

Performance, Outcomes and Results

The Maritime Education and Training (MET) Network with NGO Status at IMO

# GlobalMET NEWSLETTER



Campus of Tokyo University of Marine Science & Technology, a member of GlobalMET.

## Inside this Issue

Editorial	2
Upcoming IMO Meetings – 2022	3
GlobalMET shifts its base to Hong Kong – a walk down memory lane	4
IMO update – SDC 8 (held in January 2022)	7
IMO update – HTW 8 (held in February 2022)	9
Safety in Container Cargo Operations	11

Articles in this newsletter represent the views of the authors. They need not reflect the views or policies of their employers or GlobalMET.

Editor:

**Sriram Rajagopal**  
Hong Kong



To promote, develop and support in the spirit of cooperation, the common interests of its members in all matters concerning the development and quality of maritime education and training.

[www.globalmet.org](http://www.globalmet.org)

# Editorial



Capt. Sriram Rajagopal

Dear Readers,

Welcome to the April 2022 edition of the GlobalMET newsletter.

Much has occurred at GlobalMET since our last newsletter. This year, we have participated at four meetings at the International Maritime Organization (IMO) thus far, including HTW 8. As this editorial is being written, we are representing our members at MSC 105 (20 to 29 April, 2022). GlobalMET has been accepted into the IMO Correspondence Group on Maritime Training and has commenced giving inputs. We will carry articles in the newsletter informing members of the deliberations at each IMO meeting, in order to keep you fully informed. You may have already noticed emails that you received regarding the same. Please continue to send your inputs to us, for putting forth at the IMO.

## IMO update – SDC 8 (Jan 2022)

The IMO sub-committee on Ship Design and Construction (SDC) met from 17 to 21 January 2022. GlobalMET attended the meetings and put forth its members' interests during the deliberations. A number of current topics and regulations, including the causes of the sinking of *MV Stellar Daisy*, reduction of underwater noise from ships, safety of industrial personnel, noise levels on board ships, second generation intact stability criteria, draft amendments to the ESP code, revised performance standards for water level detectors, SOLAS Chapter II-1 alternative design arrangements, and the prohibition of asbestos on mobile offshore drilling units (MODU) were discussed. In this article, we discuss the history of SDC, its earlier forms as DE and SLF, as well as the above topics.

## IMO update - HTW 8 (Feb 2022)

The 8<sup>th</sup> session of IMO's Sub-Committee on Human Element, Training, and Watchkeeping (HTW 8) was held remotely from 07<sup>th</sup> to 11<sup>th</sup> Feb 2022. Representatives from GlobalMET

attended this meeting and put forth member's interests. We have volunteered to be part of a number of IMO model course review group and the IMO group on maritime training. In this article, Capt. Vinayak Mohla describes the main discussions that ensued during the five days of meetings including model course review, cybersecurity, action words taxonomy, ballast water management training and on board training. Since this topic will be of particular interest to members, we will be following this up in each subsequent issue with information related to these activities.

## GlobalMET shifts its base to Hong Kong

The shifting of your association to Hong Kong has finally been completed – a process that took about an year, with all the detailed paperwork and formalities that such shifts tend to normally have. In this article, we look back at the history of GlobalMET (then AMETIAP) since the 1980s, significant milestones, our work at IMO and the current activities that your organization is involved in.

## Safety in Container Cargo Operations safety

In this article, we discuss the findings of Risk Alert number 86, published by Steamship Mutual. It highlights injuries that have taken place on container ships, both to stevedores and ship staff, primarily while lashing, unlashings and tightening container lashings. Trainers and institutes involved in container and safety related course can use this article in their relevant courses.

We hope you will enjoy this selection of articles. Please do give us your feedback at [rajagopals@angloeastern.com](mailto:rajagopals@angloeastern.com)

Happy Reading.

**Capt. Sriram Rajagopal**

Editor, GlobalMET Newsletter

Head of Outreach Activities (GlobalMET).

## Upcoming IMO Meetings – 2022



The Editorial Team, GlobalMET Newsletter. Source: IMO.

Members please note: There are no IMO meetings currently scheduled for the month of August 2022. HTW 8 was held from 7 to 11 February 2022 and GlobalMET represented its members in it.

### Forthcoming meetings

March	
11 <sup>th</sup> session/14 – 18 March	Intersessional Working Group on Reduction of GHG Emissions from Ships (remote meeting)
109 <sup>th</sup> session/21 – 25 March	Legal Committee (LEG)
April	
9 <sup>th</sup> session/04 – 08 April	Sub-Committee on Pollution Prevention and Response (PPR)
105 <sup>th</sup> session/20 – 29 April	Maritime Safety Committee (MSC)
May	
46 <sup>th</sup> session/09 – 13 May	Facilitation Committee (FAL)
12 <sup>th</sup> session/16 – 20 May	Intersessional Working Group on Reduction of GHG Emissions from Ships (TBC)
June	
78 <sup>th</sup> session/06 – 10 June	Marine Environment Protection Committee (MEPC)
9 <sup>th</sup> session/21 – 30 June	Sub-Committee on Safety of Navigation, Communication and Search and Rescue (NCSR)
July	
127 <sup>th</sup> session/11 – 15 July	IMO Council
8 <sup>th</sup> session/25 – 29 July	Sub-Committee on Implementation of IMO Instruments (III)
September	
8 <sup>th</sup> session/19 – 23 September	Sub-Committee on Carriage of Cargoes and Containers (CCC)
October	
LC 44/LP 17 <sup>th</sup> session/03 – 07 October	Consultative Meetings of Contracting Parties (London Convention 1972) and Meetings of Contracting Parties (London Protocol 1996)
72 <sup>nd</sup> session/17 – 21 October	Technical Cooperation Committee (TC)
November	
106 <sup>th</sup> session/02 – 11 November	Maritime Safety Committee (MSC)
128 <sup>th</sup> session/28 November – 02 December	IMO Council
December	
79 <sup>th</sup> session/12 – 16 December	Marine Environment Protection Committee (MEPC)



# GlobalMET shifts its base to Hong Kong – a walk down memory lane

The Editorial team

## 1. Introduction

In April 2022, GlobalMET (The Global Maritime Education and Training Association GlobalMET) completed the remaining formalities connected with shifting base from Australia to Hong Kong. As we look back at the past more than thirty years of our existence, and recount how GlobalMET evolved from a simple seminar that was held in the late 1980s, this seems to be a natural move. Hong Kong is one of the centers of world shipping today, and this move reflects our desire to be closer to our members located worldwide, as well as stakeholders in the maritime sector. As part of the shift, we have also revamped our website <https://globalmet.org> and the newsletters, enabling members to engage with each other even more effectively. Members must have already noticed this in the emails being sent to them, and newsletter articles asking for their inputs for various IMO model course reviews and IMO correspondence groups that GlobalMET is part of.

In this article, we take look back at the adventurous voyage of our past more than three decades, from a humble conference held in 1989.

### 2.1 The seeds of our origin: 1989-1996

The seeds for the formation of GlobalMET were sown in 1989 when the heads of maritime institutions and trainers gathered informally to discuss common issues related to maritime training and possible solutions. Our meetings at that time were focused on the Asia – Pacific region, but this gradually expanded to Europe as more institutional heads joined in. From 1990 to 1995, we held four such international meetings at [Dalian Maritime University](#) in China, [Fiji Institute of Technology](#) in Suva, Far Eastern State Maritime Academy in Vladivostok and at the [New Zealand Maritime School](#) in Auckland. As time progressed, the number of institutions participating in these meetings increased. In the late 1990s, these meetings were attended by 18 prominent MET organizations from Australia, Japan, Hong Kong, the Philippines, India, Fiji, New Zealand, Papua New Guinea, Russia and China. It was during and from these meetings that the idea of a more permanent membership association was floated. Such an organization would continue to hold similar conferences, and during the time between these meetings, it would help members in discussing and addressing issues pertaining to maritime education and training.

The Secretary General of the International Maritime Organization (IMO) expressed strong support for us through communiqués and senior IMO officials attended many of these meetings. At the Auckland meeting in December 1995, it was unanimously resolved to establish an Asia Pacific regional association. We named this association AMETIAP, an acronym for the “Association of Maritime Education and Training in the Asia Pacific” and registered it in 1996.

### 2.2 AMETIAP: 1996-2002

In September 1996, representatives of 18 maritime education and training institutions of Australia, China, Hong Kong, Japan, Papua New Guinea, New Zealand, the Philippines, Russia and Singapore met in [The Hong Kong Polytechnic University](#) and inaugurated the **Association of Maritime Education and Training in Asia Pacific (AMETIAP)**. This effectively planted the

seed of the organization that would subsequently bloom into GlobalMET as it is today.

By this stage, in addition to the IMO, support for the initiative also came from the [Hong Kong Shipowners Association](#) (HKSA) and the Hong Kong maritime unions. During this time, conferences were held in China, India, the Philippines and Hong Kong.



**Figure 1: From our history files - AMETIAP 1999 conference, Tokyo.**  
(Source: The Nippon Foundation)

### 2.3 AMETIAP (Global) Ltd. and GlobalMET Australia: 2002-2006

In December 2002, we further formalized ourselves and GlobalMET was incorporated in Australia as AMETIAP (Global) Ltd. To reflect the growing international nature of the organizations. During this period, several conferences were held all across the world to discuss issues related to maritime training and education, as well as potential solutions. Workshops were conducted as part of our endeavors for further professional development of trainers and educators. Our organization also attended and spoke at conferences held in various parts of the world. This included the 2003 International Maritime Educators Conference, held in 2003 at Cal Maritime, a California State University Campus in Vallejo, California, USA; and was followed in 2004 and 2005 by AMETIAP conferences in Mumbai, India. The latter was attended by over 150 participants from all over the world, including India, China, Singapore, Hong Kong and New Zealand. In 2006, AMETIAP held its conference in the Philippines, one of the largest providers of maritime manpower. This provided members and experts to discuss developments in maritime education, including dual course programs introduced in some countries.

### 2.4 GlobalMET activities from 2006 to 2007

Subsequently, our membership grew, with many institutions from Europe and the Americas joining us. To reflect this global role, we adopted the name “Global Maritime Education and Training Association”, with the working name “GlobalMET” in 2006. Our membership increased, with more members based outside the Asia Pacific region joining in. A new logo was adopted to reflect our maritime links and global outreach. In February 2007, our registered name in Australia was changed to ‘GlobalMET Limited’ to reflect this transformation. In 2007, GlobalMET held a large conference in Mumbai, India which was attended by nearly 300 delegates from multiple institutions. Issues and solutions related to maritime education and training were debated, and a special week long workshop for improving the teaching skills of members was organized.

## 2.5 NGO Consultancy status at IMO (2008-2009)

2008 marked a milestone for us at GlobalMET. In June 2008, at its 100<sup>th</sup> Session, the IMO Council approved our application for NGO Consultancy Status. This was endorsed by the IMO Assembly at its meeting in November 2009.

Ever since, representatives from GlobalMET have been active at the IMO, taking part in discussions related to maritime education and training, STCW, safety and pollution prevention and a number of similar allied subjects. We participate regularly at IMO meetings including HTW and have been part of various IMO working groups and sub committees involved in the writing and revision of a number of model courses.



Figure 2: GlobalMET AGM in Hong Kong, 2009. Source: Rajagopal, S.

## 3.1 Increased activity and participation at IMO (2009-2021)

From 2009, GlobalMET became even more active at the IMO, contributing to and participating in various subcommittees and working groups, especially related to seafarers training. This continues to date and we have participated in all the IMO meetings thence. GlobalMET was the review group coordinator in 2018 for passenger safety courses as well as Drafting Group 1 for HTW 5.

GlobalMET was also an active contributor to the following IMO model courses:

- IMO Model Course 7.01 – Master and Chief Mate
- IMO Model Course 7.02 – Chief Engineer Officer and Second Engineer Officer
- IMO Model Course 7.03 – Officer in charge of a Navigational Watch
- IMO Model Course 7.04 – Officer in charge of an Engineering Watch
- Revised draft model course 3.12 – Assessment, examination and certification of seafarers
- Revised draft model course 1.30 – On-board Assessment.



Figure 3: GlobalMET making a presentation at the IMO. Source: Mohla, V.

We had the opportunity to make a number of presentations at the IMO. These include the following:

- In 2011, GlobalMET made a presentation at the IMO on the GlobalMET Cadet Record Book (CRB). The GlobalMET CRB which forms a part of the GlobalMET Structured Shipboard Training program (SSTP) enables new Deck cadets and Trainee engineers to undergo a structured training program on board ships. It is approved by a number of flag states and is used by many shipping companies as well as maritime training academies. It can be used in its original book version as well as a digitized version. The digitized version of the CRB is being used by the Maritime Academy of Asia Pacific (MAAP), one of the premier training academies of the Philippines.
- On 31 January 2017, GlobalMET made a presentation for the attendees at IMO HTW 4 on “Competency Management Systems”. The presentation was made in co-operation with Anglo Eastern Ship Management (Hong Kong) and Core Competency Limited (India) at the main hall of the IMO.
- On 28<sup>th</sup> July 2018 at HTW 5, Capt. Vinayak Mohla (representing GlobalMET) and the software vendor MarinePALS did a presentation showcasing the new digitised version and learning material for “Engine cadet Training Record Book”.
- On 11<sup>th</sup> June 2019 at MSC 101, Capt. Pradeep Chawla and Capt. Sankalp Chopra (representing GlobalMET) and the software vendor MarinePALS presented the new “Virtual Reality Learning Management System”.



Figure 4: GlobalMET participating at IMO at HTW. Source: Mohla, V.

In 2020 and 2021, GlobalMET represented its members at MSC 101, ISWG MASS1 and HTW 7 to put forth its members’ point of view and to participate in various IMO model course developments and reviews. Details can be found in the “Our work at IMO” page of the GlobalMET website.

Meanwhile, we continue to work in close collaboration with other industry bodies including the Nautical Institute, Intertanko, Intercargo and RightShip.

## 3.2 Participation at IMO in 2022

As of April 2022, GlobalMET is part of three major activities at the IMO. Firstly, we are part of the IMO Correspondence Group on Maritime Training. Secondly, we are the review group Coordinator for revised IMO model course 1.35 on Liquefied Petroleum Gas (LPG) tanker cargo and ballast handling simulator. Thirdly, we are members of the IMO review group on revised model course 1.32 on Operational use of Integrated Bridge Systems including Integrated Navigational Systems. GlobalMET has already attended four IMO meetings thus far, and we expect to attend many more over the rest of the year. Members are



requested to send in their suggestions and comments to put forth during the meetings, and are welcome to help in the work of these working groups.

### 3.3 Conferences and Workshops

GlobalMET began to conduct conferences and workshops on topics of interest related to the maritime sector, including ECDIS, training techniques and women in shipping since 2000. Eminent members of the profession including representatives from BIMCO, Nautical Institute, UKHO, US Coast Guard and WISTA were invited to participate in them and to share their knowledge with members. In 2020 and 2021, these in-person conferences were replaced with webinars.

To give a snapshot of just some of the many conferences that were held, in 2007, GlobalMET held a week long training workshop in India where we discussed method son how the delivery of courses and writing of learning objectives could be further improved. In November 2010, GlobalMET held its conference in Mumbai, India in the auditorium of Maritime Training Institute, Powai. The speakers included the Director General of Shipping Dr. S. B.Agnihotri, as well as representatives from the Nautical Institute (Capt. James Robinson), the Swedish Club Academy (Martin Hernqvist). This was followed by the December 2011 GlobalMET annual conference at Tolani Maritime Institute, India. This conference was focused on discussing the Manila amendments, and ways in which the industry and training institutes can address these, as well as the needs of Generation-Y seafarers. The list of speakers included Nautical Institute, FOSMA, maritime educational institutes, and SIRE and OCIMF inspectors. Similar conferences were held each year at various locations in India, the Philippines and Hong Kong.

During these conferences, many members asked for workshops to be held for continuing professional development of their trainers. In response to this, in 2014, we held multiple workshops at the premises of MAAP (Maritime Academy of the Asia Pacific) in the Philippines, focusing on different methods that can be used effectively for training adults. A three year program was run in the Philippines with PAEPI from 2014 to 2016 supported by the TK foundation. This program consisted of numerous Continuing Professional Development Workshops.



**Figure 5: A workshop conducted by GlobalMET in the Philippines in co-operation with PAEPI and the TK Foundation.**

Conferences were held in Malaysia in 2014 at the Malaysian Maritime Academy in Malacca. Our 2015 conference held near Pune, India, in association with the Institute of Engineers and Tolani Maritime Institute discussed the current challenges in MET including those related to the 2010 amendments to STCW convention, impact of emerging technologies, curriculum development, academic monitoring and enhancement. In 2016, a conference was held in Malaysia. In 2018, GlobalMET held a

conference on ECDIS in Mumbai, India, where representatives from the UKHO as well as various training providers shared their experiences and lessons learnt.



**Figure 6: The GlobalMET 2017 conference.**



**Figure 7: Mr. Ashoka Mahapatra, Director of IMO's Maritime Safety Division, speaking at the GlobalMET 2017 conference.**

From 2018 to 2022, GlobalMET participated in a large multi-stakeholder project with a number of maritime organizations including the Nautical Institute and supported by Intercargo in compiling an industry guideline called "A guide to bulk carrier operations". Five chapters of this new bulk carrier operations book were written by GlobalMET members represented by Capt. Deepak Gupta and Capt. Sriram Rajagopal.

### 4. The shift to Hong Kong (2021-2022)

Hong Kong remains one of the major centers of shipping. It is close to the Philippines, one of the largest maritime manpower providing nations. As per MARINA's 2021 report, the country hosts 95 maritime training institutions approved by the country's department of transportation. Furthermore, it is also in closer proximity to China, India and Singapore, thus allowing us to stay in touch with our current members and gain visibility for additional members. Our members located in Africa, Europe and the Americas also find it easier to contact us, and for us to stay in touch with them.

The process of shifting base was long, arduous, with multiple levels of paperwork, and was finally accomplished in April 2022. We hope that this shift will help GlobalMET in assisting its members.

If you have any particular expectations from the association, please feel free to send an email to the Chairman ([chawlapk@angloeastern.com](mailto:chawlapk@angloeastern.com)) and Mr. Jagmeet Makkar ([jagmeet@netvigator.com](mailto:jagmeet@netvigator.com)), and we will try our best to accommodate your needs.



## IMO update – SDC 8 (held in January 2022)

Capt. Sriram Rajagopal

The IMO sub-committee on Ship Design and Construction (SDC) met from 17 to 21 January 2022. GlobalMET attended the meetings and put forth its members' interests during the deliberations. GlobalMET was represented by Capt. Sriram Rajagopal, Capt. Vinayak Mohla and Capt. Prasad Nayak.

### Summary

Draft amendments were agreed upon and relevant correspondence groups discussed their findings. The following topics were discussed:

- Reducing underwater noise from ships
- New regulations and Code to address safety of industrial personnel agreed
- Unified interpretations for noise levels on board ships agreed
- Draft Explanatory Notes to Interim guidelines on second generation intact stability criteria agreed
- Draft amendments to the ESP Code finalized
- Performance standards for water level detectors revised
- Guidelines on alternative design and arrangements for SOLAS chapter II-1
- Prohibiting asbestos on mobile offshore drilling units (MODU).

### 1. Background

The IMO SDC meets regularly to discuss aspects related to ship design and construction, and their impact on maritime safety. This year, the sinking of *Stellar Daisy* dominated some of the discussions, especially with respect to ship construction standards on Very Large Ore Carriers (VLOCs). Other discussions revolved around the reduction of underwater noise from ships and its impact on marine life, the safety of industrial personnel, intact stability criteria, ESP code (International Code on the Enhanced Programme of Inspections), performance criteria for water level detectors, alternative designs and the prohibition of asbestos on MODU.

Prior to January 2022, the SDC has met once almost every year. Earlier, this group was referred to as DE and SLF upto 2013.

TITLE	DATE
SDC 8	21/01/2022
SDC 7	07/02/2020
SDC 6	08/02/2019
SDC 5	26/01/2018
SDC 4	17/02/2017
SDC 3	22/02/2016
SDC 2	20/02/2015
SDC 1	24/01/2014
DE 57 <sup>th</sup> session	22/03/2013
SLF 55 <sup>th</sup> session	22/02/2012

TITLE	DATE
DE 56 <sup>th</sup> session	17/02/2012
SLF 54 <sup>th</sup> session	20/01/2012
DE 55 <sup>th</sup> session	25/03/2011
SLF 53 <sup>rd</sup> session	14/01/2011
DE 54 <sup>th</sup> session	29/0/2010

*List of past Ship Design and Construction (SDC), DE and SLF meetings at the IMO. Source: IMO*

Below we summarize the main decisions arrived at this year. Members involved in relevant courses, especially those related to bulk carriers, safety and marine mammals may find it useful to include these in their training courses.

### 2. Reducing underwater noise from ships

SDC began its work on reviewing the 2014 Guidelines for the reduction of underwater noise from commercial shipping to address adverse impacts on marine life (MEPC.1/Circ.833). The guidelines focus on primary sources of underwater noise, namely on propellers, hull design, onboard machinery, and various operational and maintenance recommendations such as hull cleaning. Already, speed restrictions have been in force in some parts of the world including the coasts of United States and in some of the waters in Canada during certain times of the year, primarily to minimize any adverse impact on Right Whales. With a rise in Arctic shipping and growing awareness on the impact of underwater noise on marine mammals, this is expected to grow in impact.

The review was initiated after the issue was raised at the Marine Environment Protection Committee (MEPC). Underwater-radiated noise from ships may have both short and long-term negative consequences on marine life, especially marine mammals. Its aim is to provide updated recommendations based on the latest developments in ship design and technology and to address the barriers to their uptake in an effort towards a significant and measurable reduction of underwater-radiated noise from ships.

A working group discussed a number of submitted documents and developed a work plan. Terms of reference for a correspondence group were agreed. This correspondence group's tasks will include engagement with Inuit and other indigenous communities, incorporation of Indigenous Knowledge, identifying comparable and common means of measuring, analysing and reporting of underwater radiated noise emissions from ships (e.g. existing and developing ISO and other international standards), identifying actions to further prevent and reduce underwater noise from ships, including options to integrate new and advancing technologies and/or vessel design solutions taking into account geographical characteristics, considering the impact and interrelation of the proposed actions in the context of achieving other regulatory goals (for example: ship safety, energy efficiency, reducing pollution from ships), amending the 2014 Guidelines, increasing awareness, identifying areas that require further assessment and research; considering the next steps and to help produce

a new “Compendium on Underwater Noise from Commercial Shipping”. Its recommendations are expected to be submitted to the Marine Environment Protection Committee (MEPC 80) in 2023.

A new project bid to the Global Environment Facility has been introduced by the IMO Secretariat’s Department for Partnerships and Projects (DPP) to seek funding for a project (“Global Partnership for Mitigation of Underwater Noise from Shipping (GloNoise Partnership)”), to establish a global stakeholders’ partnership, with a strong developing countries’ focus, in order to deal with underwater noise from shipping.

### **3. New regulations and Code to address safety of industrial personnel agreed – SOLAS Chapter XV and “Code for Industrial Personnel”**

A new Code and SOLAS amendments were agreed to help ensure the safety of people transported to work on offshore facilities were agreed. This comes in the form of a new SOLAS chapter XV and the new “Code for Industrial Personnel”, both of which contain mandatory requirements for ships carrying industrial personnel to ensure their safety. The draft texts will be submitted to the Maritime Safety Committee (MSC) for approval and adoption, with a view to entry into force on 1 July 2024. Their aim is to provide mandatory minimum safety standards for ships that carry industrial personnel, especially in the offshore sector and personnel transfer operations. Such personnel may be engaged in the construction, maintenance, decommissioning, operation or servicing of offshore facilities, such as wind farms, as well as offshore oil and gas installations, aquaculture, ocean mining or similar activities.

With the increased use of Wind Farm Support Vessels (WFSV) and Crew Transfer Vessels (CTV) to attend to the maintenance and support needs of Offshore Wind Farms in the North Sea, along the coast of Great Britain, China, and now, United States of America, members involved in training related personnel may find it useful to include this in their courses.

### **4. Unified interpretations for noise levels on board ships agreed**

SDC8 agreed to draft unified interpretations of SOLAS chapter II-1, the 1988 Load Lines Protocol and the Code on noise levels on board ships.

### **5. Draft Explanatory Notes to Interim guidelines on second generation intact stability criteria agreed**

Following MSC 102, SDC8 agreed on draft Explanatory Notes to the Interim guidelines on second generation intact stability criteria which are being used on a trial basis. These Explanatory Notes provide specific guidance to assist in the uniform interpretation and application of these Interim Guidelines.

Mandatory criteria and recommended provisions regarding intact stability are set out in IMO’s 2008 Intact Stability (IS) Code, which is mandatory under chapter II-1 of the SOLAS Convention and the 1988 Load Lines Protocol. Advanced computer technology and intensive research have enabled “second generation” intact stability criteria to be developed, for a comprehensive safety assessment of ship dynamics in waves.

The Interim Guidelines address vulnerability criteria, direct stability failure assessment and operational measures and contain performance-based criteria for assessing five dynamic stability failure modes in waves: dead ship condition, excessive acceleration, pure loss of stability, parametric rolling and surf-riding/broaching. The reference to “second generation”

derives from the fact that they are based on first principles and latest technology, as opposed to predominant use of casualty records which form the basis of the mandatory intact stability criteria.

### **6. Draft amendments to the ESP Code finalized**

SDC8 finalized draft amendments to the International Code on the Enhanced Programme of Inspections during Surveys of Bulk Carriers and Oil Tankers, 2011 (ESP Code). These are intended to address safety issues that were identified during the flag State’s marine safety investigation of the loss of *MV Stellar Daisy*, by increasing the frequency of inspections of void spaces, based on the condition of hard coatings.

The draft amendments stipulate that void spaces should be inspected annually when the condition of coatings are less than GOOD (as determined in the ESP Code).

### **7. Performance standards for water level detectors revised**

SDC8 agreed to a draft revision of the Performance standards for water level detectors (MSC.188(79)/Rev.1). The revision expands the application of the performance standards to water level detectors on multiple hold cargo ships other than bulk carriers and tankers required by new SOLAS regulation II-1/25-1. This is expected to enter into force on 1 January 2024 and will require the installation of such water level detectors on applicable ships.

Two new sections were added to the Performance standards regarding the use of bilge alarms as water level detectors on multiple hold cargo ships and periodic testing on board. The draft revised performance standards will apply to water level detectors installed on or after 1 January 2024.

### **8. Guidelines on alternative design and arrangements for SOLAS chapter II-1**

SOLAS allows the approval of alternative designs and arrangements, provided that they meet the intent of the requirements concerned and provide an equivalent level of safety. SDC8 agreed to draft functional requirements for SOLAS chapter II-1, part D on electrical installations to ensure adequate availability of electrically-powered services for safe operation of the ship and protect the persons on board from hazards of electrical origin in normal and emergency conditions.

This process was initiated some years back when, in 2019, MSC approved Guidelines on alternative design and arrangements for SOLAS chapters II-1 and III (MSC.1/Circ.1212/Rev.1), outlining the methodology for the engineering analysis required by SOLAS regulations II-1/55 and III/38 on Alternative design and arrangements. Alternative designs deviating from the prescriptive requirements of SOLAS chapters II-1 and III are covered by these.

### **9. Prohibiting asbestos on mobile offshore drilling units**

SDC8 established a correspondence group to develop draft amendments to the Code for the Construction and Equipment of Mobile Offshore Drilling Units (MODU Code), 2009 MODU Code (resolution A.1023(26), as amended), the 1979 MODU Code (resolution A.414(XI), as amended) and the 1989 MODU Code (resolution A.649(16), as amended) to prohibit the use of materials containing asbestos, including control of storage of such materials on board all MODUs. This will help align the MODU Code with the provisions of SOLAS regulation II-1/3-5.





## IMO update – HTW 8 (held in February 2022)

Capt. Vinayak Mohla

The 8<sup>th</sup> session of IMO's Sub-Committee on Human Element, Training, and Watchkeeping (HTW 8) was held remotely from 07<sup>th</sup> to 11<sup>th</sup> Feb 2022.

GlobalMET, represented by Capt. Vinayak Mohla, Capt. Sriram Rajagopal and Capt. K.N. Deboo attended the meeting. The following sums up important aspects of the proceedings that may be of interest to members:

### Update on IMO Model Courses

Drafting groups will consider the draft model courses listed below for validation by means of virtual meetings and report to HTW 9.

1. New model course on Passenger Safety, Cargo Safety and Hull Integrity Training
2. Revised model course 2.03 on Advanced Training in Fire Fighting
3. Revised model course 1.22 on Bridge Resource Management
4. New model course on Engine-room Resource Management
5. Revised model course 3.25 on Security Awareness Training For All Port Facility Personnel
6. Revised model course 3.26 on Security Training for Seafarers With Designated Security Duties
7. Revised model course 3.27 on Security Awareness Training For All Seafarers.

The Sub-Committee selected Capt. Vinayak Mohla (GlobalMET) as Review Group Coordinator for revised model course 1.35 on "Liquefied Petroleum Gas (LPG) Tanker Cargo and Ballast Handling Simulator" and Mr. Jan-Willem Verhoeff (Netherlands) as Review Group Coordinator for revised model course 1.32 on "Operational use of Integrated Bridge Systems Including Integrated Navigational Systems". These courses will be validated by HTW 10.

Members are welcome to assist in the review of Model Course 1.35. For further details, please contact Capt. Vinayak Mohla with a cc to Capt. Pradeep Chawla and Capt. Sriram Rajagopal on the email addresses given in this newsletter.

### Action Verb Taxonomy & Learning Outcomes

HTW 8 prepared draft amendments to the revised guidelines for the development, review, and validation of model courses (MSC-MEPC.2/CIRC.15/REV.1) and included new appendices on "Action Verb Taxonomy and Guidance on Learning Outcomes".

Members might find it useful to refer to the revised guidelines to frame clear and definitive learning outcomes (GLOs and SLOs – General learning objectives and Specific learning objectives) as well as correct use of the action verbs in the domains of cognitive learning, psychomotor learning, and affective learning.

### Cybersecurity related training for seafarers

With regards to the cybersecurity-related training, HTW 8 invited the interested Member States and international organizations to submit relevant proposals for a new output to the Maritime Safety Committee.

### Training of seafarers related to ballast water management

With regards to the training of seafarers related to ballast water management, HTW 8 invited the interested Member States and international organizations to submit relevant proposals to the next session, with a view to finalizing the work on this output.

### Guidance for alternative measures to meet the training requirements in relation to the IGF Code

HTW 8 considered document the ICS document (HTW 8/15) proposing the development of guidance to address the challenge of complying with the practical and experience requirements of STCW regulation V/3 for certification in advanced training for service on ships subject to the International Code of Safety for Ships using Gases or other Low flashpoint Fuels (IGF Code), given the current limited number of these ships.

After consideration, HTW 8 invited the interested Member States and international organizations to submit relevant proposals for a new output to the Maritime Safety Committee.

### Implementation of the STCW Convention

A correspondence group will consider streamlined guidance for the preparation, submission, and review of reports for the communication of such information and report to HTW 9.

### Role of Human Element

HTW 8 agreed to draft amendments to the "Organization and method of work of the Maritime Safety Committee and the Marine Environment Protection Committee and their subsidiary bodies" (MSC-MEPC.1/Circ.5/Rev.2) including a revised checklist for considering human element issues by IMO bodies.

### Electronic certificates and documents for seafarers

HTW 8 finalized draft amendments to the STCW Convention and Code to accommodate the use of electronic certificates and documents for seafarers. A draft MSC circular containing guidelines on the use of electronic certificates was finalized.

**Training, certification, and watchkeeping on fishing vessels**

A correspondence group will continue the work on a comprehensive review of the STCW-F Convention.

**On-board training & mandatory seagoing service**

The Sub-Committee established the Correspondence Group on Maritime Training to prepare a work plan to develop measures regarding the assurance of the quality of onboard training required by the STCW Convention, including identification of expected goals, effectiveness, and consequences of any measures to be adopted.

The Correspondence Group will collate the information to identify the difficulties faced in implementing STCW mandatory seagoing service provisions.

**Safe operation of onshore power supply (OPS)**

With regards to the draft interim guidelines on the safe operation of onshore power supply (OPS) service in port for ships engaged on international voyages, it was agreed that the guidelines should only address familiarization, as training requirements were covered already through different STCW competencies as well as the International Safety Management (ISM) Code (ISM Code, part A, paragraph 6.5). HTW 8 further noted the need to address an inconsistency in the definition of 'high voltage' between the draft interim guidelines and Regulation I/ 1.1.44 of the STCW Convention.

The draft modifications to section 6 of the draft interim guidelines on the safe operation of onshore power supply (OPS) service in port for ships engaged on international voyages were finalized for submission to MSC 105 for consideration with a view to approval.

**Safety for ships carrying Industrial Personnel**

It was agreed that since industrial personnel receives training and instruction in accordance with the draft International Code of Safety for Ships Carrying Industrial Personnel (IP Code), crowd management training would be unnecessary.

New requirements for all cargo ships that carry more than a certain number of people should be developed to avoid different requirements for the same ship depending on how it was operated, i.e., as a cargo ship, a ship subject to the IP Code, or a ship subject to the Code of Safety for Special Purpose Ships (SPS Code).

## Request for Feedback from Members

Do you have any comments regarding the articles in this newsletter, the GlobalMET website or GlobalMET's activities?

If yes, then we eagerly solicit your feedback.

Please send your comments and suggestions to Capt. Sriram Rajagopal (Head of Global Outreach Activities, GlobalMET) and the Secretariat at the following three email addresses, and we will get back to you.

Email: [rajagopals@angloeastern.com](mailto:rajagopals@angloeastern.com) and [sriram.rajagopal@globalmet.org](mailto:sriram.rajagopal@globalmet.org)

Email: [Secretariat@globalmet.org](mailto:Secretariat@globalmet.org)

Please do mention the name of the member.

# Safety in Container Cargo Operations

The GlobalMET editorial team

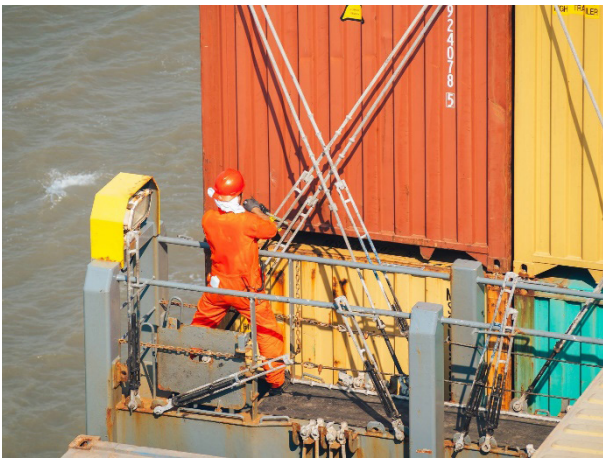
In its recent "Risk Alert number 86", Steamship Mutual (2022) has highlighted the risks and potential safety scenarios related to container cargo operations. This comes in light of a number of incidents including serious injuries and even fatalities that have occurred on container ships during cargowork. In this article, based on the above Risk Alert, we summarise the issues and various factors related to them.

Members conducting container cargo courses and personal safety courses might find it useful to include these in their courses.

## 1. Introduction

In March 2022, Steamship Mutual issued a Risk Alert focusing on container cargo operations. It highlights the importance of training and reminds all to implement safe work practices for the safety of personnel involved in container ship cargo operations as well as for ensuring that the work area remains safe for others in the vicinity.

Incidents involving serious injuries and fatalities continue to occur during cargo operations on container ships. Reminding ourselves of the contributory factors can help us all learn lessons from previous incidents and near misses. Some of these may also be relevant to ships where seafarers are required to check and tighten container lashings at sea, as they get loose due to the ship's movement and vibrations.



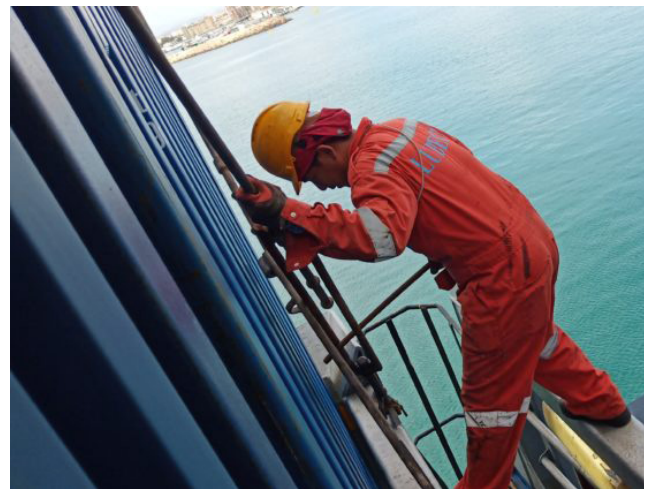
**Figure 1: A crew member tightening container lashings on board, presumably during sea passage. Source: Steamship Mutual.**

## 2. Common container operation issues

Container cargo operations differ from conventional dry cargo operations. These differences can often increase the risk of personal safety and injury. These factors include:

- the large number of cargo units (containers) that are moved in a given time
- the faster pace of operations. The increased speed of gantries and twin lift gantries have only exacerbated this
- large and heavy hatch cover pontoons being moved, often by gantry operators located high above
- blind spots for crane and forklift operators, especially due to the height at which they work and lighting conditions on deck

- tight access between container stacks
- the work related necessity of stevedores having to work between these stacks during cargo operations (for example: for the unlocking of semi-automatic twist locks, and for lashing container stacks)
- cargo stacked over multiple tiers,
- hazardous material (IMDG / dangerous goods)
- manual handling heavy lashing / securing equipment (for example: lashing bars and turn-buckles)
- large numbers of shore workers on board in some ports
- fatigue related issues of stevedores, especially in ports where working overtime and short staffing have become a norm.



**Figure 2: Working close to the shipside presents additional safety hazards. Source: Steamship Mutual.**

## 3. Factors leading to accidents

Accidents can occur due to a number of factors. These can be broadly divided into human element, design, layout, or other aspects of the work area, equipment failure, unsafe conditions and other factors.

### Human element

This could be due to issues related to Rest hours / Fatigue, Incorrect/inadequate PPE, Unauthorised (enclosed space) entry, Incorrect handling/lifting of heavy or large objects (twistlocks, lashing gear etc) when working in close proximity to others.

### Design, layout, or other aspects of the work area

Deck areas of container ships can be severely restricted from a work perspective due to their limited available space, restrictions on movement due to the same, Load bearing capability, the presence or absence of platforms and ladders, Illumination, Ventilation.

### Equipment failure

Namely, due to failures of Lashing and securing gear, Staging and ladders. For example: breakage of lashing platforms that can cause a fall, breakage or collapse of railings. The latter is especially dangerous – hinged shipside railings fitted on top of container pedestals are a common weak spot on container ships.



### Unsafe conditions

These include Openings without safety rails, unguarded openings in way of hatches, accessways, removable railings etc, loose gear on hatch covers, Unsecured cargo including cargo shifts/moves/spills inside the container. Theoretically, loose lashings on hatch covers should be removed before the hatch cover is moved, however this is seldom practiced due to the temporary nature of work and the large amount of manpower required to accomplish this. Manpower on container ships, whether in the form of stevedores or ship staff remains too small to be able to achieve the above task.

### Other factors

These include the "lift path" (during loading/discharging/restow), Weather conditions, Vessel's motion (during heavy lifts by vessels own lifting gear) and Overhead hazards.



**Figure 3: A stevedore approaches a container ship in port.**  
Source: Maersk Lines.

## 4. Prevention and Conclusions



**Figure 4: A stevedore longshoreman attending to container lashings.** Source: Steamship Mutual.

A wide range of hazards have resulted in serious, and often tragic consequences. These could have been prevented by following appropriate procedures and exercising due care and attention. Some ways this could be achieved is by focusing on the following key areas:

- Risk identification
- Effective barriers and control for risk mitigation
- Effective training
- Understanding of workplace safety
- Effective implementation of workplace safety
- Effective safety culture.

*"All parties involved in cargo operations should recognise their shared interest in ensuring that cargo operations are carried out in a safe and efficient manner. Tools for supporting a safer working environment should include a near miss reporting system to improve safety awareness and a no blame safety culture that encourages the crew to speak out when they observe or experience unsafe working practices."* (Steamship Mutual, 2022)

It is equally important to ensure that the identified risk control measures are effectively implemented. Physical control measures such as, lockout/tag-out, safety signs, barriers, markers, tagging and isolating damaged or condemned gear, etc. can help minimise or highlight these dangers. Training needs should be identified, and an appropriate training programme implemented. Vessels, in their equipment and design, constantly evolve, often with new operational characteristics that will need to be considered along with crew training, experience, and familiarity. This necessitates constant updating of the training involved. PPE should be in good condition, of correct size/fit and when correctly worn can save lives. This includes the use of retractable fall arrestors when working at heights and close to the shipside.



**Figure 5: Lashing and unlashings on container ships often requires working in constricted difficult to access spaces with fall hazard.**  
Source: Steamship Mutual.

### References:

Paranjpye, Nahush (2022). *Loss Prevention Bulletin Risk Alert 86. Work safety: Container Cargo Operations.* London: Steamship Mutual.

## IMO Model Course review announcement -

Dear Members,

It gives us great pleasure to inform you that IMO has nominated your association GlobalMET as the Review Group Coordinator for IMO Model Course 1.35 Liquefied Petroleum Gas (LPG) Tanker Cargo and Ballast Handling Simulator course.

This course is likely to be validated at HTW 10.

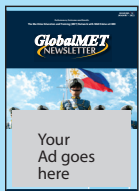
Capt. Vinayak Mohla will be coordinating efforts for this course on behalf of GlobalMET.

Members interested in contributing to this review, please email Capt. Vinayak Mohla

(Email: [mohlav@angloeastern.com](mailto:mohlav@angloeastern.com) ).

We look forward to your participation.

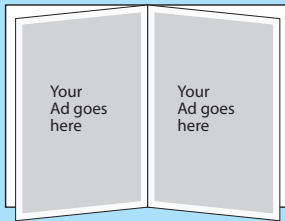
## Advertise in the GlobalMET Newsletter & General Memos



Your Ad goes here



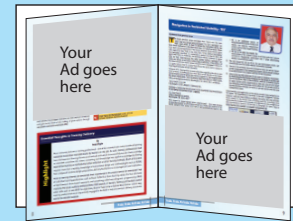
Half front or back page  
**\$ 750**



Your Ad goes here

Your Ad goes here

Full inside page  
**\$ 500**



Your Ad goes here

Your Ad goes here

Half inside page  
**\$ 250**

GlobalMET Newsletter is widely circulated.

Visit: <http://globalmet.org/> for complete membership list.

Contact: [secretariat@globalmet.org](mailto:secretariat@globalmet.org)

## SPECIAL 50% DISCOUNT FOR GlobalMET MEMBERS

“

“Don't wait for extraordinary opportunities. Seize common occasions and make them great.”

—Orison Swett Marden ”

## Call for Articles

**Would you like your article to be featured in upcoming GlobalMET newsletters?**

If yes, please send us a 400 / 800 / 1200 / 1600 words article on a topic of your choice (related to maritime education and training).

**Email:** rajagopals@angloeastern.com and sriram.rajagopal@globalmet.org

**Format:** The first few paragraphs must be grouped under an "Introduction". The final paragraphs must be grouped under a "Conclusion". Please divide your remaining contents in 2-4 sections in between. You can use anywhere from 1-9 subsections within each section. Please also add a "References" section at the end of the article.

**Referencing:** Please use Harvard Referencing system. 1-10 references are sufficient.

**Photos and diagrams:** Please send them separately as jpg, jpeg, png or bmp files.

---

## Coverpage Photo

**Would you like your training institute to be featured in the GlobalMET newsletters?**

If yes, please send us a write up about your institute of length 800 / 1200 / 1600 words with five to ten high quality photos (photo size 1 Mb or above each).

**Email:** rajagopals@angloeastern.com and sriram.rajagopal@globalmet.org,  
cc to secretariat@globalmet.org

**Photos:** Please send them separately as jpg, jpeg, png or bmp files.



**Global Maritime Education & Training Association**

**GlobalMET Limited**

A Hong Kong not-for-profit company – Incorporation No.: 3025997  
www.globalmet.org

Non-Governmental international organization with consultative status at the IMO since 2009

RM 609, 6/F, Hong Kong Plaza 188, Connaught Rd,  
West Shek Tong Tsui, Hong Kong

### Secretariat

---

1070 Tower B1 Spaze I-Tech Park  
Sector 49 Gurugram 122002 India  
Tel 91 124 45525 56/57  
globalmet.secretariat@gmail.com