



ARAB MARINER

Specialized Maritime Newsletter

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IMO Convention
ratification,
US Type Approvals
put ballast water
regulations on the
home stretch

By: Thomas Kirk

Blue Economy Wave Power

By: Dr. Seif Bayoumi

Road to Greener Future

By: ClassNK





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Developing and standardizing training onboard



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Academies and maritime universities contribute to the development of human resources. The introduction of sophisticated computing systems and advanced equipment plays an important role in the method of delivering the syllabus, educational aids and to develop the cadet's practical knowledge/skills during the on board training. In addition, this will contribute on developing a quality educated and trained officers, who will be familiar with new technologies.

A series of behavioral changes in student attitude in dealing with technology and video games and applications. The question is how to turn a video game student into a responsible well-trained marine officer. A quality assured maritime education and training must take into account the fact that students have reduced specialist knowledge. The solution must therefore not be individual. The Information Technology must guide them toward the games with marine thematic.

Rapid development of information technology, computers and communication technology considered by the International Maritime Organization (IMO) in the 2010 enhancement of the Standards Training, Certification and Watch keeping for

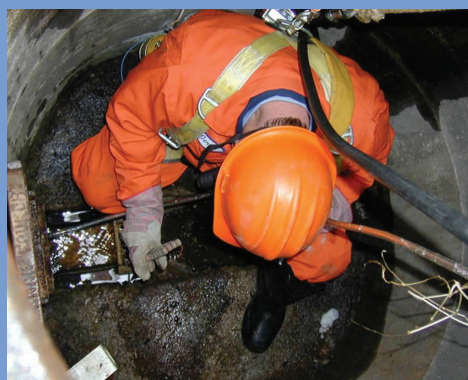
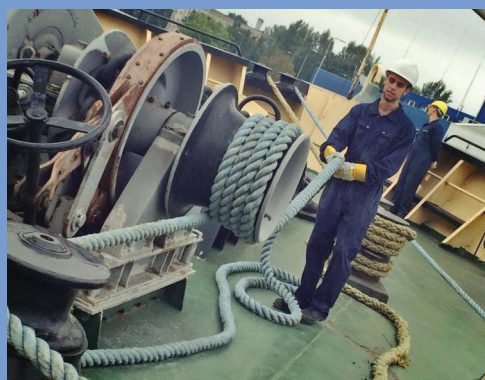
seafarers (STCW) Convention and Code (STCW, 2010) in Manila, Philippines, recent STCW amendments demonstrates that no set standards for the implementation of e-learning in the MET as the term Technology enhanced learning (TEL) is not widely applied in the Maritime education and Training (MET).

Technology will allow much cadets, refresher and upgrading training to be carried out onboard, which currently requires seafarers to attend the courses ashore. The opportunity for the seafarer's private study at sea, a service long denied him/her, will become reality as Internet links become common on board ship.

Obviously, the Maritime Academies and Universities need to make further effort to use Information Technology in the Maritime Education and Training process as it is mainly limited to the watch keeping task but did not include the shipboard seamanship and the deck work.

Cadet training worldwide has traditionally been the responsibility of ship-owners. It followed the practical apprenticeship approach whereby cadets are recruited, mostly from traditional seafaring communities and most probably from a seafaring family. Cadets were placed under the tutelage of a master mariner with whom they sail and in the process acquired the necessary seafaring skills and competencies to enable them to execute the duties of competent seafarers.

Due to increased technology in ship operations, MET was brought to change teaching methods to bring MET to shipboard reality through using simulators which is a high cost solution due to its high initial cost, maintenance and frequent upgrading, unfortunately simulators does not cover



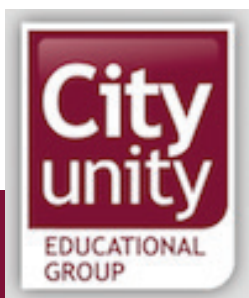
all required training aspects in a shipboard reality, practical aspects like seaman ship training, deck work and maintenance, safety systems management, shipboard maintenance and inspection routine training in addition to familiarization with shipboard parts are not covered by simulators, moreover, skills like enhancing maritime English language and enhancing management proficiency are not available in simulators training. The onboard training which is a job oriented training is the most effective part of MET, where cadets combine theory with practice onboard through introducing knowledge and training skills, but not taken seriously by ship staff so learning outcomes cannot be predicted. The need of a quality seafarer in the context of globalization in shipping industry derived the need to develop a technological intervention to standardize training onboard and to fulfil the present training gaps, which is not covered by simulators.

Enhancing seafarer skills through proper MET tools is needed due to the present and forecasted significant shortage in skilled seafarers in the global shipping market, which are observed by the BIMCO (2010) and (2015) reports. Although, the rapid development in technology is pushing MET activities to change teaching and learning methods to cope with the new technological

tools, MET just consider simulators training as a tool for shipboard reality. Simulation training is a high cost solution due to its high initial cost, maintenance and frequent upgrading. In addition, simulators do not cover all required training aspects in a shipboard reality. Practical aspects like seaman ship training, deck work and maintenance, safety systems management, shipboard maintenance, inspection routine training and familiarization with shipboard parts are not covered by simulators training. Moreover, skills like enhancing maritime English language and enhancing management proficiency are not available in simulators training.

The onboard training which is a job oriented training is the most effective part of MET, where cadets combine theory with practice onboard through introducing knowledge and training skills, but not taken seriously by ship staff, therefore, learning outcomes cannot be predicted. The need is urgent to restructure the onboard training globally in order to produce a quality seafarer in the context of globalization in shipping industry driven from the intention to develop a technological intervention tool and network to develop the follow up and standardize training onboard and to fulfil the present training gaps which is not covered by simulators.





Blended Learning and Maritime Education

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*The Case of the
cooperation between
the Arab Academy of
Science,
Technology and Maritime
Transport
and
City Unity College Greece*

INTRODUCTION

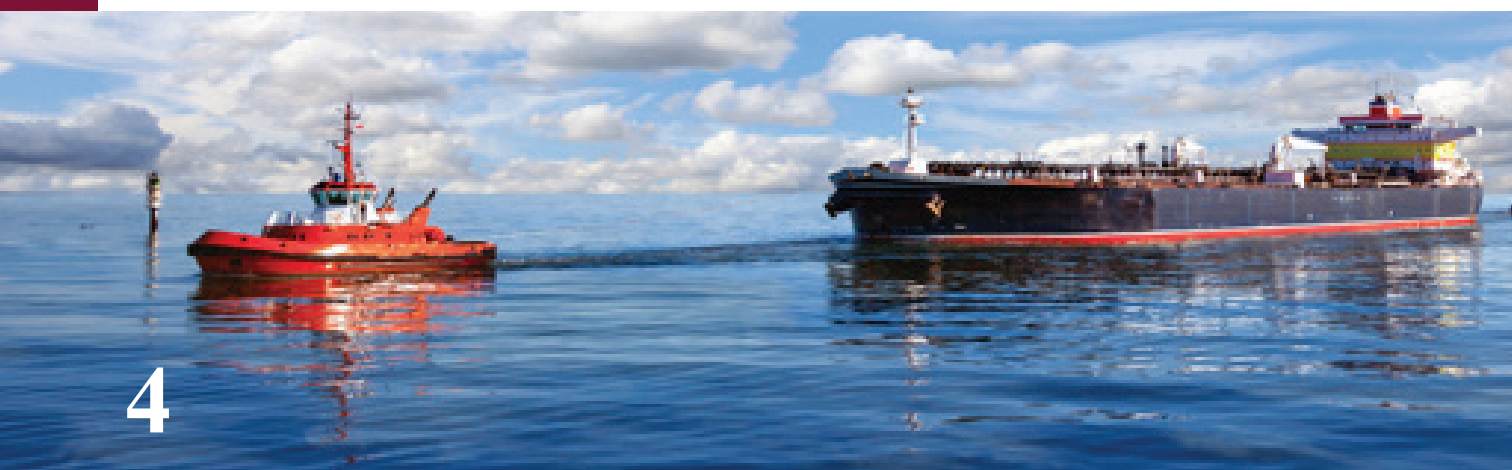
This article endeavors to present, as a case study, the development, formulation and operation of the cooperation between the Arab Academy of Science, Technology and Maritime Transport and City Unity College Greece in the form of the establishment of potential Blended Degree Programs.

It is commonly accepted today that the evolution of technology together with all the innovations and research developments have generated themselves new methodologies in education.

Therefore, we should not just perceive them only as methodological tools in higher education but also, at a different level, as a new educational norm since they have created a completely new methodology of learning. This new spectrum of learning methodologies has forced the existing educational institutions to seek and develop new theories and models of didactics away from the two traditional systems of vis-à-vis or distance learning. In this framework, the most successful and innovative new norm that has been evolved recently is Blended Learning.

HISTORICAL BACKGROUND

On the 31st of August 2016 Mr Harris Geronikolas the President of the Arab - Hellenic Chamber of Commerce and Development in his capacity as the President of City Unity College Educational Group signed a Memorandum of Understanding with the President of the Arab Academy for Science, Technology and Maritime Transport in Alexandria, Egypt, Prof. Ismail Abdel Ghafar Ismail Farag.



This important agreement will pave the way for further cooperation in the field of education, research and other educational activities. It also signals the vital role of education in the strengthening of international relations between Europe and the Arab countries.

In this framework, both institutions were inspired by the extensive possibilities offered by international co-operation and also recognized the need to develop and nurture new partnerships and to share human and material resources, with the aim to promote international understanding and contribute to the pool of global knowledge.

THE BLENDED LEARNING METHOD

Blended courses (also known as hybrid or mixed-mode courses) are classes where a portion of the traditional face-to-face instruction is replaced by web-based online learning (University of Central Florida, 2016). On Blended Learning programmes, students can complete their studies studying online on an e-learning platform and on campus.

The majority of blended-learning programs resemble one of four models: Rotation, Flex, A La Carte, and Enriched Virtual. The Rotation model includes four sub-models: Station Rotation, Lab Rotation, Flipped Classroom, and Individual Rotation.

1. Rotation model: a course or subject in which students rotate on a fixed schedule or at the teacher's discretion between learning modalities, at least one of which is online learning. Other modalities might include activities such as small-group or full-class instruction, group projects, individual tutoring, and pencil-and-paper assignments. The students learn mostly on the brick-and-mortar campus, except for any homework assignments.

2. Flex model: a course or subject in which online learning is the backbone of student

learning, even if it directs students to offline activities at times. Students move on an individually customized, fluid schedule among learning modalities. The teacher of record is on-site, and students learn mostly on the brick-and-mortar campus, except for any homework assignments. The teacher of record or other adults provide face-to-face support on a flexible and adaptive as-needed basis through activities such as small-group instruction, group projects, and individual tutoring. Some implementations have substantial face-to-face support, whereas others have minimal support. For example, some Flex models may have face-to-face certified teachers who supplement the online learning on a daily basis, whereas others may provide little face-to-face enrichment. Still others may have different staffing combinations. These variations are useful modifiers to describe a particular Flex model.

3. A La Carte model: a course that a student takes entirely online to accompany other experiences that the student is having at a brick-and-mortar school or learning center. The teacher of record for the A La Carte course is the online teacher. Students may take the A La Carte course either on the brick-and-mortar campus or off-site. This differs from full-time online learning because it is not a whole-school experience. Students take some courses A La Carte and others face-to-face at a brick-and-mortar campus.

4. Enriched Virtual model: a course or subject in which students have required face-to-face learning sessions with their teacher of record and then are free to complete their remaining coursework remote from the face-to-face teacher. Online learning is the backbone of student learning when the students are located remotely. The same person generally serves as both the online and face-to-face teacher.

(Source: Horn Michael B. and Staker Heather, 2014).

INSTRUCTIONAL TOOLS AND METHODOLOGY

The Maritime programs will be realized by using the following instructional strategies:

- Authentic cases and scenario-learning
- Coaching and mentoring
- Problem-based learning
- Self-paced learning
- Virtual team collaboration and problem-solving
- Simulations or gaming
- Guided learning
- Modeling of the solution process
- Exploration and discovery discussion
- Lecturing and instructor-directed activities
- Debates and role play
- Maritime virtual campus at Second Life
- Knowledge management tools
- Online simulation
- Electronic books
- Wikis



IMO Convention ratification, US Type Approvals put ballast water regulations on the home stretch

After an extended period during which regulations and technology related to ballast water management suffered from misalignment, shipowners now have greater certainty on international and regional requirements.

However, despite last year's ratification of the IMO Ballast Water Management Convention, the industry continues to work on twin compliance tracks to meet IMO and US Coast Guard rules.

Because an agreement could not be reached at last October's IMO MEPC 70 meeting on implementation dates for the Convention, this will be on the agenda for the upcoming meeting of the MEPC in July 2017. Member states will consider whether the effective compliance date should remain as originally proposed – the first renewal of the IOPP certificate after September 2017 – or the first renewal after September 2019.

Once the entry into force dates for the IMO BWM Convention have been agreed, shipowners will have a clear deadline by which they will need to install a BWMS.

The United States does not intend to ratify the Convention and has adopted its own ballast water management regulations. The USCG's 'BW Discharge Standard Final Rule' is in force and applicable to all vessels discharging ballast water in US ports or territorial seas. Ships must be in compliance with USCG regulations and also with the requirements of the US Environmental Protection Agency. They must additionally be in compliance with the local regulations in 16 individual US states if discharging there.

The principal difference between the IMO and USCG regimes is that vessels, irrespective of flag, discharging ballast in US waters must have a BWM treatment system which has been Type Approved by a USCG-accredited independent laboratory.

Largely due to the lack of US type approvals for BWMS, the USCG has issued more than 10,000 extensions in response to specific applications by shipowners. These extension letters must be carried aboard the vessel and the crew is responsible for ensuring that the terms of the extension are specifically followed.



Now that the USCG has issued type approval certificates to three vendors, the policy regarding extension applications has been significantly tightened.

The USCG's Policy Letter states that in order to prevent delays to vessel schedules, the master, owner, operator, agent, or person in charge of a vessel is reminded to keep BWMS records onboard the vessel and immediately available for review by Coast Guard officials.

When looking for the right BWMS technology for their unique fleet profiles, owners and operators must weigh the technical merits, costs and benefits of each available alternative. ABS has the depth of knowledge to provide an impartial comparison on the particulars of the relevant BWMS technologies.

Through the ABS BWMS Technology Evaluation Service, owners and operators can save time and gain a better understanding of the information that they need to make informed decisions about their fleet. The ABS BWMS Technology Evaluation Service is offered to clients irrespective of vessel class.

Equipped with a like-for-like technology comparison, owners and operators can make better informed and smarter decisions about their fleets. Additionally, where specifically requested by the vendor, all BWMS that have successfully met the requirements of the ABS Guide for Ballast Water Treatment are issued a Product Design Assessment or Type Approval Certificate as appropriate.



Attributable to Thomas Kirk
DIRECTOR,
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GLOBAL MARINE,
ABS

Road to a greener future

At the end of October 2016, IMO's MEPC70 agreed to stick with plans to reduce the global permissible sulfur content in ship fuels to 0.50% from 2020. The new global limit is a significant step up for an industry still coming to terms with switching between the fuels of 0.10% sulfur content permitted inside Emissions Control Areas from January 2015 and those of 3.50% content permitted outside.

At the same time, 2016 proved decisive in terms of NOx emissions, after Tier III regulations came into force on NOx emissions lowered permitted limits by 80% when compared to Tier I regulations and by around 75% against Tier II. In this case, it is difficult to achieve the compliance by taking conventional measures inside the engine itself.

With Tier III already in force and a new, more stringent cap on fuel sulfur content looming, it is timely to review recent developments in the different technologies which address regulatory developments and outstanding issues.

LNG-fuelled vessels

With over 70 LNG-fuelled ships currently in service throughout Europe and more than 160 LNG-fuelled vessels expected to enter into service by 2018.

Gas fuel engines equipped with LNG-fuelled vessels are classified into two types. The pre-mix combustion type is characterized by the forced ignition of the gas and air pre-mixture. The second type involves diffusive combustion, and is comparable to a diesel engine, with high pressure gas injected directly into cylinders. Pre-mix combustion types burn a uniform lean fuel-air mixture to lower the peak combustion temperature and thereby independently comply with the Tier III regulations.

Diffusive combustion types that directly inject high pressure gas require the use of Selective Catalytic Reduction (SCR) or an Exhaust Gas Recirculation (EGR), or other NOx reduction technology to meet the Tier III regulations. In the context of Tier III alone, LNG fuel supply equipment including fuel tanks entail high initial costs, but its relative operational cost will depend on the price of LNG fuel and the bunkering infrastructure.

Methanol

Methanol could be a 100% renewable material, as it can be produced from a variety of renewable feed-stocks or as an electro-fuel. Every year over 70 million tons are produced globally, so it is available worldwide and is very similar to heavy fuel oil (HFO) in character.

Handling a liquid like methanol has clear advantages over gas or cryogenic fuels in terms of fuel storage and bunkering. However, the drawback is that methanol is a low-flashpoint fuel and can be toxic.

Methanol fuel produces no sulfur emissions and relatively low levels of nitrogen oxide emissions, which make it a suitable option to comply with SOx emissions. However, to reduce NOx from a diesel-fueled engine to Tier III levels, there is a need for additional installations such as a SCR or an EGR.



SOx scrubbers

Exhaust gas cleaning systems (SOx scrubber) can also be installed for reducing SOx emissions to achieve compliance with the regulations if approved by the flag administration. SOx scrubbers can remove around 98% of sulfur contained in the exhaust gas, desulfurizing exhaust gas emitted when using fuel oil with a sulfur content concentration of 3.50% m/m to decrease the concentration to the level equivalent to that of when using low-sulfur fuel oil with a sulfur content concentration of 0.10% m/m .

The use of SOx scrubbers is now mainly aimed to comply with the regulations imposing a maximum limit on sulfur contents of 0.10% in ECAs in force since January 2015.

Scrubbers have been adopted particularly for many ferries and roll-on/roll-off (Ro-Ro) ships operating in the Baltic Sea and the North Sea

SCR vs EGR

In line with IMO Tier III rules, SCR technology is designed to selectively promote the reduction reaction between NOx and a reductant agent through catalysis to decrease the NOx level in the exhaust gas, using an aqueous solution of urea as the reductant agent. SCR technology can lower NOx emissions by at least 90% without combination with any other technology

and has only a minor impact on the fuel efficiency of the engine itself. However, it entails higher operation costs due to the need for a reductant agent.

EGR technology is a method that recirculates part of the exhaust gas after combustion to the combustion chamber. Part of the exhaust gas is separated and passed through an exhaust gas cleaning system called the scrubber, and then mixed with the scavenging air. The mixture of air and exhaust gas lowers the oxygen concentration in the combustion chamber and raises the concentration of CO₂ with a higher specific heat. Combustion is slowed and the gas heat capacity in the combustion chamber rises to lower the combustion temperature and thus decrease NOx emission levels.

The EGR system is known to be more expensive to install for a small or medium-sized engine, but SCR's need for aqueous urea is a clear disadvantage. However, a decision on whether to choose SCR or EGR needs close attention to ship type, hull form design and ratio of sailing within ECA, among other considerations.

LIABILITY TREATIES ON THE IMO AGENDA



An IMO workshop in Egypt supported countries in the Arab region to implement and enforce treaties dealing with liability and compensation. The workshop, took place in Alexandria (13-16 March) in cooperation with the Arab Academy for Science, Technology and Maritime Transport (AASTMT), provided a comprehensive overview of the IMO liability regime, including treaties covering wreck removal, salvage, carriage of hazardous and noxious substances, passengers, CLC, Fund and Bunkers Convention.

The history of the treaties' development, their principles, implementation and practical

implications were all covered, with a view to supporting officials to implement and enforce the full liability regime in States in the region.

IMO was represented at the Regional Interactive Workshop on IMO Liability Conventions by Jan de Boer and Amr Hussein, who are joined by Chiara Della Mea (IOPC Funds) and Tjorborn Claesson (IG of P&I Clubs). The event was organised under the IMO Integrated Technical Cooperation Programme (ITCP) for the Arab/Mediterranean region and within the framework of the MoU between IMO, the Ministry of Transport of Egypt and the Arab Academy for Science, Technology and Maritime Transport (AASTMT).

WMU PRESIDENT VISITED THE AASTMT



While in Alexandria, President Doumbia-Henry had the opportunity to visit the Arab Academy for Science, Technology and Maritime Transport (AASTMT). Dr Ismail Abdel Ghafar, President of AASTMT is a WMU Governor and arranged for Dr Doumbia-Henry to meet with AASTMT faculty and staff who are WMU alumni.



The 6th International Maritime Transport and logistics Conference

WMU President Speaks at 6th International maritime Transport and logistics Conference



**WORLD
MARITIME
UNIVERSITY**

Dr. Cleopatra Doumbia-Henry, World Maritime University (WMU) President, delivered a keynote address at the 6th International Maritime Transport and Logistics Conference (MARLOG) organized by the Arab Academy for Science, Technology and Maritime Transport that was held in Alexandria, Egypt from 19-21 March.

On the topic of Global Integration in Ports – Future Opportunities, the President highlighted the significant roles the World Trade Organization, successive technological advances and national economies have played in rapid globalization and the efficiency and reliability of global supply chains.

As Chair of a panel at the conference, President Doumbia-Henry also addressed the topic of The Human Element in Shipping: Where are we today? She noted that the maritime industry is often referred to as “the lifeblood of world trade,” but maintained that what should also be acknowledged is that “the human element in shipping, particularly seafarers, is the lifeblood of the maritime industry and thus, by extension, of world trade.



Facilitation Committee (FAL)

41st session 4-7 April 2017



**Capt.
Emad Khafagy**
DEAN,
IMO COMPOUND,
AASTMT

The forty one session of the Facilitation Committee was held at IMO Headquarters from 4 to 7 April 2017, under the chairmanship of Mr. Yury Melenas (Russian Federation). The Vice-Chairman of the Committee, Mrs. Marina Angsell (Sweden), was also present. The session was attended by delegations from Member states including a number of Arab states and Associate Members; by representatives from the United Nations Programmes, specialized agencies and other entities; by observers from intergovernmental organizations with agreements of cooperation; and by observers from non-governmental organizations in consultative status.

The Arab Academy for Science, Technology and Maritime Transport participated in the session representing the League of Arab States according to the Arab Transport Ministers council decision.

The following is a summary of the important results of the session:

1. Updating of the Explanatory Manual to the FAL Convention

The Committee made progress in updating of the Explanatory Manual to the FAL Convention to reflect the amendments to the Annex to the FAL Convention adopted by FAL 40, which are expected to enter into force on 1 January 2018. The Committee agreed to establish a correspondence group to progress the work intersessionally, and extended the scope of the review of the Explanatory Manual to include additional aspects, such as best practices, operation procedures in ports, etc, and agreed to extend the target completion date until 2019.



2. Maritime Single Window project

The Committee discussed the way forward for IMO's Maritime Single Window project. There was support for the development of a completely new prototype, taking into account the experience of others in the development and implementation of maritime single window systems.

The Committee recognized that the project provided a framework that Member States might refer to, to help them meet their obligations to establish electronic interchange of information by 9 April 2019. However, the goal was not to establish a global system.

Member States and non-governmental organizations were invited to submit information to the next session to progress the project further.

The Committee established a correspondence group to review and update the guidelines for setting up a single window system in maritime transport (FAL.5/Circ.36), to ensure it reflects best practices and accurately reflects developments in maritime trade, electronic and automated machine-to-machine communication and cooperation between Member States, and other relevant developments.

3. "Electronic signature" discussed

The Committee discussed the development of guidance relating to electronic signature and decided to develop (at the next session) guidance for authentication, integrity and confidentiality of content for the purpose of exchange via maritime single windows, with a target completion date of 2019.

4. Review of the compendium on electronic business

The Committee agreed on the need to review the IMO Compendium on Facilitation and Electronic Business, with a target completion date of 2019. The Committee also invited the World Customs Organization (WCO) to continue hosting an informal correspondence group on interoperability, standardization, and harmonization issues.

5. Stowaways reporting form updated

The Committee agreed on the importance of including information related to port, port facility number, berth and terminal information when Member States and international organizations report stowaways' incidents to the Organization. The Committee agreed to update the circular on information on stowaway incidents (FAL.2/Circ.50/Rev.2), and issue a new unified interpretation to Appendix 3 of the FAL Convention, to reflect this.

6. Reduction in number of stowaways

According to information provided by the P&I Clubs, statistics for stowaway cases in 2014-2015 showed a significant decrease in the numbers of incidents and stowaways (the full set of data will be submitted to FAL 42). The Committee also noted that IMO capacity-building activities, including regional seminars on stowaways, had led to a reduction in the number of stowaway cases in targeted ports.

7. Cyber security guidance agreed

The Committee, recognizing that the existing Interim guidelines on maritime cyber risk management (MSC.1/Circ.1526) already contains already facilitation aspects, approved a joint MSC-FAL circular on Guidelines on maritime cyber risk management (subject to concurrent decision by MSC 98).

8. Reduction of administrative burden in cases of vessel needing to put sick or injured persons ashore

The Committee approved a circular to encourage public authorities to share the relevant information submitted by the master of a vessel needing to put sick or injured persons ashore amongst themselves, in order not to create an additional administrative burden to the ship, through multiple reporting requirements.



**Seif Bayoumi,
PhD.**

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Wave Power

Egypt energy consumption is estimated to increase extensively over the next decades and almost all available conventional water resources have been exhausted. The traditional methods of electricity production are leading to serious environmental and economic complications. Moreover, the vast urban expansion, mainly along the coastal areas to relieve the population pressure from the old valley and delta, requires the abundance of energy and potable water resources. Egypt comprises around 3000 kilometers of seacoasts with different climatic conditions. Marine renewable energies may provide Egypt with an alternative energy source for electricity production and water desalination required for sustainable development in remote coastal areas or even maritime ports and offshore establishment such as fisheries.

Marine renewable energy encloses offshore wind energy, thermal energy conversion, tidal energy, and wave energy. The winds and gravitational pull of the sun-earth-moon system charge the ocean and sea waves with large amounts of kinetic energy. An important feature of sea waves is their high energy density, which is the highest among the renewable energy sources with low to medium environmental impact.

Energy in waves is harvested by the use

of Wave Energy Converters (WEC). Each WEC produces a highly irregular alternating current (AC), following from the reciprocal wave motion. From a system perspective, this current needs to be rectified and conditioned before the plant is connected through sub-sea cables to the grid.

From an economic point of view, large waves dictate the costs while the small and medium waves give the incomes. If a WEC is to survive in large waves, it must have large safety margins. This usually raises the total costs of the system without giving a corresponding increase of the income. Therefore, the idea of wave power plants consisting of many relatively small units, in contrast to large-scale converters reaching several megawatts is very attractive.

WECs are complicated devices. They may be categorized in many ways. WECs can be categorized into shoreline, near shore, and offshore devices. Another two major categories of WECs are active devices where the interface element responds to the wave action and produces the mechanical work, and passive devices where the device remains stationary and the water movement relative to the structure is made to work. The first category includes different types of floating bodies; the second one includes constructions fixed rigidly to the sea bottom

or shore. WECs can be classified by the type of displacement and the reaction system employed. Various hydraulic or pneumatic power take-off systems are used, and, in some cases, the mechanical motion of the displacer is converted directly to electrical power (direct-drive)

It is vital to mention that in the Mediterranean Sea, the average annual wave energy may reach 275 MWh/m. For this purpose, several research programs with government and private support started mainly in Portugal, Spain, France, and Greece aiming to harness the wave energy in both medium and long terms.



International Yacht Training Program

International Yacht Training (IYT) offers training for both the professional and recreational yachtsman and woman. Our Master of Yachts certificates are internationally recognized by 24 governments worldwide, including the UK maritime and coastguard Agency (MCA). All courses meet S.T.C.W. '95 standards where applicable.



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FROM LAND TO SEA, CHARTING NEW COURSE



3rd MATE
Mohamed Dawod

Admission & Impression

I went to the academy for admission to maritime transportation college, when I first entered Abu Qir campus I was fascinated by the infra & superstructure but as a person I more care for personnel so I tried to visit the maritime facilities to have a better overview and also to discuss with formers I discussed with a gentleman. It was a real surprise! The gentleman who later on turned to be a senior lecturer warmly welcomed me, he even introduced me to other lecturers, administrators and students. At that moment I told myself "a place which combines such classy and high level personnel -for sure- will be a good place and will teach me many things even beyond maritime knowledge"

Sea career choice

I look back to myself years ago when I had to choose my educational & career path, I remembered the day my late father discussed with me, he said "Son! You have achieved an excellent with honor grade in high school, now you must choose your college, I understand that you have engineering choices which are considered a wish for many but why don't you consider the sea career path? We have Arab Academy, a highly standard educational institute which qualifies you to become a ship's mate later on a ship's captain for high seas, also I think the sea will be suitable for men like you" the word sea and ship's mate truly touched my heart. since then I made my choice I'll visit the academy.

Education Standard

When I started my 1st semester & by the amount of facilities the academy provided I became very sure I'm about to really learn many things. Again, it's all about personnel, our lecturers were our mentors we could discuss with them about many things from sea to personal stuffs, I and a group of colleagues always wanted to learn more. The teaching staff always supplied us with "to-read" materials and discussed, commented and guided us. There are words they frequently remarked (safety, behavior, continuous learning, reading, communication..etc)

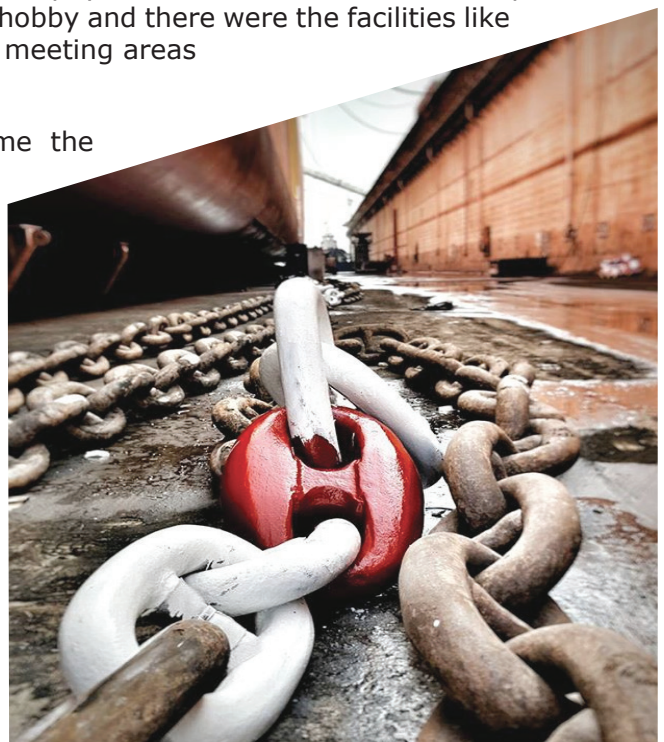
Colleagues & Multicultural Sense

The academy provide indoor housing for first 4 semesters, my colleagues were from many different cultures this taught me how to socialize & co-operate with others, respecting our differences moreover overcoming language barriers. We are in constant contacts until now from different and very far spots worldwide.

Our lecturers taught us that working and living at sea is hard so they instructed us to maintain a high mental and physical status. Beyond education, leadership and physical courses each of us could practice his own sport, his own hobby and there were the facilities like playgrounds, GYM and meeting areas

The Library

The library was for me the most comfortable zone, the friendly librarians, the so many books, magazines, journals, researches and maritime publications. I -till now- constantly visit them even if I have no plan to pick a certain book. In my spare time I go there pick up something and enjoy.



Support beyond Education

Although the role of any educational institute is limited to the education & training process but the academy tries to provide opportunities for graduates with all possible means, also they welcome any ideas and give full support, I was part of a team that suggested constructing "Egyptian Seafarers Database Project" a web-based database that provides key performance indicators & updates about our seafarers status, also provide a window for ship managers/operators to select Egyptian seafarers under supervision of the academy, the academy did support us starting from the president's office to departments and the project is carried on.

Graduation

Graduated and I feel that I'm ready to penetrate the market, It's now about the opportunity and how to catch it. My choice was to become a bulk mate so I headed to National Navigation Company NNC, the company adopts a policy

for picking distinctive graduates and here I go.

Thirsty for More

After my sea service time I finished my undergraduate studies but I wanted to learn more so I applied for MPI (Maritime Postgraduate Institute) for master degree studies my major is "fleet operation and marine safety" again my lecturers supported me with all available means with them I was introduced to what's going on ashore, how the industry operates. I really liked the fact that we have no barriers, you can set up a meeting with any level at the teaching or administrative staff and discuss any topic asking for guidance or support.

The academy for many of us "seafarers" is a second home, our relations don't end after graduation as we go for certifications, training and attending promotion courses. Even the staff there is our supportive friends we contact them when we need assistance or guidance no matter what distance separate us

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This is the second article in a series that looks at the opportunities and challenges of seafarer's shore leave. The first article explored the significance of shore leave for seafarer's. This second article will continue by examining the most important problems looming with the shore leave.

The issue with respect to challenges experienced by the seafarers who had been declined shore leaves and access to shore based facilities was distinguished as divergences in the usage of the IMO instruments received to guarantee uniform execution of SOLAS and ISPS code.

Visa necessities and migration controls are additionally influencing increasingly seafarers, with specific nationalities being liable to more prominent limitations than others as groups get to be multinational.

Issues Emerging with the Shore Leave

That implies some crew individuals can get shore leave, while their partners need to keep focused. There is likewise an issue with various authorities deciphering the standards in various ways. Moreover, a few ship-owners are denying shore leave to their crew just to maintain a strategic distance from conceivable challenges.

Expanding requests on crews and ships are cutting radically into time in ports. In and out. Cargo work, audits, surveys and administration visits.

There are less open doors for shore leave, and it is clear for seafarers this is not supportable. It is not just the business which has changed, ports themselves have developed. Expansive new ports and stretched out terminals are liable to be remote and segregated, far from the conventional urban communities and populaces. So distant from civilization, that seafarers' choices, when they do have time off-ship, are progressively constrained and costly.

Security can bring positives yet unfortunately, draconian one-size-fits-all security methodologies are detrimentally affecting seafarers.

Well no doubt seafarers are not being listened to, it appears that foundations, unions and expert bodies are being overlooked. Somebody must skirt their duties and ports must not be considered responsible. Indeed, even from a governmental point of view, port states just can't go sufficiently under stress, and flag states are having the capacity to disregard the matter.

Far from security, disregarding documentation – it appears that very effortlessly and frequently seafarers turn into a sort of money dairy animals. Taxi firms, transport administrators, even port organizations, are draining seafarers and making it excessively costly, making it impossible to get ashore.

In the next article, we will look at what conventions Say about shore leave.



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The environmental aspects of the ballast water convention on marine environment

Ballast water is very important for ship stability but it is very harmful for the marine environment as it contains several species (a group of animals or plants

whose members are similar and can breed together to produce young animals or plants) and bacteria that lie in the water and harm the human health. The international maritime organization (IMO) has actively taken regulated measure by adopting the International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM) Adoption: 13 February 2004; Entry into force: 8 September 2017.

Under the regulation of Ballast Water Exchange, all ships using ballast water exchange should whenever possible, conduct ballast water exchange at least 200 nautical miles from the nearest land and in water at least 200 meters in depth, taking into account Guidelines developed by IMO; in cases where the ship is unable to conduct ballast water exchange, this should be as far from the nearest land as possible, and in all cases at least 50 nautical miles from the nearest land.

When these requirements cannot be met areas may be designated where ships can conduct ballast water exchange. All ships shall remove and dispose of sediments from spaces designated to carry



ballast water in accordance with the provisions of the BWM plan.

In addition, under the ballast convention, each vessel is required to carry a ballast water management plan approved by its flag administration. This plan demonstrates the method by which the vessel will implement the regulations of the convention, including methods for ballast water exchange if necessary. The plan must employ a shipboard officer who has the responsibility to ensure that the plan is properly implemented.

Moreover, The Convention requires specific treatment systems to be installed and identified in the management plan, treatment systems must be appropriate for treating the species in the ballast water.





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The AASTMT is elected for the second time to membership of the next IEB (IAMU)

In 1999, the Arab Academy for Science, Technology and Maritime Transport (AASTMT) among other six universities representing the five continents of the world agreed to establish the International Association of Maritime Universities (IAMU), with a shared recognition of significance of maritime education and training in the rapid globalization of the international shipping arena.

Since then, IAMU has significantly expanded its membership, and now boasts more than 60 universities of the world's maritime education and training universities/faculties, and The Nippon Foundation as its members, totaling 62 altogether. Since the inception of the IAMU, the AASTMT is considered one of the active member universities provides a unique support and well participation in most of the IAMU activities and regular events. Moreover, in 2003, the AASTMT successfully hosted the fourth Annual General Assembly (AGA4) in parallel with its academic conference and student forum in Alexandria, Egypt. Recently, in March 2017 and during the meetings of the International Executive Board (IEB) of the IAMU in Varna (Bulgaria), the AASTMT and for the second time in a row was elected to the next IEB (2018-2020) as one of the largest three maritime universities in the world.



The next IEB will commence its work in April 2018 and ending by the end of March 2020. This selection was an appreciation to the AASTMT's active role in the academic and research levels, as well as for its outstanding role and great support to the work of the Executive Board in the current session. Furthermore, as a draft proposal submitted by the Academy to establish and develop an interactive database for the IAMU, a new working group has been approved to be formed for implementation of the proposal, the Academy has been selected to lead this working group. The main mission of this working group is to achieve an

appropriate scientific and research link among the member universities of the IAMU as well as between member universities and the maritime industry. On another subject, based on a development project presented by the AASTMT as a principal investigator (PI) and with a consortium of distinguished researchers from other three international maritime universities (World Maritime University (WMU), Sweden - Liverpool John Morris University (LJMU), UK and University of South East Norway (USN), Norway), The Academy is invited by the IAMU to join an existing Working Group on Maritime Training on-board Ships.

MARITIME EVENTS



2017

JUNE



*Tuesday 13-June - Thursday 15-June
08:00 - 17:00
Mayflower Park venue, Southampton, UK
Exhibitions & Conferences*

SEPTEMBER



*Monday 25-September - Wednesday 27 September
08:00 - 17:00
Abu Dhabi National Exhibition Centre, Abu Dhabi, UAE
Exhibitions & Conferences*

OCTOBER



*Monday 23-October
18:00 - 22:00
Atlantis The Palm,
Dubai - UAE
Exhibitions & Conferences*



*Tuesday
24-October
08:00 - 17:00
Grosvenor House
Hotel, Dubai
Exhibitions & Conferences*

NOVEMBER



*Tuesday 07 -November
Friday 10-November
08:00 - 17:00
Ahoy Rotterdam,
The Netherlands
Exhibitions & Conferences*



*Wednesday
08- November
08:00 - 17:00
Abu Dhabi, UAE
Exhibitions & Conferences*



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