click here to change your profile	
Ruck Chapter Barre Merker Barch OC Declements for Menker Cangory Chapter A	Click here to refresh & get the	
Adata ita Garina an Mininkadi ang	latest updates	Nother David

IN CASE OF ANY PROBLEM ENCOUNTERED WHILE INSTALLATION, kindly contact Ms. V. G. Geeta at membership@imare.in

### THE INSTITUTE OF MARINE ENGINEERS (INDIA)

"IME(I) House", Plot No. 94, Sector 19, Nerul, Navi Mumbai - 400 706, Tel.: +91 22 2770 1664 / Fax : +91 22 2771 1663 Email: administration@imare, in / accounts@imare.in, membership@imare.in / training@imare.in

Navi Mumbai

# **Empowering Maritime Inclusivity: Gender Sensitization for Seafarers**

n a constantly evolving environment, it is crucial to stay current with the needs and demands of society at large. Women seafarers are an integral part of the maritime community. To foster a more inclusive and non-discriminatory environment, particularly towards women, courses on "Gender Sensitization" have been introduced. These courses aim to raise awareness among seafarers and transform their attitudes.

Branch News

> The Gender Sensitization course was introduced in June 2023 and has since been an essential component of training for MEO Class 1 and MEO Class 2 seafarers. At IMEI, Nerul, this course is conducted by Mrs. Lata Khatri, who continues to inspire and influence the minds of future maritime leaders.







# THE INSTITUTE OF MARINE ENGINEERS (INDIA)

**Goa Branch** 

### **ANNUAL GENERAL MEETING**

The AGM of the Goa Branch of The Institute of Marine Engineers India will be held on **Saturday, 27th July 2024 at THE HQ HOTEL, Vasco Da Gama, Goa at 6 P.M.** 

The AGM will be followed by a contributory dinner The Agenda of the AGM is as follows:

- 1. Welcome address by Chairman
- 2. Annual Report by Honorary Secretary.
- 3. Presentation and approval of Audited accounts for the year 2023-24.
- 4. Appointment of Auditors for the year 2024-25 and deciding on his remuneration.
- Any other matter with the permission of the chair.
   Vote of Thanks.

Fully Paid Corporate Members of IME(I)-Goa Branch are Requested to Confirm Their Attendance in Advance on Mobile: +91 7972529309 or by Email: imehousegoa@gmail.com

# **INTERNATIONAL MARITIME INSTITUTE** (An ISO 9001 : 2015 Certified Institution, Approved by

DG Shipping, Govt. of India) (Graded A1 Outstanding by IRS)

# D.G. Shipping Approved Advanced STCW Courses

PSCRB Ref. PSCRB MFA	Course duration - 1 days Course duration - 5 days Course duration - 1 days Course duration - 4 days	08-07-24, 12 07-24, 13-07-24 08-07-24, 22-07-24 04-07-24, 11-07-24, 18-07-24 15-07-24	4, 25-07-24
SSO RUCE	Course duration - 3 days Course duration - 4 days	22-07-24	10% discount on all post-sea

courses to all IMI alumni

### For course booking please contact 8750055674 / 8750055662 / 8750055687

BIGF	
AIGF	

**Course duration - 05 days Course duration - 05 days**  01-07-24, 15-07-24 08-07-24

15-07-24. 29-07-24

08-07-24, 23-07-24 04-07-24, 19-07-24

RTCD (Revalidation Training Course for Masters and Deck Officer) (01-07-24, 15 -07-24) Course Duration -2 Days

### DGS APPROVED ENGINE SIMULATOR COURSES every Monday

- Diesel Engine Combusion Gas Simulator
- Engine Room Simulator (Management Level)
- Engine Room Simulator (Operational Level)
- Special package for MEO competency / simulator courses and Advance STCW courses
- Deluxe residential facility available

**EVERY MONTH** COMMENCES

MEO CLASS I COURSE FEE Rs. 25,000/-Call: +91 87500-55664

MEO CLASS II COURSE FEE Rs. 32,000/-Call: +91 87500-55675

# Registrations open for next batch of B Tech / DNS / GME / ETO / GP Rating / CCMC

PRE-SEA COURSE	S		-
Diploma in Nautical Science	Course Duration : 1 Year	Commences: February & August	To book you
B.Tech Marine Enginering	Course Duration : 4 Year	Commences: August	course scan th
Graduate Marine Engineering	Course Duration : 1 Year	Commences: May & November	
Electro Technical Officer	Course Duration : 4 Months	Commences: March, July & November	「「認識
CCMC	Course duration - 6 Months	Commences January and July	
GP RATING	Course duration - 6 Months	Commences January and July	

online QR code

For Course Booking: +91 9650657755 admissioncell@imi.edu.in | www.imi.edu.in

For bulk booking discounts and discount packages please call-8750055687/8750055674

Branch News

### Vizag

# Technical Meeting on "Industry 4.0 for Marine Engineers"



On 5<sup>th</sup> July 2024, the Institute of Marine Engineers India (IMEI) Vizag branch organised a technical meeting in the Seminar Hall of the Marine Engineering Department, A.U. College of Engineering, Andhra University. The meeting featured a presentation by **Dr. Giri Rajasekhar Gunnu**, Professor of Practice in the Department of Marine Engineering at Andhra University, focusing on the significant advancements of Industry 4.0 in marine engineering, particularly marine machinery.

### **Presentation Overview**

**Part 1: Introduction to Industry 4.0** Dr. Gunnu began by emphasising the importance of Industry 4.0 for marine engineers. He provided an insightful overview of the evolution from Industry 1.0 to 4.0 and highlighted key technologies driving this transformation. The discussion covered:

- The impact and challenges of adopting Industry 4.0 technologies.
- Concepts such as Maritime 4.0, Shipyard 4.0, Shipping 4.0, and Port 4.0.
- The role of cyber-physical systems in data exchange within the industry.

Dr. Gunnu also shared publication trends in Maritime 4.0 from 2011 to December 2021 and trends in Digital Twin Technology literature from 2010 to 2022. He elaborated on how Digital Twin Technology can be applied within the maritime industry. **Part 2: Marine Machinery Maintenance** In the second segment, Dr. Gunnu discussed the role of IoT sensors and devices in marine machinery and existing predictive maintenance techniques for asset management.

**Part 3: Condition-Based Predictive Maintenance** The final part of the presentation illustrated condition-based predictive maintenance using a motor as an example. Key topics included:

- Detecting classic faults in rotating machines such as unbalance, misalignment, mechanical looseness, and normal conditions.
- The role of signal processing techniques.
- The application of supervised and unsupervised machine learning approaches for predictive maintenance.

Dr. Gunnu's presentation was highly informative, providing valuable insights into the advancements and applications of Industry 4.0 technologies in marine engineering. His expertise and comprehensive coverage of the subject matter were greatly appreciated by all attendees. He also enlightened the audience about current IMO regulations and those set to come into force.

The session was well attended by Chairman **Dr. V.V.S. Prasad**, members of the Institute of Marine Engineers, and faculty and students of the Marine Engineering Department, Andhra University College of Engineering. The meeting concluded with the National Anthem.

# **ADMISSIONS OPEN**

Limited seats available

# B.Tech Marine Engineering 4 YEARS

# **B.Sc Nautical Science**

# **3 YEARS**

AFFILIATED TO INDIAN MARITIME UNIVERSITY (IMU)

# **ELIGIBILITY**

- PCM > 60% in 12<sup>th</sup> Std
- Age- Max 25 Yrs.
- IMU-CET Rank Mandatory



Great Placement Record

Quality Faculty



5

World Class Infrastructure

Classrooms

HIMT College GRADE A1 OUTSTANDING

S 98404 98000 admission@himtcollege.com
Www.himtcollege.com

AC

Branch News

### Pune

# The Future of Indian Seafarers in Global Shipping

**O**<sup>n</sup> 24th June 2024, the Institute of Marine Engineers India, IME(I), the Company of Master Mariners of India, (CMMI), the Indian Maritime Foundation, (IMF), and Tolani Alumina (TMIAN) held a press conference in Pune. The focus was on the future role of Indian seafarers in the global shipping industry.

Experts emphasised that with improved ship connectivity, enhanced safety measures, a robust educational structure, numerous training institutes, and a better

understanding of international compliances, Indian seafarers are poised to play a more significant role in the global shipping industry. Additionally, improvements in the quality of life on board have been pivotal.

### **Encouraging Women Seafarers**

The International Maritime Organization (IMO) is placing a strong emphasis on encouraging women in the seafaring profession. Currently, women constitute only 2% of the global seafaring population. However, structured programs and scholarships for women, promoted by the Directorate General of Shipping, are increasing this number. Women are now advancing from crew members to officers and engineers, further enhancing India's contribution to the global shipping industry.

### Day of the Seafarer

The Day of the Seafarer, celebrated on 25th June, acknowledges the contributions of seafarers to international trade and the global economy. It commemorates the adoption of the 2010 Manila Amendments to the International Convention on Standards of Training, Certification, and Watchkeeping for Seafarers (STCW). This year's theme, "Safety First," underscores the importance of maritime safety, security, and environmental protection.

### **Celebrations in Pune**

Ex-Chief Engineer Mr. Sanjeev Ogale, Chairman of IME(I) Pune, highlighted Pune's strong connection to the seafaring community. The city hosts three associations, four training institutes, and approximately 5,000 seafarers, with 1,000 currently active in cargo and passenger ships. Pune's proximity to Mumbai and Goa, along with improved connectivity since the 1990s, has contributed to this concentration. To attract and guide aspiring seafarers, a guidance cell has been established in Pune.



### **Growth of Indian Seafarers**

Capt. Shrirang Gokhale, Chairman of CMMI, noted that Indian seafarers currently make up about 10% of the global shipping workforce, with projections suggesting this could increase to 20% by 2030. The availability of English-speaking manpower, skill development, technology adoption, and a strong educational foundation are key factors driving this growth. Improved living conditions on board and a better understanding of international

compliances further support this trend.

### **Challenges and Opportunities**

Capt. Anand Dixit, Chairman of the Indian Maritime Foundation, acknowledged the challenges faced by the seafaring community, including rough weather, piracy, and conflicts in the Middle East. However, international naval surveillance, including proactive efforts by India, has mitigated many risks. Given the indispensable role of ships in global trade and the economy, the influence of Indian seafarers is set to increase.

### **Boosting the Indian Shipping Industry**

Capt. Sudhir Subhedar, former President of Indian Coastal Operators and former member of CMMI, emphasized the need for growth in the Indian shipping industry. Currently, India has only about 1,000 merchant ships, which need to increase fivefold to meet domestic and international demands. Shipping various goods, including containers, medicines, cold cargo, finished products, and heavy equipment, domestically via sea routes is cost-effective and environmentally friendly. The industry could benefit from tax relaxations, fiscal incentives, and deregulation.

Experts unanimously agree that while adopting new technologies and skills is crucial, competency and hands-on experience remain essential for success in the seafaring profession.



THE INSTITUTE OF MARINE ENGINEERS (INDIA) MUMBAI BRANCH



Hydraulics Workshop – Skill Upgradation Course (Online)

for Marine Engineers, Electro Techno Officers & Superintendents

Faculty Name : Mr. Pravin R Marathe, Ex- Chief Engineer (MEO Class I)

### **OBJECTIVES:-**

- To understand Principle of operation of various hydraulic equipments suchs as pumps, control valves and actuators.
- To understand the symbolic representation of various hydraulic equipments so as to read and analyse the hydraulic circuit diagrams.
- To know the correct dismantling and assembly procedure for various hydraulic equipments.
- To understand safe operation and trouble shooting of hydraulic systems.

### Venue : Web Platform / Zoom

### Time: 0900 hrs to 1700 hrs

Fees : Members - Rs. 11,800/- (Inclusive of GST ) (IMEI, CMMI and INA Members)

Non Members - Rs. 14,160/- (Inclusive of GST )

### **MORE INFORMATION**

Ms. Anita Patill: +91-7350002757 , +91-9225516456 Ms. Neetha Nair: 91-9930977647

www.linktr.ee/imei.m

training\_mumbai@imare.in / mumbai@imare.in

The Institute of Marine Engineers (India) Mumbai Branch 1012, Maker Chamber V, Nariman Point Mumbai 400021

Branch News

### Pune

# World Seafarers Day Celebration



The Institute of Marine Engineers (India) Pune Branch celebrated World Seafarers Day on 30<sup>th</sup> June 2024. Over 100 seafarers gathered at PYC Gymkhana for a special programme, which included a talk show, pottery workshop, and musical event. The theme for the talk show was "Navigating the Future: Safety First!"

**Capt. (Dr.) Ashutosh Apandkar,** Principal of Training Ship Rahaman, India, delivered the keynote address, while **Capt. Indranath Banerjee,** Principal of Tolani Maritime Institute, gave the welcome address.

Ex-Chief Engineer **Mr. Sanjeev Ogale**, Chairman of IME(I) Pune, **Capt. Shrirang Gokhale**, Chairman of CMMI, **Capt. Anand Dixit**, Chairman of the Indian Maritime Foundation, and **Capt. Sudhir Subhedar**, former President of Indian Coastal Operators and former member of CMMI, were among the dignitaries present.

In his speech, Capt. (Dr.) Apandkar highlighted the integration of women into the shipping industry, emphasising efforts to ensure their safety and competence on board. He noted that TS Rahaman aims



to prepare women for global challenges, with positive feedback from shipping companies. He also praised Pune's contributions to the industry, with its four maritime institutes gaining recognition.

Bhagyashree Ogale, a Pune-based first engineer, shared her experiences, stating, "Challenges are part of the journey, but quitting is never an option. Gaining confidence and becoming an asset to the organization is key. Women need to believe in their ability to make decisions and solve problems."

Mr. Sanjeev Ogale, addressed parents' concerns about safety, security, and quality of life on board.

Capt. Dixit emphasised the importance of seafarers' wellbeing and the mental health issues they face.

Pune boasts a strong seafaring community with three associations and four training institutes, supporting over 5,000 seafarers, 1,000 of whom are actively on board. The program was well-received and appreciated by all attendees.





# IMEC Indian Cadet **Graduate Marine Engineering** IMEC (GME) Program

### 🚯 Eligibility: Mechanical Engineering 🛛 🚯 Max. Age: 24 years as of 31<sup>st</sup> March 2024 Graduates, 60% Aggregate



LAST DATE FOR APPLICATIONS 15<sup>th</sup> July 2024

**COURSE COMMENCEMENT DATE 1<sup>st</sup> Sept 2024** 

# **Following IMEC Member Companies coming for Placement**

























Scan the **QR** Code to know more



www.himtcollege.com S 98404 98000 / 98404 00000 admission@himtcollege.com  $\mathbf{X}$ 





# Maritime Safety Committee - 108th Session



The 108<sup>th</sup> session of the Maritime Safety Committee (MSC) was held from 15<sup>th</sup>-24<sup>th</sup> May 2024. The Indian delegation was represented by Capt. Abul Kalam Azad, Mr. Sunil Kumar, Cdr. Sandeep Kumar, Mr. Lokanath Prasad Tripathy, Mr. Jathesh Chandra Gopinathan and Mr. Anish Sankarapillai who attended the session in person at IMO Headquarters, London whereas Mr. Killi Mohana Rao, Mr. Rajeev Nayyer, Mr. Pradeep Sudhakar, Capt. Vikram Singh Manhas, Mr. Praveen Nair, Mr. Nishant Bhaskaran, Mr. Bhagatsingh Geda, Mr. Jyotisman Dasgupta, Mr. Nebu Oommen, Capt. Nimish Mhatre and Mr. Ganesh Karthik Subramaniam attended in remote mode.

Following are the important outcomes of MSC 108:

Important amendments to the mandatory instruments that were adopted at MSC 108 are as follows:

- Amendments to the 1974 SOLAS Convention and related mandatory instruments
  - SOLAS Chapter II-1, Regulation 3-4, pertaining to the fitting of emergency towing arrangements on ships of gross tonnage 20000 and above other than Tankers;
  - b. SOLAS Chapter II-2 with regard to following:
    - I Part B, Regulation 4 Oil fuel parameters other than flashpoint

- Part C Regulations 5 & 9, Part B Regulation 6, Part G – Regulations 20 & 23 regarding Fire Safety for Ro-Ro Passenger Ships.
- **c.** SOLAS Chapter V, Regulations 31 & 32 in regard to communication of loss containers as well as information to be provided in the messages transmitted by the communication.
- International Code of Safety for Ships using Gases or other Low-Flashpoint Fuels (IGF Code)
- e. International Code for Safe Carriage of Grain in Bulk (Grain Code)
- f. International Code on the Enhanced Programme of Inspections during Surveys of Bulk Carriers and Oil Tankers, 2011 (2011 ESP Code)
- g. Chapters II, IV and VI of the LSA Code
- h. Chapters 7 and 9 of the FSS Code
- i. International Maritime Dangerous Goods Code (IMDG Code)
- j. Amendments to the STCW Code
- **k.** Revised annex to the 1995 STCW-F Convention and new STCW-F Code
- I Performance standard for protective coatings for dedicated seawater ballast tanks in all types of



ships and double-side skin spaces of bulk carriers (resolution MSC.215(82));

- Performance standard for protective coatings for cargo oil tanks of crude oil tankers (resolution MSC.288(87)); and
- n. Requirements for maintenance, thorough examination, operational testing, overhaul and repair of lifeboats and rescue boats, launching appliances and release gear (resolution MSC.402(96))

Associated amendments to non-mandatory instruments that were adopted/ approved at this session are as follows:

- Amendments to the Revised recommendation on testing of life-saving appliances (resolution MSC.81(70));
- 2. MSC Circulars on
  - a) Voluntary early implementation of the amendments to paragraphs 4.2.2 and 8.4.1 to 8.4.3 of the IGF Code;





- b) Revised standardized life-saving appliance evaluation and test report forms (personal lifesaving appliances), for dissemination as MSC.1/ Circ.1628/Rev.2;
- c) Revised unified interpretations of SOLAS chapter II-2 and the FSS and FTP Codes, for dissemination as MSC.1/Circ.1456/Rev.1;
- d) Revised emergency response procedures for ships carrying dangerous goods (EmS Guide), for dissemination as MSC.1/Circ.1588/Rev.3;
- e) Guidelines for maintenance and repair of protective coatings, for dissemination as MSC.1/ Circ.1330/Rev.1;
- f) Guidelines on procedures for in-service maintenance and repair of coating systems for cargo oil tanks of crude oil tankers, for dissemination as MSC.1/Circ.1399/Rev.1; and
- g) Guidelines on the medical examination of fishers.

In addition, relevant discussion and decisions taken by the Committee regarding the following agenda items are further elaborated in this report (which also includes relevant circulars approved at this session):

- 1. Agenda Item 2 Decisions of other IMO Bodies
- Agenda Item 4 Development of a goal-based instrument for Maritime Autonomous Surface Ships (MASS)
- Agenda Item 5 Development of a safety regulatory framework to support the reduction of GHG emissions from ships using new technologies and alternative fuels
- Agenda item 6 Revision of the Guidelines on Maritime Cyber Risk Management (MSC-FAL.1/ Circ.3/Rev.2) and identification of next steps to enhance maritime cybersecurity

- Agenda Item 7 Measures to enhance Maritime Security
- 6. Agenda Item 12 Navigation, Communications, Search and Rescue
- 7. Agenda Item 14 Carriage of Cargoes and Containers
- 8. Agenda Item 18 Work Programme
- 9. Agenda item 19 Any other business

# Summarised outcome of relevant topics which were discussed at MSC 108

### **Decisions of Other IMO Bodies**

### (Agenda Item 2)

India made an intervention on MSC 108/2/1 regarding the outcome of C 130 and A-33. The intervention was made to update the Committee further on a matter of Resolution A.1192(33). India had submitted document MEPC 81/2/5 which proposed the inclusion of an additional operative paragraph in resolution A.1192(33), concerning preventing inadvertent criminalization of seafarers, which was broadly supported at MEPC. Further, the document was considered at LEG 111, where, the Committee noted the discussions and views expressed by MEPC, at its eighty-first session, on the proposal by India in document MEPC 81/2/5, and referred further consideration thereof to LEG 112, before transmitting it to the Assembly at its thirty-fourth session in 2025. The MSC Chair appreciated India's update and stated that the Committee would await the outcome of LEG 112.

# Consideration and adoption of amendments to mandatory instruments

### (Agenda Item 3)

### SOLAS Chapter II-1, Regulation 3-4

MSC 107 approved draft amendments to SOLAS regulation II-1/3-4 relating to new requirements for all



new ships other than tankers of 20,000 GT or more to be fitted with emergency towing arrangements. The same has been adopted by MSC 108 (Res. MSC. 549(108).

The amendments will enter into force from **1 January 2028.** 

Key points to be noted are as follows:

- Ships must be capable of rapid towing deployment without main power.
- Towing arrangements should facilitate easy connection to the towing ship.
- The equipment must be strong enough to handle the ship's size and bad weather conditions.
- The design, construction, and testing of the towing arrangements need approval by the Administration, based on the guidelines developed by the Organization.

### SOLAS Chapter II-2, Regulation 4

The Committee adopted the resolution MSC .550(108) for amendments to SOLAS Chapter II-2, Regulation 4 in relation to addition of a new functional requirement vide paragraph 2.1.9 specifying the oil fuel delivered and used on ships should not jeopardize the safety of the ship or adversely affect the performance of machinery or be harmful to personnel.

The amendments will enter into force from **1 January 2026**.

### SOLAS Chapter II-2, Regulation 7

MSC 108 adopted amendments to SOLAS Chapter II-2 (resolution MSC.550(108)), Part C, concerning fire suppression.

These amendments affect regulation 7, paragraphs 5.2 and 5.5:

Paragraph 5.2: Now includes the word "fire" before the alarm system for spaces with low fire risk (for passenger ships carrying more than 36 passengers).

- Paragraph 5.5: Requires detection and alarm systems for "control stations and cargo control rooms" on cargo ships according to the applicable method (i.e. IC; IIC; IIIC).
- The amendments will enter into force from 1 January 2026. Cargo ships constructed before this date are to comply with the previous requirements.

### SOLAS Chapter II-2, Regulation 20

Key amendments include the following:

The term 'ro-ro' spaces is now expanded to clarify ro-ro spaces as open and closed ro-ro spaces as well as weather decks intended for carriage of vehicles.

• Fixed Water-Based Fire-Extinguishing Systems: Requirements to Protect weather decks and ro-ro spaces with closing devices. Includes continuous video monitoring for existing ships.



- Linear Heat Detectors: Reg II-2/20.4.1 now requires smoke and heat detectors in vehicle, special category, and ro-ro spaces. Linear heat detectors are acceptable, if tested under normal ventilation conditions. Existing ships must also comply, and smoke detectors cannot be substituted.
- Video Monitoring: Amendments to Reg II-2/20.4.4 require effective video monitoring systems in these spaces. Systems must provide immediate playback capability and cover the entire space, with cameras high enough to see over cargo and vehicles.
- Arrangement of Openings in Ro/Ro and Special Category Spaces: Reg II-2/20.5.2 changes include the term "normally occupied service spaces" and specific safety distance requirements.
- Water Monitors for Existing Ships: Reg. II-2/20.6.2 mandates retrofitting existing ro-ro passenger ships with fixed water-based fire extinguishing systems for weather decks.
- New section 7 requires suitable signage and markings for fixed fire extinguishing systems in new ships, considering crew movement patterns and cargo obstructions.

Applicable to new ships (fitted with vehicles, special categories, open and closed ro/ro spaces, and weather decks intended for the carriage of vehicles) built on or after **1 January 2026**, and existing ships, which must comply by their first survey on or after **1 January 2028**.

### SOLAS Chapter V, Regulations 31 & 32

The Committee adopted the resolution MSC.550(108) for amendments to Regulation 31 pertaining to the communication of incidents related to loss of freight containers from ships. The Master of the involved ship is required to communicate the particulars of such incident to all ships in the vicinity, the nearest coastal state and the flag Administration of the ship. Also, the Master of any Ship upon observation of freight containers drifting at sea is required to communicate the particulars of such observation to all ships in the vicinity and the nearest coastal state.

Regulation 32 is consequently amended to reflect the format of the information required to be included regarding incident pertaining to loss of freight containers or sighting of freight containers drifting at sea.

The amendments will enter into force from **1 January 2026** and will apply to any ship carrying or sighting lost containers.

### IGF Code

The MSC 108, following the work of the CCC, adopted several amendments to the IGF Code through resolution MSC.551(108). These changes cover various aspects of safety and operational requirements for ships using low-flashpoint fuels.

Key amendments include the following:

- Venting, Pressure Relief, and Ventilation Requirements: Paragraphs 9.6, 9.6.1, 11.6.2, 9.4.7, 12.5, and 6.7.3.1.1 amended
- *Fuel Supply Failures*: Paragraph 9.3.1: Focuses on managing the failure of essential fuel supply auxiliaries and allows for a partial reduction in propulsion capability.
- Delivery Pressure and Bunkering Line Design: Part A-1, Paragraphs 5.12.1, 6.9.1.1, 9.8.1, 9.8.2, 9.8.4, and Part C-1, Paragraph 18.4.1.1.1 amended.
- General Pipe Design: Paragraph 7.3.2 amended focusing on the wall thickness requirements.
- Bunkering Manifolds and Level Indicators: Paragraph 8.4 amended for the design and safety of bunkering manifolds. Paragraph 15.4.1 updated providing the requirements for level indicators in liquefied gas fuel tanks.

The amendments will enter into force from **1 January 2026.** In cases where there is **no explicit reference** to the application, the amendments will also apply to existing ships from 1 January 2026 onwards.

### Grain Code

The Committee adopted resolution MSC.552(108) to amend the International Code for the Safe Carriage of Grain in Bulk (Grain Code). The amendments introduce a new class of loading conditions for "specially suitable compartment, partly filled in way of the hatch opening, with ends untrimmed" and specify the requirements under which grain could be carried in such compartments.

The amendments will enter into force from **1 January 2026.** Applicable to both new and existing ships. Stability Booklet is to include relevant information before the first loading in accordance with the new conditions after the 1 January 2026.

### 2011 ESP Code

The MSC 108 adopted an amendment to the annexes of the 2011 ESP Code (2019 Amendments) through resolution MSC.553(108). These changes clarify the roles of Administrations and their Recognized Organizations regarding the approval and certification of firms engaged in thickness measurement of hull structures.

Key amendments include the following:

 Amendments addresses inconsistencies in the definition of "Administration" in the 2019 amendments to the ESP Code. Previously, "Administration" was defined as either the Administration or an organization recognized by the Administration, differing from definitions in SOLAS, MARPOL, and Load Line conventions. Changes made ensure that Administrations can participate directly in the document review and certification process of firms engaged in thickness measurements of hull structures.



**Course Dates:** 

Basic IGF: 22nd July 2024/05th August 2024/26th August 2024/02nd September 2024/23rd September 2024 Advanced IGF: 20th August 2024/17th September 2024

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

		02nd Sept 2024/ 01st Nov 2024		
MEO CL-I (FG)	2 months		Rs. 30000/-	CLICK HERE
MEO CL. III NCV CEO	2 months	01st November 2024	Rs. 28000/-	
MEO CL-III NC V-CEO	4	01st Aug 2024 / 02nd Sept 2024/ 01st Oct 2024 /		
MEO CL-II (FG) - NEW	Months	01st Nov 2024 / 01st Dec 2024	Rs. 40000/-	CLICK HERE
MEO CL-III SEO- NCV PART - A	2 months	1st August 2024	Rs. 28000/-	<u>CLICK HERE</u>
MEO CL-III SEO- NCV PART - B	4 Months	01st October 2024	Rs. 40000/-	<u>CLICK HERE</u>
MEO. CL-IV NCV	4 Months		Rs. 36000/-	<u>CLICK HERE</u>
Diesel Engine Gas Combustion Simulator for MEO Class I	3 Days	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	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	7th August 2024	Rs. 7500/-	<u>CLICK HERE</u>
		22nd July 2024		
Refresher Updating Training Course for all				
Engineers (RUCE)	3 Days		Rs. 7000/-	CLICK HERE
Basic Training for Ships using Fuels covered within IGF code Course	5 Days	22nd July 2024/ 05th August 2024/ 26th August 2024/ 02nd September 2024/ 23rd September 2024	Rs. 15500/-	CLICK HERE
Advanced Trg. for Ships using Fuels covered within IGF code	5 Days	20th August 2024/ 17th September 2024	Rs. 21500/-	CLICK HERE
Assessment, Examination and Certification of Seafarers	10 Days	Commencing Soon	Rs. 15500/-	CLICK HERE

The amendments will enter into force from **1 January 2026.** 

### LSA Code

The Committee adopted resolution MSC. 554(108) for amendments to the LSA Code. The amendments correspond to the following topics:

- Chapter II, Section 2.2.1 (General requirements for lifejackets) – The amendment further clarifies the expected performance for the self-righting of the lifejacket.
- Chapter IV, Section 4.4.7 (Lifeboat fittings) The amendment is targeted at providing clarification on the hook as well as the single fall and hook system.
- Chapter VI, Section 6.1.2 The amendment pertains to the lowering speed of the survival craft or the rescue boat. The amendment specifies maximum speed of the survival craft or the rescue boat to be 1.3 m/s.

The amendments apply to lifesaving appliances installed on or after **1 January 2026**.

### Amendments to the Requirements for maintenance, thorough examination, operational testing, overhaul and repair of lifeboats and rescue boats, launching appliances and release gear (Res. MSC.402(96))

MSC 108 adopted resolution MSC.559(108), introducing amendments to paragraph 6.2.3 of the Requirements for Maintenance, Thorough Examination, Operational Testing, Overhaul, and Repair of Lifeboats and Rescue Boats, Launching Appliances, and Release Gear (resolution MSC.402(96)). These amendments follow new ventilation requirements for totally enclosed lifeboats (resolution MSC.535(107)).

The amendments to Paragraph 6.2.3 stipulate that Lifeboats, including free-fall lifeboats, rescue boats, and fast rescue boats, are to have their ventilation systems thoroughly examined and checked for satisfactory condition and operation.

The amendments will enter into force from **1 January 2026**.

### FSS Code

The Committee adopted vide resolution MSC.555(108) amendments to the FSS Code. The amendments include the following :

- Chapters 7 and 9 of the FSS Code, including specification of fixed water-based fire-extinguishing on ro-ro passenger ships having weather decks intended for the carriage of vehicles, and
- applicable test standards for heat detectors and linear heat detectors

The amendments will enter into force from **1 January 2026.** 

### IMDG Code

The MSC 108 adopted amendments to the IMDG Code, known as Amendment 42-24, through resolution MSC.556(108). These changes will be incorporated into the 2024 Edition of the IMDG Code, updating requirements for both new and existing substances.

Key Amendments include following :

- New Definitions and Modifications to definitions
   introduced
- Substance Lists updated.
- Chapters updated. In chapter 2.9.2, a new part for assigning "Sodium ion batteries" to class 9 added. In Chapters 3, 4, 5, and 6, various amendments made to improve safety and clarity.
- Revised emergency schedules (EMS) Guide. Amendments made to MSC.1/Circ.1588/Rev.2, resulting in the preparation of a revised consolidated version of the EMS Guide (MSC.1/Circ.1588/Rev.3).

Amendments are effective from **1 January 2026**. Applicable to all ships, including cargo ships of less than 500 GT, that carry dangerous goods in packaged form.

Member States are encouraged to disseminate the revised EMS guide, with voluntary application from **1 January 2025**.

### STCW Code

The amendments (Res. MSC.560(108)) to Part A of the STCW Code include the requirements to prevent and respond to bullying and harassment in the minimum standard of competence in personal safety and social responsibilities (Table A-VI/4).

The amendments will enter into force from **1 January 2026**.

### STCW-F Convention and new STCW-F Code

The comprehensive revision of the STCW-F Convention (Res. MSC.561(108)) includes – inter alia – the necessary modifications due to GMDSS modernization.

A new edition of the STCW-F Code has consequently also been adopted (Res. MSC.562(108)).

The amendments will enter into force from **1 January 2026**.

### Performance Standard for Protective Coatings for Dedicated Seawater Ballast Tanks in all types of Ships and Double Side-skin spaces of Bulk Carriers (MSC.215(85) as amended)

The Committee adopted vide resolution MSC.557(108) amendments to the performance standards for protective coatings of dedicated sea water ballast tanks in all types of ships and double side-skin spaces of bulk carriers. Specifically, the amendments are made to Section 6.1 – the coating inspector should be certified now to AMPP Certified Coatings Inspector instead of the NACE Coating Inspector Level 2.



The amendments will enter into force from **1 January 2026**. As a consequence, revision was also made to MSC.1/Circ.1330 and this is issued as MSC.1/Circ.1330/ Rev.1

### Performance Standard for Protective Coatings for Cargo Oil Tanks of Crude Oil Tankers (MSC.288(87) as amended)

The Committee approved vide resolution MSC.558(108) amendments to the performance standards for protective coatings of cargo oil tanks of crude oil tankers. Specifically, the amendments are made to Section 6.1 – the coating inspector should be certified now to AMPP Certified Coatings Inspector instead of the NACE Coating Inspector Level 2.

The amendments will enter into force from **1 January 2026**. As a consequence, revision was also made to MSC.1/Circ.1399 and this is issued as MSC.1/Circ.1399/ Rev.1

### Development of a goal-based instrument for Maritime Autonomous Surface Ships (MASS)

### (Agenda Item 4)

Deliberations of this WG were attended by Mr. Jathesh Chandra DGM Design, CSL (physically) and Mr. Anish S, DGM SBU, CSL (physically), Mr. Jyotisman Dasgupta, INA (remotely) and Mr. Bhagatsingh Geda, IRS, (remotely) as part of the Indian delegation.

### Terms of Reference of the WG

The Working Group was instructed by plenary to continue to develop the draft non-mandatory MASS Code, considering identified submissions under Agenda item 4 and submissions made at MSC/ISWG/MASS 2, and ensuring alignment with GBS guidelines (MSC.1/ Circ.1394/Rev.2). Parts 1, 2, and 3 of the Code were to be reviewed for consistency, with additional IMO guidance identified as necessary. The report of the MASS JWG on MASS was to be taken into account, and potential issues for sub-committees or international organizations were to be identified. The road map was to be updated, draft terms of reference for the MSC MASS Intersessional Working Group(ISWG 3) were to be developed, and relevant documents on the officer in charge of a navigational watch during MASS trials were to be considered.

### **Key Discussions and Outcomes**

### General

The Group reviewed MSC 108/J/5, which included further modifications to the draft MASS Code as in MSC 108/4, particularly with respect to Part 3, prepared by the Secretariat, WG Chair, and CG Chair. It was agreed to use this as the development basis. India made an important intervention (regarding splinter groups and HAZID tables) at the plenary providing comments on the CG report MSC 108/4, specifically paragraph 12.

### **Revised Roadmap**

The road map for developing a goal-based code for MASS was further revised, considering the agreed way forward. The Group agreed to invite MSC to approve the proposed timeline and work plan, particularly that the finalization and adoption of the non-mandatory MASS Code, planned for MSC 110, be followed by an experience-building phase. It was noted that achieving the 2026 adoption deadline for a mandatory Code would not be possible, and the earliest possible entry into force would now be 1 January 2032.

### **Re-establishment of CG and ISWG**

The Group considered the current schedule, including the dates for MSC 109 and the capacity of the Secretariat to support additional meetings. To progress the work intersessionally, the Group agreed to invite the MSC to re-establish the intersessional MASS CG. Additionally, the Group agreed to re-establish the MASS-ISWG.

### Recommendations

**1.** Continued Participation in Intersessional Correspondence Group

It is recommended that India continues to participate actively in the intersessional correspondence group. This group will work intersessionally, report verbally to MSC 109 and MSC/MASS-ISWG 3 and provide its final report to MSC 110. Active participation will ensure that India's interests and perspectives are considered in the ongoing development of the MASS Code.

### 2. Involvement in the Intersessional Working Group

It is also recommended that India participates in the MSC/MASS-ISWG, scheduled to meet from 9 to 13 September 2024. This involvement will be crucial for contributing to the discussions and ensuring that the specific needs and concerns of India are addressed in the formulation of the MASS Code.

### 3. Engagement with Relevant Sub-Committees

India should engage with relevant sub-committees after the adoption of the non-mandatory Code to ensure that the guidelines and standards are effectively implemented and that any emerging issues are promptly addressed.

### Development of a safety regulatory framework to support the reduction of GHG emissions from ships using new technologies and alternative fuels

### (Agenda Item 5)

Deliberations of this WG were attended by Mr. Rajiv Nayyer, IMEI, (remotely) as part of the Indian delegation.

There were detailed discussions on the agenda item. The following are the key points to be noted:

1. The Committee noted the views of the Group concerning requirements for ship-specific training

and agreed to inform the HTW Sub-Committee accordingly.

- MSC noted the need to clarify whether or not the IGF Code applies to ships using gas as fuel irrespective of flashpoint and take action, as appropriate.
- **3.** The Committee noted the views of the Group regarding the mechanism for the allocation of work to sub-committees for coordination of tasks under this new output and invited interested parties to submit proposals to MSC 109 containing elements that should be taken into consideration while assigning priority, if necessary, to the tasks to be allocated.
- 4. The Committee endorsed the view of the Group that when preparing emergency response plans, the port community should be informed about the challenges posed by the use of alternative fuels.
- **5.** The Committee re-established the Correspondence Group on Development of a safety regulatory framework to support the reduction of GHG emissions from ships using new technologies and alternative fuels and tasked it to submit it's report to MSC 110 (and making an oral report to MSC 109).
- 6. The Committee agreed to establish a GHG Safety Working Group at MSC 109.

### Recommendations

- India may continue to participate in the re-established Correspondence Group on Development of a safety regulatory framework to support the reduction of GHG emissions from ships using new technologies and alternative fuels.
- 2. India may consider participation in the GHG Safety WG at MSC 109.

### Revision of the Guidelines on Maritime Cyber Risk Management (MSC-FAL.1/Circ.3/Rev.2) and Identification of next steps to enhance Maritime Cyber Security

### (Agenda Item 6)

India was represented by Mr. Sunil Kumar (physically), IMEI and Mr. Loknath Tripathy (physically), INSA in this Drafting Group.

The Committee approved the draft revised Guidelines on maritime cyber risk management (MSC-FAL.1/Circ.3/ Rev.3) and agreed to forward them to the Facilitation Committee for its concurrent approval.

The revised Guidelines provide high-level recommendations to safeguard ships from cyberthreats and include among the others, the following amendments:

- functional/technical cybersecurity controls that represent minimum controls that should be implemented;
- identification that Computer Based Systems (CBS) onboard, to be protected, include information technologies (IT) and operational technologies (OT),

but OT should be segmented from IT and protected from internet facing systems;

- update of the list of potentially vulnerable systems, including ship-port interfaces; and ship to shore systems (e.g. remote-control systems/ MASS);
- designation of a person or entity accountable for planning, resourcing and execution of cybersecurity activities;
- an inventory of digital systems onboard should be established and maintained;
- implementation of security measures (such as firewall or antivirus) for ship digital systems that have access to the internet or interaction with third party or ashore networks;
- controls to protect systems from the use of unauthorized removable media should be established;
- annual basic cybersecurity training for all employees, OT-specific cybersecurity training for OT users, and cybersecurity familiarization to all crew members;
- measures to minimize the effect of detected cyber incidents to other ship systems should be implemented;
- reporting of cyber incidents to required parties within required timeframes as defined by the Administration; and
- request for equipment and systems to be designed and tested as per international standards (among referenced standards and best practice IACS UR E26 and UR E27 have been included).

### Measures to enhance Maritime Security

### (Agenda Item 7)

India made interventions during the discussions on MSC 108/7/1, MSC 108/7/2 & MSC 108/7/3 and apprised the Committee regarding the active role played by the Indian Navy. It was brought out that the Indian navy has actively responded to incidents and played a crucial role in saving crew members of vessels, such as the *MV Rubymar*, and continued to play a key strategic role in strengthening maritime security in the Red Sea, the Gulf of Aden and the Arabian Sea. The Information Fusion Centre-Indian Ocean Region (IFC-IOR) had played an important part in these efforts through information sharing and incident mitigation.

After detailed discussions in the Drafting Group, the Committee adopted the draft MSC resolution on the 'Security situation in the Red Sea and Gulf of Aden resulting from Houthi attacks on commercial ships and seafarers' (Res. MSC. 564(108)).

**Recommendations**: India may consider submitting a .INF paper to MSC 109 detailing the active role played by the Indian Navy as a net security provider in the region.

# Navigation, communications and search and rescue

### (Agenda Item 12)

MSC did not agree that the IMO needs to develop a formal recognition framework for new terrestrial GMDSS services, such as NAVDAT, concluding that NAVDAT should not replace NAXTEX and should not be made mandatory.

The Committee adopted resolution MSC.530(106)/ Rev.1 on *Performance Standards for Electronic Chart Display and Information Systems (ECDIS)*. The revised resolution is applicable for ECDIS equipment installed on or after **1 January 2029**.

The Committee approved MSC.1/Circ.1313/Rev.2 on *Joint IMO/IHO/WMO Manual on Maritime Safety Information* to be implemented from **1 January 2025**.

### **Carriage of Cargoes and Containers**

### (Agenda Item 14)

The Committee adopted vide resolution MSC.565(108) the Revised Interim Recommendations for Carriage of Liquefied Hydrogen in Bulk. Additionally, the Committee also agreed to include the output on "Revision of the Interim recommendations for carriage of liquefied hydrogen in bulk" in the provisional agenda for CCC 10 and to extend the target completion year to 2026.

The Committee approved the following circulars:

- MSC.1/Circ.1599/Rev.3 Revised Guidelines on the application of high manganese austenitic steel for cryogenic service
- MSC.1/Circ.1622/Rev.1 Revised Guidelines for the acceptance of alternative metallic materials for cryogenic service in ships carrying liquefied gases in bulk and ships using gases or other low-flashpoint fuels
- MSC.1/Circ.1679 Interim Guidelines for use of LPG Cargo as Fuel

The Committee also approved the draft amendments proposed in annex to MSC 108/14/1 regarding use of ammonia cargo as fuel with view to adoption at MSC 109 and entry into force on **1 January 2026**.

### Ammonia Cargo as fuel

The draft amendments to the IGC Code should be finalised at CCC 10, with a view to approval at MSC 109 (December 2024) and subsequent adoption at MSC 110, with an expected entry into force of **1 January 2028**. In this regard, MSC 108 considered proposals to move forward the timeline for entry into force of the draft amendment to paragraph 16.9.2 of the IGC Code through approval of the draft amendment at this session and adoption at MSC 109; for earlier entry into force of the amendment, i.e. **1 July 2026**. The proposals aim to address the current ban in the IGC Code on the use of ammonia cargo as fuel. MSC 108 approved draft amendments to the IGC Code, with a view to adoption at MSC 109, and entry into force on **1 July 2026**, together with an MSC circular on the early implementation of the draft amendments to be issued at MSC 109.

### Ship Design & Construction

### (Agenda Item 15)

The Committee approved the following circulars:

- **1.** MSC.1/Circ.1212/Rev.2 Revised guidelines on alternative design and arrangements for SOLAS chapters II-1 and III
- MSC.1/Circ.1572/Rev.2 Unified interpretations of SOLAS chapters II-1 and XII, of the Technical provisions for means of access for inspections (resolution MSC.158(78)) and of the Performance standards for water level detectors on ships subject to SOLAS regulations II-1/25 and 25 1, and XII/12 (resolution MSC.188(79)/Rev.2)
- MSC.1/Circ.1509/Rev.1 Unified interpretations of the Code on Noise Levels on Board Ships (resolution MSC.337(91))
- **3.** MSC.1/Circ.1511/Rev.1 on Unified interpretations of SOLAS regulations II-2/9 and 13
- **4.** MSC.1/Circ.1680 Unified interpretations of SOLAS regulation XV/5.1 and paragraph 3.5 of part 1 of the International Code of Safety for Ships Carrying Industrial Personnel (IP Code) on the harmonization of the Industrial Personnel Safety Certificate with SOLAS safety certificates.

### Work Programme

### (Agenda Item 18)

Based on discussions at MSC 107, a new WG was constituted at MSC 108 to conduct a holistic review of the workload of the Committee and to consider among other things:

- (a) the future process for considering and approving new outputs;
- (b) prioritization of outputs;
- (c) possible mechanisms to manage the workload of the sub-committees; and
- (d) any other related matters to ensure the sustainability of the workload of Committee and sub-committees;

Based on discussions at the WG, the following are the key points:

 The Committee intends to establish a new standing body (i.e. Group of Chairs) to undertake a preliminary assessment of proposals for new outputs with a view to establishing an effective mechanism to keep the workload within manageable levels. The decision on the acceptance or rejection of proposals for new outputs was the prerogative of the Committee

thus, the recommended new advisory standing body should only undertake an assessment of proposals for new outputs in a transparent manner, including timeframes and work involved, ensuring compliance with relevant procedures, taking into account the Committees' method of work, with a view to facilitating considerations and final decision by the Committee on those proposals.

- MSC 108 agreed to invite sub-committees to undertake an analysis of the continuous and annual outputs under their purview and make relevant suggestions to the Committee for their efficient consideration, minimizing additional workload.
- **3.** The Committee invited interested Member States and international organizations to submit relevant proposals on measures to address the increased workload of the Committee and its subsidiary bodies, including draft amendments to MSC-MEPC.1/Circ.5/ Rev.5, taking into account the progress made at this session, for consideration at MSC 109.

The **moratorium** applied on submissions of proposals for new outputs will continue till MSC 109 in order to focus on the consideration of the workload of the Committee and sub-committees.

### **Any Other Business**

(Agenda Item 19) Unified Interpretations The Committee agreed on the following policy to be followed by all its subsidiary bodies and preferably by all IMO bodies regarding approval of Unified Interpretations (UI) to Conventions and Mandatory Instruments:

- The following safeguards should always be followed when considering a UI:
  - ✓ UIs are not meant to amend mandatory requirements in Conventions and associated instruments
  - Uls should not go beyond the interpretation of requirements
- ✓ UIs should not contradict the text of requirements
- The principle of consensus is to be applied to the decision-making process of UIs, and not unanimity. If concerns are raised, sub-committees should discuss them and attempt to address them and make a decision. The report of the sub-committees should record any concerns when raised.
- Due regard should be given to the following when considering UIs:
  - Effective date of UIs, taking into account the readiness of the industry to implement them
  - Potential impact of not approving a UI (e.g. different interpretations by Member States)

### THE INSTITUTE OF MARINE ENGINEERS (INDIA) **KOCHI BRANCH** In pursuit of excellence in Maritime Education & Training, we have been conducting the CoC preparatory courses for the past many years. And presently, also conducting the Refresher and Updating Training course (RUT) for engineers too. We are in need of dedicated and motivated members with Chief Engineers experience, who can take over the responsibilities as Principal/ Course-in-charge. We are also looking for Full-time/ Visiting Faculty as well. Principal, Course-in-charge Full-time/ Visiting Faculty **Qualification & Experience Qualification & Experience** Certificate of Competency as MEO Class I (FG) Certificate of Competency as MEO Class I (FG) / TOTA / VICT course Certificate . Master (FG) **AECS certificate for Course-in-charge** TOTA / VICT course Certificate . Minimum 3 years teaching experience in Some teaching experience in Competency courses . Competency courses (MEO Preparatory courses) (MEO Preparatory courses) Qualified and eligible members may kindly contact the Institute at Kochi, for more details. Email id: kochi@imare.in , Whatsapp number: 7025159111 The Institute of Marine Engineers (India), Kochi Branch Kamalam Towers, Vyttila, Kochi, Kerala-682019



### Industry News

# Successful Conclusion of AGMS 2024 and AGMA 2024

The AMET Global Maritime Summit 2024 (AGMS 2024) and AMET Global Maritime Awards 2024 (AGMA 2024), organised by the Dr. J Ramachandran Maritime Foundation and AMET University successfully concluded on 2<sup>nd</sup> July 2024 at the Anna Centenary Library Auditorium in Kotturpuram, Chennai, India. The event brought together over 1250 participants and delegates from the maritime industry, academia, and related sectors all around the Globe.

### Summit Highlights:

AGMS 2024 focused on the theme "Charting the Future of Maritime Excellence," featuring insightful panel discussions, technical sessions, and keynote addresses from industry leaders. The summit served as a platform for discussing the latest advancements, challenges, and opportunities in the maritime sector.

### **Keynote Speakers and Distinguished Guests:**

**Col. Dr. G. Thiruvasagam,** Pro-Chancellor (Academics), AMET University and Member-Secretary, Dr J Ramachandran Maritime Foundation delivered the welcome address emphasising the conference's dual role in addressing shipping industry needs and aligning with UN Sustainable Development Goals (SDGs).

The event was presided over by Dr. J Ramachandran, Founder-Chancellor of AMET University. In his presidential address, Dr. Ramachandran, a prominent figure in maritime education, highlighted India's advancements in the shipping and logistics industry, emphasising the significant role of AMET University. Dr. Ramachandran addressed the importance of continuous industryacademia collaboration, innovation, and strategic initiatives to propel maritime education and the industry forward. He further emphasised on sustainability, collaboration, and innovation to address global challenges and promote environmental stewardship towards sustainable shipping. Reflecting on AMET's founding in 1993, Dr. Ramachandran recounted the challenges overcome to establish it as India's pioneering maritime institution. The establishment of the AMET Knowledge Park at Thenpattinam, envisioned as a holistic maritime complex, was highlighted, along with the unique Centre of Excellence that is offering assured employment to students. At this juncture Dr. Ramachandran elaborated the 27 years long association with Global shipping giant AP Moller Maersk and its every accomplishments to make AMET a global leader in Maritime Education.

Shri. Shyam Jagannathan, IAS, Director General of Shipping and Additional Secretary, Ministry of Ports, Shipping and Waterways, Govt. of India, delivered the inaugural address, highlighting the importance of innovation and resilience in maritime operations. Shri.

Jagannathan, outlined India's significant advancements in the shipping and logistics industry over the past decade. He highlighted the country's growing global competitiveness and shared a vision for the next few decades, emphasising transformative reforms by the Indian government to strengthen the sector. He projected a demand for 21 lakh officers and ratings by 2026, noting a global shortage of maritime workforce in countries like Korea, Singapore, Canada, Australia, and Denmark. India's share in the global seafarer market has risen from 6% in 2021 to 14% in 2023, with aspirations to reach 20% by 2030. Strategies to achieve this goal include enhancing partnerships with industries, digitalising certification programmes, increasing women's participation, and leveraging advanced technology for training. Shri. Jagannathan also discussed India's initiatives on decarbonising in shipping, including the development of the hydrogen fuel cell ferry. He stressed the importance of port capacity augmentation and shared insights on wellness for young cadets. Addressing gender equality, he highlighted the Sagar Mey Samman initiative, promoting a gender-inclusive maritime sector with a zero-tolerance approach to barriers faced by women seafarers. He proposed an overall action plan that includes policy intervention, strategic planning, training engagements, gender-neutral infrastructure, social media campaigns about maritime safety, and ongoing analysis and course correction to ensure a diverse and equitable maritime future.

Dr. Rajesh Ramachandran, Pro-Chancellor of AMET University and Dr. J Ramachandran Maritime Foundation has delivered a special address in which he addressed several critical aspects on the challenges facing the shipping industry, emphasising the need to navigate these challenges while charting a course towards maritime excellence. Emphasising the importance of knowledge sharing and innovation, Dr. Rajesh Ramachandran, underscored their transformative power in shaping the industry's future. Digitisation emerged as a pivotal theme, essential for enhancing operational efficiencies and sustainability. Dr. Rajesh Ramachandran, positioned the AGMS (Annual Global Maritime Summit) as a significant platform uniting policymakers, industry leaders, seafarers, students, and stakeholders to foster collaboration and drive meaningful advancements in the maritime sector.

**Prof. Adam Weintrit,** Chair of the International Association of Maritime Universities (IAMU) and Rector of Gdynia Maritime Academy, highlighted India's robust growth in the maritime industry during his Guest of Honor Address. Emphasising the importance of global summits like this one, he underscored their role in bringing together diverse stakeholders to exchange ideas crucial for industry advancement. Prof. Weintrit cautioned that



# THE INSTITUTE OF MARINE ENGINEERS (INDIA) MUMBAI BRANCH

2

VIKING MARITIME TRAINING INSITUTE

# VIKING MARITIME TRAINING INSTITUTE NAVI MUMBAI

# **INSTRUMENTATION & AUTOMATION COURSE**

Online and Offline for Marine 3rd/Eng, 2nd/Eng, Ch/Eng & ETO.

# Topics:-

- Intrumentation
- Process Control Engineering
- PLC / HMI
- Encoders, Proximity Sensors & Retentive Timers
- VFD
- Machine Communication
- PLC Based Boiler Firing Sequence Simulator
- Level and Flow Simulator

Offline Course : Timing : 9 am to 5 pm daily (5 Days) Venue : Offline courses at VMTI, CBD Belapur, Navi Mumbai

### **Online Course:**

Timing : 9 am to 5 pm daily (5 Days) Venue : Web Platform / Zoom

Contact Person for any queries:-Ms. Anita Patill: +91-7350002757 , +91-9225516456 Ms. Neetha Nair: 91-9930977647 Email :training\_mumbai@imare.in / mumbai@imare.in

# Faculty Name : Mr. Kishore Khopkar , B.E.(Elect.)

Ex - Sr. Faculty for Marine Automation, Control Engineering and Electronics for Six Years at A.E.M.A., Karjat, and previous

30 Years of Sea and as Marine Superintendent <mark>Experience.</mark>

Registration Link : https://linktr.ee/imei.m



while technological advancements and new policies are crucial, their effectiveness hinges on their suitability for end-users, particularly seafarers. He advocated for inclusive discussions involving serving seafarers to ensure these innovations are practical and beneficial onboard. Regarding the next generation of seafarers, he expressed optimism, stressing their need for regular interaction with industry veterans to effectively steer the future of the shipping industry.

**Prof. Dr. V. Rajendran,** Vice Chancellor of AMET University, emphasised the robustness of the global and national maritime industries, highlighting their significant strength in his felicitation address. **Capt. Srinivas Gopal** highlighted the theme of the AGMS 2024 and AGMA 2024 and mentioned that these events aims to inspire maritime innovation and sustainability, recognising pioneers through the AMET Global Maritime Awards 2024. He briefly introduced themes of technical sessions such as technological innovation, education, and sustainability, aiming to steer our industry towards a prosperous and resilient future.

Shri. Jagannathan has released the Proceedings and the first copy was received by Prof. Weintrit, Chair of the International Association of Maritime Universities (IAMU). **Dr. Sangeetha Albin,** Additional Registrar and Convener AGMS-2024, AMET University presented vote of thanks.

### **Panel Discussions and Technical Sessions:**

The AMET Global Maritime Summit 2024 featured two significant panel discussions and an engaging Fireside Chat.

Panel Discussion 1: Bridging the Gap between STCW Amendments for Resilient Seafaring- moderated by Capt. Arun Mehta, Managing Director of OSM Thome, Mumbai; Panelists included Ms. Sonali Banerjee, Capt. Ashutosh Apandkar, Capt. Ajay Gangadharan, and Capt. Man Mohan Saggi.

Panel Discussion 2: Climate Change and Futuristic Technologies for Maritime Resilience, moderated by Capt. Karan Kochhar, Managing Director of Maersk; Panelists Mr. Sunil Kumar, Mr. Koki Pannerselvam, Mr. Nipun Chatrath and Capt. K. Karthik.

During the panel discussion Mr. Sunil Kumar highlighted the pivotal role that international organizations and shipping administrations play in promoting climate resilience in maritime operations.

The Fireside Chat: Speakers - Capt. Arvind Shankar of Maersk Fleet Management and Technology India, and Capt. Sundeep Inkurthy, Founder & CEO of SMARTSEAS. Al, Singapore

Concurrent technical sessions covered themes such as Maritime Education and Training, Maritime Technology Innovations, Maritime Management Strategies, and Maritime Sustainability, with over 70 research and lead articles presented by industry professionals and academicians.

### Valedictory Ceremony and AGMA Awards 2024:

His Excellency Mr. Haymandoyal Dillum, CSK, High Commissioner, High Commission of the Republic of Mauritius, New Delhi delivered the Chief Guest Address at the Valedictory Ceremony and AGMA Awards 2024, praising AMET University as a unique institution dedicated solely to maritime education, ensuring its students' guaranteed placements. Highlighting the critical role of maritime trade in the economy, he underscored numerous challenges including maritime safety, security, and environmental issues such as marine pollution and plastic waste. His Excellency Mr. Dillum, emphasised opportunities in e-learning, professional development, and capacity building, calling for updated curricula to align with current trends. He extended an invitation for AMET to establish a maritime institution in Mauritius to address Africa's maritime education needs effectively.

The AMET Global Maritime Summit 2024 concluded with the prestigious AMET Global Maritime Excellence Awards (AGMA) 2024, honoring outstanding individuals and institutions in the maritime industry. Mr. Dillum presented the awards, with Prof. Weintrit, Chair and Dr. J Ramachandran.

AGMA Maritime Leadership Award 2024 – Individual Category: Ms. Nynne Norman Scheuer, Senior Director, Head of Marine People & Culture, A.P. Moller-Maersk, Denmark, was honored for her exceptional leadership in promoting sustainable shipping practices and fostering a culture of diversity and inclusion.

AGMA Maritime Leadership Award 2024 – Individual Category: VADM Eduardo Ma R Santos, AFP (RET), President of the Maritime Academy of Asia and the Pacific (MAAP), Philippines, received accolades for his visionary leadership in maritime education and his pivotal role in advancing naval training standards globally.

AGMA Maritime Excellence Award 2024 – Institution Category: The Maritime Academy of Asia and the Pacific (MAAP), Philippines, was recognised for its commitment to excellence in maritime education, training, and research, setting benchmarks in academic rigor and industry relevance.

AGMA Maritime Innovation Award 2024 – Innovation Category: Mr. Suraj Singh, Founder CEO of Seaker Systems Pvt. Ltd., Maharashtra, India, was honored for his innovative contributions to digitalisation and automation in the shipping industry, driving advancements in operational efficiency and safety.

### **Commendation and Closing Remarks:**

In his commendation address, Dr. J Ramachandran has emphasised the importance of fostering maritime excellence and innovation to address future challenges in the industry. He acknowledged the challenges of selecting awardees and commended the jury, led by Prof. Weintrit, for their exemplary work. He proudly highlighted the nomination of Ms. Nynne Norman Scheuer and congratulated her. The strong partnership between Maersk and AMET was emphasised, particularly their collaborative efforts in establishing the Maersk Centre of Excellence and introducing the dual cadets' program B Tech Marine Technology. He also congratulated Mr. VADM Eduardo Ma R. Santos, Mr. Suraj Singh and the Maritime Academy of Asia and the Pacific (MAAP), for their respective awards, celebrating their outstanding contributions to maritime education, leadership, and innovation. The event concluded with a vote of thanks by **Dr. Deepa Rajesh**, Vice President (Academics) and Convener AGMA 2024. The event was made possible by the dedicated efforts of the organising committee, distinguished guests, panelists, speakers, and participants. Special gratitude was extended to the Jury Chairman, Prof. Weintrit, and the Jury Members for their rigorous selection process in recognising excellence in the maritime sector.

# Glimpses of the Event















### Book Release

# 'Beginning With Diesel Engines'

**O**n 27 June 2024, **Shri. Dipak Kumar Banerjee**, a retired Mechanical Engineer, trained at MAN Germany, with a lifelong association with diesel engines, on shore, offshore and on ship, in their installation, maintenance, management and supervision, visited our Kolkata Branch office, and presented a copy of his recently published book, titled '*Beginning With Diesel Engines*'.

In a small ceremony, the book was received by **Shri. Abhijit Banerjee**, Hon. Secretary, IMEI Kolkata Branch, in the presence of **Shri. Gautam Sen**, Chairman, IMEI Kolkata Branch.

The Branch thanked the author for his gesture, and expressed the hope that, in future, he would consent to be involved in Branch events to throw more light on the subject of diesel engines.





# MASSA Maritime Academy, Chennai

Unit of Maritime Training and Research Foundation) GRADE A1 (OUTSTANDING) E-mail - <u>mmachennai@maasa.in.net</u> Website - <u>https://massa.academy.chennai.com/</u>



### **COMPETENCY COURSES**

- MEO Class I Preparatory Course
- MEO Class II Preparatory Course
- Second Mates (FG) Function Course
- Chief Mate (FG) Phase I Course
- Chief Mate (FG) Phase II Course
- Advanced Shipboard Management

### SIMULATOR COURSES

- Diesel Engine Combustion Gas Monitor Simulator,
- Engine Room Simulator (Management level)
- Engine Room Simulator (Operations) level
- High Voltage Course (Management level)
- High Voltage Course (Operations level)
- Radar & ARPA Courses
- RANSCO Courses
- Ship Manoeuvring Simulator and Bridge Teamwork
- Liquid Cargo Handling Simulator Course (Oil)

### https://massa-academy-chennai.com/

### MODULAR COURSES

- Medical First Aid
- Medical Care
- MEO Revalidation & Upgradation
- Assessment, Examination and Certification of Seafarers
- Train the Simulator Trainer
- Ship Security Officer Course



### THE INSTITUTE OF MARINE ENGINEERS (INDIA)

IMEI HOUSE, Plot No.94, Sector-19, Nerul, Navi Mumbai – 400 706 Email: <u>training@imare.in</u> Website: <u>https://imare.in/</u> Phone no: +91 22 – 27711663 / 27701664, Mobile No: +91 8454847896

**RANKED GRADE A1 (OUTSTANDING)** 

D. G. Shipping Approved Course

AECS Course Course Id - 1062 11 Days

Assessment, Examination and Certification of Seafarers meets the guidelines provided in the IMO Model Course 3.12

Entry Criteria: Master (FG) / MEO Class I (FG) / GMDSS (GOC) / ETO COC Holder and TOTA / VICT Holder

This Course ensures that the Core publications namely, the STCW Convention and the Code and the Quality Management System is familiarized and well understood by the trainee.

This Course also covers the techniques of assessment and developing written tests and conduct of oral and practical assessments

**Assessment, Examination and Certification of Seafarers** 

Commencing Soon Time: 9am - 5pm Course Fee: Rs.15500/- (per participant inclusive of Taxes)

VENUE: IMEI HOUSE, Plot No.94, Sector-19, Nerul, Navi Mumbai- 400706

For Registration:- CLICK HERE or click on - https://imeimum.marineims.com/course/register

FOR MORE INFORMATION, please email to training@imare.in or contact on Mob: 8454847896 / Tel:- 022 2770 1664 & 27711663

Visit our Website: https://imare.in/



# Day of the Seafarer: Navigating the Future Safety First



**N** ational Maritime Day Celebrations (Central) Committee [NMDC], under the aegis of the Directorate General of Shipping, Government of India, celebrated the 'Day of the Seafarer' on Tuesday, 25th June 2024, at Swatantra Veer Sawarkar Sabhagruha in Mumbai. 'Navigating The Future: Safety First,' was the theme adopted by the International Maritime Organization (IMO) for this year's celebration with 'Safety Tips at Sea' as the campaign hashtag.

The Union Cabinet Minister of Ports, Shipping and Waterways Shri Sarbananda Sonowal, in his message, appreciated and recognized the great contributions of Indian seafarers for maintaining supply chain. The Secretary, Ministry of Ports, Shipping and Waterways, Shri T K Ramachandra explained the details of the work done by the Government of India for the benefits of the seafarers and informed the importance of safety and security in the current scenario in his video message.

The keynote address was delivered by **Shri Shyam Jagannathan**, Director General of Shipping and Chairman of NMDC (Central) Committee and while congratulating the seafarers he mentioned that India wants to increase the number of seafarers from 12% to more than 20% of global supply of seafarers. He explained the various new initiatives started like 'Sagar Mey Samman' for bringing the diversity, equality and inclusion for providing the employment to women seafarers both onshore & offshore and 'Sagar Mey Yog' for bringing the sense of mental and physical wellbeing. He stressed upon the 'Suraksha Hamesha-Sarvapratham', development of the state-of-the-art LMS for quality education and maritime training, end to end computarisation and digitisation of

**🛛 Mélange** 

















# **()**Mélange

the examination and further vigorously addressing the grievances and crisis management.

**Capt. Karen Davis,** Managing Director, Oil Companies International Marine Forum (OCIMF), a global association of oil and gas companies that promotes safe and environmentally responsible marine operations, was the Guest of Honour for the function. In her address, she congratulated seafarers



and all the stakeholders of maritime fraternity and provided safety tips and guidance regarding security related things by referring to her life experiences filled with emotions and humor. She mentioned that a lot of opportunities have emerged for men and women seafarers in the offshore sectors too. She told the seafarers to be brave and learn to speak boldly about any issue that they are facing. She praised the efforts made by the DG Shipping, Ministry of Ports, Shipping and Waterways, Indian Navy and other organisations for maintaining the marine security in recent years.

### Mr. Arsenio Dominguez,

Secretary-General, International Maritime Organisation (IMO) in his message asserted that the Seafarers are performing their job with highest level of safety and mentioned they are always ready to tackle the emergency situations.

A souvenir covering details of the maritime industry was also released during the function to commemorate the 61st year of NMDC. The

presentations were given by the officers from DG Shipping on various subjects like Ensuring Security for Seafarers, Rights of Seafarers, Safety Connect & Casualty Analysis, and Strategy to Increase the Percentage of Seafarers from 12% to 20%.

While showing their hidden talent, the cadets performed skit plays depicting the importance of safety in shipping. NMDC felicitated around 20 meritorious candidates who have excelled in their academic performance.

Courtesy: PIB

# A book of absolute LDGIC upends our concept of God and His relationship with us.

"It is you alone who has to become aware of the Ultimate Truth, to hear about it, to reflect on it ...., and implement it in your life!"

POWER YOUR WAY TO A LIFE WITHOUT MISERIES AND PAINS, ANXIETIES AND STRESSES...

"The God Concept" is NOT a book on any religion. It is as secular as, say, the Theory of Gravity, or our old beliefs of a flat earth! This book is an English translation of a Malayalam tutorial on Sankaracharya's Manisha Panchakam by Swami Aseshananda of Chinmaya Mission, Palakkad

GAIN A DEEP UNDERSTANDING OF YOUR OWN SELF ...., AND THE UNIVERSE AROUND YOU.

Let LOGIC Lead your way to Faith ...!

Available in Amazon/Flipkart/Kindle



YOUR GUIDE TO THE

**ULTIMATE TRUTH!** 



# ANGLO EASTERN **MARITIME TRAINING CENTRE**

AEMTC MUMBAL: 401, Fourth Floor, Leela Business Park, Marol, Andheri-Kurla Road, Andheri (East), Mumbai-400 059. T. +91 22 6720 5600 / 611 / 612 | A.O.H. +91 8657408962 / +91 9820917656 aetr.bom@angloeastern.com Capt. K. N. Deboo, Mr. Francis Akkara, Mr. Ivor Wilson AEMTC DELHI : A-43, Ground Floor, Mohan Co-Operative Industrial Estate, Mathura Road, Delhi 110044. T. +91 11 6817 0800, 0801 aetr.del@angloeastern.com

Capt. Prashant Gour, Ms. Sukhjeet Kaur



- Should be interested in modern teaching methodologies. Candidate must have a passion for learning continuously and a desire to be in the
- teaching profession. Proficient in use of computers and savvy with use of various software.

For application along with your CV and/or queries with regards to the vacancy, kindly send it to AE-HR at talentsourcing@angloeastern.com / aemt.bom@angloeastern.com



DNV





### Sailing Memoirs

# What Happens When A Prop Meets a Buoy



### **e**auty is in the eyes of the beholder.

The 'Nosac Taishan' was a brand new ship built in Sumitomo Yard, Oppama, Japan. As Owner's Representative, I was in the Yard 3.5 months before she was delivered and, therefore had to familiarise myself with every aspect of her, from stem to stern.

I was its first Chief Engineer when we sailed out.

To many, she was big box that went sailing, with a hideous stern.

To me, she was a beauty, her lines visible to me, her stern and stern ramp lending an elegance to her lines.

On her maiden voyage, she breezed through several US ports, to the awe of all and sailed across the Atlantic, to load, to discharge.

Le Havre, Zeebrugge, Antwerp, Rotterdam, Bremerhaven and Gothenburg were some of the ports we had to call during that European leg.

Europe was a madhouse. Short runs between ports, long pilotages up or down river, short stays of just a few hours, docking and undocking at any time of day and night with reduced crew meant sleep deprived staff. The vessel schedules were normally to sail after 3 or 4 hours, after discharging 200 cars and loading 200 cars.

As Chief Engineer, I would be called at '1 hour notice' and would join the Duty Engineer and the Duty Motorman in the Engine Room within 15 minutes. The maximum hours of sleep I would have gotten was 2 to 3 hours, before being woken up. The Electrical Officer and I would be the maximum affected as we both have to be in the Control Room. The Second and Third Engineers would relieve one another.

The Main Engine would be on 'Bridge Control', but I would be keenly watching to see if all the sequences were taking place as programmed. I would imagine myself as something akin to the Director of Operations at NASA during a launch.

One of my core duties is to ensure that the Engine is not stressed at any time. The most prominent of these stresses are Heat Stresses caused by a sudden decrease or increase in operating temperatures. Modern metallurgy has improved to a point where materials operating at high temperatures are resilient to a certain degree. But if subjected to frequent steep temperature gradients, they

are likely to crack, much like a human mind under strong, frequent stresses.

Without going into too much detail, suffice it to say that speed reduction, in small steps, from full speed to manoeuvring speed is one of the essential operations to minimise heat stresses. It was important for me to remotely watch this reduction of speed by the Bridge operator and, if necessary, correct the rate of reduction by taking over controls from the Bridge to Engine Control Room.

This ship was captained by a top class Captain, who understood well the nuances of operating the Main Engine. But I have sailed with mavericks who used to think of the engine as a horse and, when going at full speed, pull hard on the reins to stop the horse. Maybe they were under the impression that, as the Main Engine power is expressed in "horse power", it is actually a horse.

Those were the days when I used to walk straight up to the Bridge and, after ascertaining that there was no emergency, would quietly tell the Captain that if the same thing happens again, I will have to take controls back to the Control Room. The explanation from them would be that the previous Chief Engineer had no problems with such speed reductions. (I would have just joined the ship). Then I would take the opportunity to explain to him in detail why it was harmful to the Main Engine.

We were entering Antwerp around midnight+. To get to the berth, we have to go through one of the two locks and berth close to the locks, upriver. I am not certain if we were going to discharge or load or both.

We were well outside the locks. Captain A was on the Bridge, along with other watchkeepers. I was in the Engine Control Room, along with a duty Engineer and a Greaser.

The Bow Thruster was running and in use. All 3 generators were running, which is normal when using the Bow Thruster. I was watching all the parameters.

We were on Bridge Control. A 'Full Astern' movement was given. Less than a minute into the 'Astern' movement, I heard the 'humming' sound of the Engine change to one of strain. I looked at the Load Indicator and realised that the Engine Load had gone up by more than 70%. The engine was straining to give the required rpm and the Fuel Index was increasing more and more. A 'Stop' signal stopped the engine.

The changes in parameters had taken place in the space of 30 seconds.

My first thought was that we had run aground. I called the Bridge.

I was told that we were in the locks, which meant a 20 minute period of non-activity. I went up to the Bridge and spoke to Captain Abraham about the rapid and sudden change in parameters at exactly a particular minute and second. Since we had not run aground, I stated that I suspect propeller damage.

He said that, due to a wrong 'Astern' movement from the Pilot, the vessel may have struck a navigational buoy, as he had seen it drifting away.

Then the Agent, who was at the pier waiting for the ship to berth, was contacted for an immediate inspection of the propeller by an authorised diver.

In the meantime, I quickly called all Engine Room personnel and formulated a check list of all important inspections to be made of the Main Engine, in the short time available alongside.

The inspections included

If turning gear motor amps had increased

Thrust Block inspection

Bearing clearances

Any longitudinal shift of shaft

Chain inspection

If possible, crank web deflections

Air Coolers Check

The sound from the turbochargers had already been checked, found no undue vibrations, oil levels of the BBC Turbochargers' sumps all good, LO pumps good.

I had a 'Check Main Engine Fuel Pumps' Timing' on my list, but did not have the time to check it.

We had less than three hours to carry out umpteen number of checks.

In the meantime, the diver had come up and he reported that all was fine with the propeller. I asked him how many blades he had checked. He said he had checked four blades. I took him down to the Engine Control Room and asked him again if he had checked properly and was he sure there was no damage. His reply made me lose my temper. He had said, with a very racist sneer, " Chief, if you had wanted me to give a 'damaged propeller' report, you should have told me before I went down". I was furious. I then showed him the propeller drawing that this was a 5 bladed propeller. He had already typed out his report but he had not mentioned the number of blades. He quickly changed his previous verbal statement that he had checked 4 blades and corrected it to 5.

I refused to sign the report and told him to get out of the ship. Apparently, he went to the Agent, who signed the report and handed it over to the Captain. The report, without my signature, had no value.

By then cargo had been completed, we picked up the ramp and went out through the locks.

As we went to 'Slow Ahead', I noticed that the Load Indicator showed 30% more than normal. On reaching 'Half Ahead', the Load was 60% more than normal. 'Full Ahead' showed about 80% increase in load, along with a 'thwack, thwack' coming from the stern tube and heavy vibrations of the engine and hull, with the turbochargers starting to surge..

We reduced to slightly less than 'Half Ahead', so that the noise reduced and the vibrations were tolerably less. We changed Engine Controls to Control Room and tried to increase speed, with the same result. We even changed to Emergency Local controls - where the pneumatics and hydraulics were cut out and controls reverted to pre-automated days (like I had on the "Chennai" ships) and tried, all to no avail.

If we were to keep the schedule, we would not be able to sustain running at this low an rpm for long.

I drafted a message to be sent to the Hong Kong Office. The Superintendent was a different from the one I had a verbal fight with. We called them on the 'Inmarsat' after a few minutes. They said they were assembling a team at the conference table and would call back.

### What did Happen on the Bridge?

While waiting for the Office to call back, Captain A gave me a step-by-step account of the incident when the buoy was found drifting away.

He and the Pilot were on the Bridge Wing, with the vessel being aligned for entry into the locks. Because of the span or beam from Bridge to Bridge wing being large, the Captain always used the handheld radio to communicate with the Duty Officer, to pass on the Pilot's instructions, either for Engine Telegraph orders or Helm orders, the Duty Officer at the Engine telegraph and the duty AB at the wheel.

On this ship, like most Car Carriers, the Bridge was right forward, so you had to go out on the wings to see astern. Unlike on other ships having the Bridge near the stern and above the Engine Room, one cannot hear or feel an engine start, unless one is watching the rpm indicator closely.

The Pilot wanted a 'Full Astern' movement.

Being a 'Right Handed' ship, with an astern movement, the bow tends to swing to starboard and the stern to port. (A link to a brief but interesting video is below).

https://youtu.be/y7-tUlxr\_no



Arrangements Astern on the "Nosac Taishan' with the Stern Ramp Raised. Note the Position of the Bridge Forward

Seeing a buoy very close to the ship on the port quarter, the Captain refused to transmit the order and told the Pilot that the request for "Full Astern" will be given once the vessel clears the buoy. The Pilot, probably with racial prejudice, started screaming at the Captain, shouting "Full Astern" "Full Astern", whereas the Captain was calmly telling him "There is no cause for alarm. You will get the astern movement after we clear the buoy".

The Pilot shouted even louder "Full Astern".

It will be pertinent to note that there were two tugs tied to the vessel to align her to the locks.

The Duty Officer heard the Pilot screaming "Full Astern" and, thinking it was legitimate, gave the "Full Astern" movement.

About 30 or 40 seconds later, feeling a bit of vibration - an 'astern' movement is always accompanied by vibrations - the Captain saw the vessel starting to swing to starboard and, looking up at the rpm indicator on the Bridge Wing, realised the Main Engine was running on 'Astern', called for it to be stopped.

Looking astern, he saw the buoy drifting away.

The rotating propeller had cut the anchor chain of the buoy, damaging itself.



Arrangements Astern on the "Nosac Taishan, with the Stern Ramp Lowered"



Anchoring a Buoy



A View of the Buoy from Below

All propellers are balanced. This ship had a highly skewed 5 bladed, lighter than normal, high precision balanced propeller. The slightest damage to it will cause vibrations and cause engine imbalance.

### Trying to Convince the Office Pool that our Propeller is Damaged

The call from Hong Kong came through. We were still going down river, with the Pilot on board. The Pilot was an experienced ex-seafarer and he co-operated with us to the utmost and had a very avid interest in what was going on and the damage sustained.

Both sides, Hong Kong and the ship had their speakers on. They first spoke to the Captain, who handed the phone over to me.

There were six people at their conference table. They immediately started bombarding me with different questions covering so many angles that I started getting confused, trying to jump from one answer to the next, without any coherence. After about 2 minutes of struggling to answer their questions coherently, I told them all "Before you ask more questions, let me give you the sequence of events, why I suspect the propeller is damaged, why I am sure everything with the engine is fine and what checks I had made on the Engine to ensure that there is nothing wrong with the Main Engine. Would you all be willing to listen without disturbing me? I will answer all questions at the end." There was quiet for nearly a minute at the other end and then a quiet voice said "Go ahead Bada Saab".

I had my notes-in-brief ready. I gave them an exact run down on the sequence of events, before and after the change in parameters and what the parameters were that changed and what they were under normal circumstances. I then went on to tell them what all had been checked on the Main Engine and what were the findings.

I continued with why I felt that the Diver's Report was falsified, with the Agent and the Diver having colluded, so that the vessel is quickly despatched out of the Antwerp Agent's jurisdiction. I finished with why I was certain that there was damage to the propeller. I think I must have spoken for 12 or more minutes.

There was silence at the other end for a couple of minutes. When the silence extended, I said "Hullo, is anyone there, or have I been taking into the ether?" There was some laughter from the other end and somebody said "No, no, we are all here and digesting what you had reported. Please wait". Apparently they were conferring - after all it was a Conference Room - with the phone covered.

Another two minutes or so, they came back and one of them said "Ranga, we do not have any queries on your checks. But you are asking us to make major and costly decisions based on your instinctive observations. How can we make sure?"

I had already prepared an answer to that question. "We definitely will not be able to go faster than what we are doing now, which is just below Half Ahead rpm. It is now 0530am here. We are on pilotage down river. Let us find a convenient place and anchor. Let us get Class, P&I/H&M and another good, authorised, diving company - all together - and let them inspect. After that we can make a decision".

That seemed the sensible course of action to all.

They then asked Captain Abraham to anchor and await Class Surveyor, P&I Surveyor and Diver.

The Pilot, who had been listening in with interest, was already at the chart table and suggested a good area to anchor.

We anchored about half an hour later.

Whether it was the same day or the next, I am unable to recall. All 3 parties turned up around the same time. I took them down to the Engine Control Room and showed them all relevant drawings, mostly restricted to the rudder, propeller and stern frame.

In design, the stern of Car Carriers, RO-Ros and Super Carriers are quite different from a conventional ship, because of the presence of a Stern Ramp.

What is the effect of a skewed propeller over a conventional one?

After years of experimentation, analysis and sea trials, it was observed that aptly skewing a ship propeller **nullifies or considerably minimises the extent of unsteady hydrodynamic loading in this flow field**. This indirectly has positive effects in reducing resistance due to viscous 'drag' effects.

What is a highly skewed propeller?

A marine propeller whose blades are in the form of scimitars, typically with the tip of one blade aligning radially with the root of the following blade.

I explained to the Diver and Surveyors that it was a 'highly skewed' propeller and how it should look. I also mentioned that it looks like a flower, with its 5 petals just opening (as seen by me in the Shipyard).

# **()**Mélange





Above image is the closest I can find of what we had on the 'Nosac Taishan' - thanks to 'Slideplayer'

We went down to the diver's barge, where the diver had all his equipment, including a video monitor and a 2 way radio set.

The river water was a little murky, so the diver could not get a long shot of the full propeller. As he moved closer to each blade, he pointed his video camera at the blade edges - we saw the tip was bent quite a bit on one blade, the bend of the blade tip decreasing ever so slightly, but visibly, on the following blades. All the 5 blades had sustained damage.

The diver, on coming up, told me "Chief, you described the propeller as a flower. On seeing this propeller, I could well imagine it looking like a flower - but now it is looking like a cauliflower".

The Classification Surveyor was relieved and immediately recommended docking the ship, with further checks to be made on the tail shaft along with repairs to the propeller.

In the meantime, the Hong Kong Office had been scouting around for an available dry dock in that vicinity, on the grounds of my dialogue and taking a 'worst case scenario' reaction. They found space in Verolme Docks, Rotterdam.



Map showing Antwerp and Location of Verolme Docks

We slowly made our way to Rotterdam and Verolme Docks.

This being the ship's maiden docking, there was plenty to prepare and keep ready. There were 2 ship's side sea valves that were not functioning and which required change. Apart from that, it was mainly to do with revising how to get shore power supply, how to get cooling water supply for AC and Fridge plants and other routine dry dock matters.

Surprisingly, only four of us, the Captain, the Chief Mate, the Electrician and myself had ever seen dry docking of ships.

The Superintendent, a new entrant to the Company, had flown in to Rotterdam.

The ship entered the graving dock, the gates were closed and the pumping out of water commenced. Much before she sat on the blocks, the first blade of the propeller gradually came into view.

The Superintendent and I were dockside, he with binoculars from the Bridge. He seemed very anxious, kept asking me "What if there is no damage to the propeller?" I kept reassuring him that I am certain that the propeller is damaged, being at the same time bemused and a little irritated that they still did not believe a Chief Engineer (especially one who knew the ship very well), nor a Class reviewed Diver's Report.

Blade thicknesses vary, with the maximum thickness at the root of the blade and gradually lessening as it reaches the tip of the blade. The blade thickness of highly skewed propellers is considerably lesser than conventional four bladed propellers and, hence, lighter in weight. All these add to a smooth performance, with very little or near zero vibrations.

The water levels in the graving dock reduced. As more and more of the top blade became visible, it was easily seen that the blade was bent inwards.



# Join the India's Largest Association for **Marine Engineers**

# **BENEFITS OF MEMBERSHIP**

- Develop professional competency on a continuous basis.
- Receive monthly technical journal free of cost.
- Access Institute's website for relevant technical and social information.
- Get special discount on Institute Publications. attendance fees at technical seminars and conferences.
- Use the opportunity to interact and network with senior marine engineering professionals, academics, administrators and business leaders.
- Receive information about marine technical events worldwide.

# **ABBREVIATED TITLES** AND DESCRIPTION OF MEMBERSHIP

Each Corporate and Non-Corporate Member of the Institute may use the title of the grade to which he belongs or the abbreviation thereof, as provided by these Articles and shall use no other title or abbreviation to describe his relation to the Institute.

Each member of the Institute is entitled to describe himself as follows

F. I. Mar. E (I)

Fellow	
Member	
Associate Me	ml

M. I. Mar. E (I)

ber

Associate

A. M. I. Mar. E (I)

A. I. Mar. E (I)

Graduate	G. I. Mar. E (I)
Student	S. I. Mar. E (I)
Subscriber	S. M. I. Mar. E (I)

# **OUR BRANCHES & CHAPTERS ARE AT**

- Chennai
- Chandigarh
- Delhi
- Gujarat
- Hyderabad Kochi
- Kolkata Mumbai Navi Mumbai
- Karnataka
- Patna
- Pune
- Visakhapatnam
- Rajasthan

And many more branches being launched soon.

# **BECOME A MEMBER NOW**

https://sites.google.com/view/member-imei/home For any clarification/support, please mail us at membership@imare.in

# Institute of Marine Engineers (India) visit us: https://imare.in/

- Goa

As the other blades came into view, all 5 blades were found to be bent to varying degrees.

We were lucky in many aspects.

Regulations state that propeller repairs can be carried out only if the damage is located beyond 0.7 R from the root. That is 30% from the tip. The worst damaged blade was 24% from the tip. Permission to repair was given by the Class Surveyor. If it had been more, the whole blade would have required replacement or else the whole propeller would have needed renewal. Renewal of the propeller would have meant flying in the propeller from her sister ship ("Nosac



From Wikipedia (I think it was this very same dock that we went to)

Takara / Tancred?) then in Sumitomo Yard, nearing completion. The other alternative was to use the cast iron spare propeller on board.



E-mail: imeikol@yahoo.co.in

The shipyard people removed the propeller. This was a Kawasaki manufactured propeller. But they did not have any repair outlet in Europe at that time. The best propeller repair workshop closeby was LIPS, later bought over by Wartsila.

It is really unfortunate that I was not a camera buff in those days - those photographs of the repairs would have been wonderful. Today (2022), I am still not a camera buff, but have no need of a camera since most of everything is available on the Internet.

We were in the dry dock for 10 days. The propeller was in the LIPS workshop for 7 days. I attended the propeller repairs for 5 days and watched what they were doing.

Having the full set of propeller drawings, they first took all measurements and compared with the original. Then they checked the entire surface of all the blades for cracks. None were found in the 0.7R area.

The LIPS Foreman told me that this was the first blade to hit the anchor chain of the buoy, followed in sequence by the others, the bending damage being most prominent on the first, with the bend damage gradually reducing.

Then the job of straightening the bends started. Using massive gas torches, the surface around the bends were heated evenly and, using massive hydraulic pincer-like tools, the bent sections were straightened out. Then they moved on to the next one. Once the blade had cooled, it was subjected to a crack detection test. 2 of the blades had frayed at the tip, so they had to be 'trimmed', after which the other three were also trimmed. Constant measurements were taken to ensure that they were conforming to manufacturer's dimensions.

# () Mélange



From Ricepropulsion.com (Representation only) https://youtu.be/ HLL4CXf1PAE

I am not sure, but I think 'annealing' was done at night, one blade at a time.

After completion of all work, it was subject to static balancing.

### Ship propeller blades balancing control

Then it was finally polished and sent back to the Ship Yard for assembly.

One of the methods of checking the balance of shafting and propeller at sea is to make a broad and visible mark on the Intermediate Shaft and check if the shaft returns to the same position after each start. Ideally, it should not return to any spot that you may have marked.

Assembly took place and vessel sailed out to complete all the ports on her European schedule.

### 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.



Email: ranganathan.blog@gmail.com





( / )

 $\overline{}$ 

# The Institute of Marine Engineers (India)

**For General Queries:** 

(Except Courses, TAR Book, Membership and MER / iMélange): The Institute of Marine Engineers (India) "IMEI House" Plot No. 94, Sector-19, Nerul, Navi Mumbai – 400706, India Phone: +91 22 2770 1664, +91 22 2770 6749 E-mail: hgs@imare.in

### For Training/Admission: Training Programmes:

The Institute of Marine Engineers(India) "IMEI House" Plot No. 94, Sector-19, Nerul, Navi Mumbai – 400 706, India. Phone: 022 – 27711663 / 27701664 Mobile No.: +91 – 9967875995 | E-mail: training@imare.in

### For Membership Queries:

The Institute of Marine Engineers(India) "IMEI House" Plot No. 94, Sector-19, Nerul, Navi Mumbai – 400 706, India Phone: +91 22 2770 1664, +91 22 2770 6749 E-mail: membership@imare.in

### Send your Articles to:

The Institute of Marine Engineers(India) "IMEI House" Plot No. 94, Sector-19, Nerul, Navi Mumbai – 400 706, India Tel.: +91 22 2770 1664 | Fax: +91 22 2771 1663 E-mail: editormer@imare.in

### For iMélange Queries and Articles:

The Institute of Marine Engineers(India) "IMEI House" Plot No. 94, Sector-19, Nerul, Navi Mumbai – 400 706, India Tel.: +91 22 2770 1664 E-mail: editornewsletter@imare.in / subeditor@imare.in



IME(I) House, Nerul, Navi Mumbai