

# TRAINING JOURNAL 2016

## FEATURE REPORT

Real Action  
for Proficiency  
& Promotion

## ANALYSIS

Quality Assurance in Training  
Education is the Basis  
for Maritime Talent

## INTERVIEW

Competitive Edge at UMTC



WELCOME  
ABOARD!

WELCOME TO REAL  
PARTNERSHIP!

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MARLOW INTERVIEW

Competitive Edge at UMTC



Dear Readers,

We are pleased to present the 2016 Marlow Navigation Training Journal, a publication that continues the new-look editorial style that we launched not so long ago. We had a great deal of positive feedback with this new approach of reporting on news, information and insights in maritime training at Marlow, which was also read, distributed and downloaded online by more people than ever before.

As always, content has been sourced from a variety of channels within the Marlow network, including United Marine Training Center (UMTC) in Manila, Kherson State Maritime Academy (KSMA) in Ukraine, Marine Training Centre (MTC) in Hamburg, as well as of course our training department at corporate head office in Cyprus. We extend our sincere thanks to all contributors.

One point, we believe, that is well highlighted in this issue is our company's commitment and proactive approach to training and development despite the continued challenges being faced by the shipping industry across the globe.

Since first embarking on our structured training programmes and initiatives many years ago, the vision has always been one of long-term sustainability, which can only come from constant action and determination, together with firm support from our partners. In education and training, this translates to real action in areas such as new facilities and equipment at the various training centres, as well as continued evolution of leading courses – an overview of these areas are presented in this training journal.

This year, a new academy based maritime cluster was launched in Kherson, Ukraine. This is an important initiative supported by numerous local and international organisations, such as Marlow and other private companies, academia (KSMA), industry associations,

national and local government including the Ministry of Education and Science of Ukraine, as well as financial organisations.

Other articles in this journal include a feature on Marlow's continuous proficiency development initiative, a report on simulator technologies by MTC, an analysis on the importance of quality education at maritime universities in the Philippines, and an interview with UMTC's training director, who offers us his view on the training centre's competitive advantage.

No doubt, investing in good people in shipping pays off. People are important and ships need good, qualified, and motivated seafarers to operate well and assure a prosperous voyage. On our part, they need to be provided with the right support, such as the proper tools and be adequately trained to be able to conduct their work in a safe and competent manner. At the same time, enhancing their attitude, motivation and loyalty to the company and to their work.

This is especially important in our industry, where quality and safety, as well as operational efficiency are paramount. At this point, we should also emphasise the importance of continuing to support the development of new cadets by providing positions on-board that allows them to attain the necessary experience and help towards ensuring a long-term sustainable supply of talent for the industry, especially officers.

We trust you find the 2016 training journal informative and motivating, and look forward to your continued feedback and invaluable support.

**Marlow Navigation  
Management**

“ Investing in good people in shipping pays off. People are important and ships need good, qualified, and motivated seafarers to operate well and assure a prosperous voyage ”



## TRAINING SEMINARS IN THE PHILIPPINES

A number of major training seminars took place at Marlow Philippines throughout 2016, both in maritime education and shipping.

Many clients and training partners utilised the premises and facilities for their events. Most notable were a BUSS Shipping seminar early in the year, Navigia Day in March, World Maritime University Field Study Program and PMMA Graduate School Seminar in April, a Bulk Carrier Training Seminar in October and a Hapag-Lloyd Seminar in November.

Meanwhile in the middle of the year, a technical management seminar took place, attended by management level officers from the Philippines and Vladivostok, Russia.

The three-day event covered topics including pilot on-board teamwork, fuel handling, fuel saving on-board, crew appraisal systems, the environmental training programme, discussions on current market conditions, communication between ship and shore, recent safety related incidents, as well as new regulations coming into force.

A presentation was also given on master-pilot relations and teambuilding. The Officers took part in group workshops to solve problems and find solutions to case study incidents.

We look forward to welcoming more events from training clients and partners in 2017 and beyond.



Technical Management seminar in the Philippines



From the left: Cornelia Beelmann, Prof. Dr. Carsten Wilken, Jan Meyering, and Prof. Dr. Marcus Bentin

“This agreement with Marlow is something unique and gives our University an outstanding profile”

## MARLOW TO COOPERATE WITH UNIVERSITY IN GERMANY

Marlow Navigation and the University of Applied Science in Leer, Germany sign an agreement to offer greater opportunities to maritime students.

Marlow Navigation has formed a cooperation with the University of Applied Sciences (Hochschule) Emden/Leer, Faculty of Maritime Studies to support students with their practical education.

Joint Managing Director, Marlow Navigation, Jan Meyering emphasised the great value of this agreement for both parties: “We at Marlow, and other shipping companies, need the know-how which these students will gain while training on-the-job and on-board vessels,” he said. “It is no doubt important that new talent is attracted to the shipping industry and given the right opportunities to gain invaluable experience in order to better learn and excel,” he added.

The agreement includes 10 student positions per year on vessels under Marlow’s crew managed fleet. Students must successfully complete two on-board assignments.

“Achieving the on-board component of the internship became rather challenging during an economically

difficult situation in the shipping sector. Therefore this new cooperation with Marlow Navigation is of great value,” said Dean of the University’s Maritime Studies, Prof. Dr. Marcus Bentin.

The application process lasts 26 weeks. “The students-to-be have to prove that they are fit for sea duty by having a medical examination beforehand, as well as to successfully complete safety training,” explained Cornelia Beelmann, in charge of internships and practical education at the University.

Demand for seagoing personnel, and ashore in management, has increased greatly over recent years, with the professions considered to be highly acclaimed in many countries around the world. Providing greater channels to develop new talent is considered fundamental to the industry and indeed the global economy.

At the moment around 430 students study in Leer. The faculty in Leer offers various courses in maritime studies, nautical sciences and ship management. In addition, an international Master’s course is planned in cooperation with the Norwegian city of Haugesund.

“This agreement with Marlow is something unique and gives our University an outstanding profile,” stated Vice President for Studies and Education and International affairs at the University, Prof. Dr. Carsten Wilken, during the signing of the agreement.



Hapag-Lloyd conducts crew conference at UMTC in Manila



## MARLOW-KSMA CELEBRATE 10 YEARS OF SUCCESS

The event took place on the 15<sup>th</sup> of October in Kherson, Ukraine and coincided with the annual inauguration ceremony of new cadets into KSMA. Present at the event were officials from local and central government, International Maritime Employers Council (IMEC), representative from Marlow Navigation Ukraine and Marlow corporate head office in Cyprus, the media, as well as other shipping companies.

“The last 10 years were a continuous success story in the area of maritime training and development, both for KSMA, as well as for Marlow Navigation, but more so for the many cadets that have been trained to become Marine professionals and specialists. The first graduates sailing by now as Masters and chief engineers on-board modern vessels,” said Chairman, Marlow Navigation, Hermann Eden during his speech to the cadets and guests.

Marlow is an industry partner to the Academy, employing Ukrainian cadets on-board crew managed ships as part of its ‘hands-on’ approach to training and developing maritime officers. Marlow selects KSMA students to join the company after their second study year as cadets. These students continue their studies in designated Marlow classes and return to the company when they have graduated as officers. The company further supports the academy by helping to upgrade and enhance education and training facilities.

“This co-operation proves well that a close relation between the educational institution and the industry is the best basis for a training that produces graduates fitting the needs of the industry and complying with modern requirements, being able to perform in this fast chang-

ing, demanding environment of international shipping,” continued Mr Eden.

Over the past 10 years, many projects have been initiated and completed jointly between Marlow and KSMA. The installation of the only free fall life boat in Ukraine, implementation of the communicative English teaching programme, development of the heavy lift course and the heavy lift simulator, commissioning of new laboratories and simulators, among many other.

“This development would not have been possible without the vision and dedication of the rector of the Academy, Professor Volodymyr Fedorovic Khodakovskiy and his team of specialists. The hard work of the rector and his team, the willingness to change and to adapt to a competitive environment has made KSMA what it is today, the best Maritime training institution in Ukraine. As well as to Captain Walter Wekenborg (former director of training at Marlow) and his team, who dedicated their time and work to make this partnership successful,” added Mr Eden.

During the event, Marlow and KSMA renewed their maritime training cooperation. An official signing of a memorandum for the establishment of the International Maritime Education and Training Cluster on the base of the Academy was also signed.

The aim of the cluster is to create an attractive investment climate for foreign investors in the Academy, providing proper conditions to systematically improve the quality of training and education of Ukrainian seafarers in order to improve their competitiveness in both national and global labour markets and to help meet the industry’s increasing demand for marine officers.

Marlow Navigation and Kherson State Maritime Academy (KSMA) recently celebrated 10 years of collaboration in the training and education of marine professionals.



Chairman, Marlow Navigation, Hermann Eden addresses the people of Kherson



Marlow and KSMA renew agreement in training and education of marine professionals in Ukraine

Chairman, Marlow Navigation, Hermann Eden and CEO, IMEC, Francesco Gargiulo cut the ribbon to the new simulator complex at KSMA



## INTERNATIONAL MARITIME CLUSTER IN KHERSON

Working group meeting to discuss and plan the newly created IT-MET Chamber at Kherson State Maritime Academy (KSMA) as a model of international maritime cluster in Ukraine.



Official tour of KSMA facilities



Founding representatives of the Innovation Technologies – Maritime Education and Training Chamber (IT-MET Chamber) met in Kherson in October to sign a memorandum of agreement on the organisation's structure and operation, as well as to plan activities for 2017, and draft a longer-term framework until 2020.

"This cluster is an important initiative for the maritime sector in Ukraine, as well as the wider industry," stated General Manager, Marlow Navigation, Alfred von der Hoeh, who is also the company's representative to the International Maritime Employer's Council (IMEC).

"The cluster will help meet the demand for highly qualified maritime professionals through systematic and consistent training. It will ensure cadets are well positioned to apply the knowledge, skills and competencies gained at the academy when they work on-board our fleet," he added.

IT-MET Chamber brings together the knowhow and resources of international and national shipping companies, central and local government bodies, financial and public organisations, as well as research and educational institutions.

In general, the cluster's pledge is to further maritime education and training in Ukraine, assist with innovation, infrastructure and implementing modern technologies at the academy, as well as research and development. A scheme has also been set up to assist in the education and employment of youth from underprivileged families.

"This cluster is a great achievement that unites leaders in the commercial maritime industry with local public and educational organisation here in Kherson and Ukraine," said Rector of KSMA, Professor V.F. Khodakovskiy.

"Together, we shall facilitate the alignment of the vocational training system and the offer of maritime educational establishments to the needs of the companies, and the industry at large," continued Khodakovskiy. "At the same time, this cluster helps inject investment activity to the region, supports youth education and employment, and overall strengthens Ukraine's competitiveness as a maritime location."

“ This cluster is an important initiative for the maritime sector in Ukraine, as well as the wider industry ”

## NEW POTENTIAL FOR SEAFARERS IN CAPE VERDE

Marlow Navigation recently opened a fully-controlled crew manning office in Mindelo, Cabo Verde. With the support of colleagues from Marlow Navigation Netherlands, the new office will assist in the administration and recruitment of Cabo Verde seafarers.

Ahead of the official opening, Marlow's Crew Personnel Manager, Joern Clodius visited Cabo Verde in May 2016 to get an insight on the local maritime environment and institutions. In this context he visited the maritime university in Mindelo and other training facilities, and conducted meetings with the maritime authority and interviews with applicants.

The aim is to support graduates from the University of Cabo Verde by offering on-board training opportunities. Then those with good performance and who prove their qualification for future officer assignment, will be considered for promotion to operational level rank, while the rest will join our increasing pool of Cabo Verdean seafarers.

Department of Engineering and Marine Science, University of CPV



## REAL ACTION FOR PROFICIENCY & PROMOTION

By recognising important tendencies in seafarer education and development, Marlow Navigation is taking maritime training to the next level, with real action for making sure seafarers are keeping up and surpassing latest industry competencies, whilst positioning themselves for promotion in good time. UMTC's Maritime Training Consultant, Captain Peter Grunau and Management Consultant Tony Noakes offer us a report on what's needed from the crew management side to support this evolution in the marine profession.



Maritime Training Consultant, UMTC,  
Captain Peter Grunau

Over the past decades, there have been many, sometimes rapid, changes in the maritime industry. From enhancements in marine technologies such as complex automated engines and advanced electronic systems on the bridge, operational efficiency, regulations, to environmental concerns.

Ultimately, maintaining productivity and a safe shipping environment still very much lies in the hands of all seafarers across the world, observing high standards of competence and professionalism in the duties they perform on-board. Meanwhile, our duty as crew managers and trainers is to continue monitoring existing practices, evaluate and introduce new innovative techniques in order to enhance long-term results.

Since the establishment of the EMSTROM project in 1998, Marlow's philosophy has always been one of providing additional training over and above the minimum required standards. In doing so, ensuring that junior officers are better educated, trained and prepared, so that they can be promoted to command positions in the shortest time possible.

Certainly, prospective officers have the right foundation to complete management level tasks. However, due to the time it takes them to be promoted into rank (8-10 years), this knowledge and skills are not properly utilised and nurtured. During which time many changes in the industry also occur, limiting proficiency and hindering the possibility for promotion.



### Introducing “Continuous Proficiency Development”

As such, the Continuous Proficiency Development concept was born – a holistic method of ensuring seafarers are always confident, fully ready and able.

This initiative aims at enhancing proficiency of Masters and Deck and Engine Officers by refreshing their skills and updating their knowledge via a structured upgrading matrix on a two-year training cycle (see figure on the right). It maintains continuity in quality and professional standards, as well as encouraging punctual career advancement.

The Continuous Proficiency Development at Marlow has been established for the following ranks:

- Operational Level Officers
- Management Level + Operational Level Officers for promotion, and
- Masters, Chief Engineers + Management Level Officers for promotion

The programme for deck has already been developed this year and will have its pilot introduction in 2017. For Engineers and Electro Technical Officers it is in progress.

At the same time, this initiative shortens cadet training time from 32 months to 24, since part of the programme can be implemented on-board, on-the-job.



Management Consultant, UMTC, Tony Noakes



Source: Marlow Navigation, 2017

**Competency Assurance:**  
refresh, upgrade & enhance via  
structured matrix training cycle



Seafarer competence – safety and quality



### Ensuring seafarers are the best they can be

Seafarers require a number of traits in order to successfully operate a modern ship, including:

- Solid and precise knowledge in all aspects of the vessel's day-to-day operation
- Good skills, assertiveness and talent to manage the ship and its crew, as well as to control operations, and
- Professional knowhow

Seafarer competence (and proficiency) is the most critical factor, as it directly influences the safety of the vessel and its crew, as well as the commercial operation of a ship. In professional training, learning through practicalities and by example is one of the most effective methods for achieving this competency.

This is also true for the industry as a whole. In other words, we must look beyond the maritime field to analyse and perhaps borrow proven professional development models from other sectors.

For instance in aviation, continuous proficiency development has been a fixed standard for some time. Airlines constantly inspect and assess their pilots and technical staff to measure their competency in managing and controlling airplanes efficiently. Part of this includes

common programmes that ensure consistency among their professionals, while more exceptional scenarios propose challenges to tackle and learn from.

The same should apply for proficiency in shipping – primarily of masters, officers and engineers, but also across the board – where issues of safety, performance and reliability are just as fundamental.

This is now embedded in training at Marlow Navigation, officially applied via the implementation of the Continuous Proficiency Development. An initiative that follows a study of almost two decades of specialised maritime training at Marlow and reflects a methodology of outcome based training, which is so crucial in our industry.

At the same time, it combines new progress in education with structured learning outcome taxonomy, a model that offers a way of assessing and describing the growing complexity levels of a learner's activity and understanding of subjects. Thus, when designing the curriculum and putting together training course objectives, content/substance corresponds with the level of cognitive engagement appropriate for the seafarer. This dynamically improves their understanding, and in turn grooms them to take more competent and timely decisions in various situations.

Overall, this new approach for enhanced proficiency and promotion makes learning and maritime training more responsive and in turn more successful.





New Dynamic Positioning Simulator at KSMA

# EQUIPMENT & FACILITIES

## NEW ANCHOR-MOORING STATION IN MANILA

A second mooring station to simulate the ships' forecastle and incorporated mooring and anchoring equipment was built at United Marine Training Center (UMTC) and launched in May this year.

This followed increased demand from shipowners and crew managers to provide more training, guidance and practice for all seafarers in safe and efficient mooring operations, as well as to raise awareness of associated hazards.

This new facility will assist in providing further training to reduce incidents during mooring operations.

The new mooring training complex at UMTC simulates an entire ship, consisting of an existing ship's aft deck mooring station and a new ship's forward anchor-



New mooring station at UMTC, Manila

mooring station. Equipment includes a set of hydraulically driven anchor-mooring winches (ship's windlass) and ship's anchor.

The construction of this second mooring station and the anchor-mooring equipment was funded by the International Maritime Training Trust (IMTT), an initiative of the International Maritime Employers Council (IMEC) and the ITF.

## NEW ALFA LAVAL FACILITY

A new Alfa Laval training facility opened at United Marine Training Centre (UMTC) in November.

The facility includes a number of new facilities, such as Fuel Management; Fuel Oil Cleaning Systems; Lube Oil Cleaning Systems; Central Cooling Systems; Freshwater Production Systems; Sludge Treatment Systems; Waste Heat Recovery Systems; Fuel Conditioning Systems; and Steam Generation Systems; among other.

These will be used for several courses at the training centre, including:

- **MODULE 1**  
Alfa Laval marine and Power Operation and Maintenance of Ship's Fuel, Lube Oil and Central Cooling Systems (4-day course)

- **MODULE 2**  
Alfa Laval marine and Power Operation and Maintenance of Ship's Fuel, Lube Oil and Central Cooling Systems (5-day course)
- **ALMD**  
Fuel Management (3-day course)

Future training courses may include Auxiliary boiler, and Ballast water treatment.

A launch-party was held to celebrate the facility's opening, with Marlow's management attending from Cyprus and Germany. This followed a memorandum of agreement (MOA) for training that was concluded between UMTC and RJH Consultancy, Inc., the exclusive representative of Alfa Laval Marine & Diesel, and authorised Alfa Laval training provider in the Philippines.

New Alfa Laval fuel management equipment at UMTC



## KSMA OPENS NEW SIMULATOR COMPLEX

Marlow's training partner in Ukraine, Kherson State Maritime Academy (KSMA) officially opened its new simulator complex in April.

The complex was donated by the International Maritime Employers' Council (IMEC) and the International Transport Workers Federation (ITF), with a total investment of over USD 1.8 million.

The simulator complex consists of Dynamic Positioning Simulators, GMDSS, and an engine room simulator, which will significantly enhance the training programmes offered at the academy.



Full mission engine room simulator at KSMA

“ Seafarers need to be provided with the right support, such as the proper tools and be adequately trained to be able to conduct their work in a safe and competent manner ”

# TRAINING COURSES

Understanding the demands of the maritime industry, United Marine Training Center Inc. (UMTC) and Kherson Maritime Specialized Training Centre (KMSTC) are at the forefront of high quality training in the Philippines and Ukraine, respectively. Both training centres continue to produce technically competent marine professionals by providing comprehensive training programmes and courses, employing outcome based teaching methodologies, as well as using advance equipment and the latest technology. Below are some of the newly introduced courses at UMTC and KMSTC.

## NEW COURSES INTRODUCED AT UMTC IN 2016

### CUSTOMISED COURSES

COURSE NAME	PILOT DATE
Continual Professional Development Course for Masters	MARCH
Inspection and Maintenance of Breathing Apparatus Compressor	JULY
Inspection and Maintenance of Self-Contained Air Breathing Apparatus	JULY
Inspection and Maintenance of Portable Fire Extinguisher	AUGUST
Chemical Tanker Cargo Operation Course	SEPTEMBER
Junior Engineer Officer Refresher and Evaluation Program	SEPTEMBER
Practical Shipboard Safety Course	OCTOBER
Refrigerant Gases Manipulation and Reeferman Training	OCTOBER

### STCW COURSES

Electro Technical Officer Training Program: Marine Engineering Systems	MARCH
Updating Training for Officers in Charge of an Engineering Watch Function 1: Marine engineering at the operational level, Part B	MARCH
Updating training for Officers in Charge of an Engineering Watch Function 2: Electrical, Electronic and Control Engineering at the Operational Level, Part B	MARCH
Electro Technical Officer Training Program: Electrical and Electronic Systems	APRIL
Electro Technical Officer Training Program: Automation and Control Technology	JUNE
Updating Training for Officers in Charge of an Engineering Watch Function 1: Marine engineering at the operational level, Part A	JUNE
Updating Training for Officers in Charge of an Engineering Watch Function 4: Controlling the Operation of the Ship and Care for persons on-board at the Operational level, Part A	JUNE
Electro Technical Officer Training Program: Ancillary Trainings	JULY
Updating Training for Officers In Charge of a Navigational Watch Function 3: Controlling of Operation of the ship and Care for Person On-Board at the Operational Level, Part B	DECEMBER

### ELECTRO-TECHNICAL COURSES

COURSE NAME	PILOT DATE
Auxiliary Machineries and Engine Room Familiarization	MARCH
Thermodynamics for Marine Applications	MARCH
Engine Technology	APRIL
Introduction to Marine Electro-Technology	APRIL
Electrical Equipment, Schematics and Safety	MAY
Generators and Distribution Systems	MAY
Ship`s Communication Systems and Bridge Navigation Equipment	MAY
Instrumentation, Automation and Alarm Systems	JUNE
Leadership and Teamworking Skills	JULY

### CULINARY COURSES

Galley Waste Management and Disposal System	-
Galley Workplace Safety and Practices	-

## NEW COURSES INTRODUCED AT KMSTC IN 2016

### CUSTOMISED COURSES

Environmental Training Program Course	JANUARY
Offshore Crane Operator (stage 1)	FEBRUARY
Admiralty Commercial Law Course	MARCH
Diving Techniques Familiarization Course	JUNE
Reefer Container Handling for all Seafarers Course	AUGUST

### STCW COURSES

Medical First Aid	OCTOBER
Security-Related Training and Instruction for All Seafarers	OCTOBER
Designated Security Duties for Shipboard Personnel	OCTOBER
Ship Security Officer	OCTOBER

# TRAINING COURSES

Course on pollution prevention of marine environment

## ENVIRONMENTAL TRAINING PROGRAMME

Pollution from ships at sea has very serious environmental consequences. In response to these concerns, a new pre-departure Environmental Training Programme (ETP) has been introduced at various Marlow training locations, including Ukraine, Russia and the Philippines.

This new tailor-made course provides an overview of the pollution control measures for seafarers. The course was designed as an introduction to the environmental aspects of vessel operations and the basic structure of the marine regulatory setting.

The training provides seafarers with knowledge and understanding regarding pollution prevention of the marine environment and the ability to develop the correct attitude to ensure compliance with pollution prevention requirements. This course also relates to the STCW 2010 Code Ch. II Sect. A-II/1; Ch. III Sect. A-III/1 & A-III/6 and Ch. VI requirements for Environmental Awareness.

## MARINE INTEGRATED AUTOMATION SYSTEMS

Not long ago we developed and implemented a training and upgrading course for engineers in basic electrical, electronic and reefer systems; initiated in Ukraine.

The topics and quality of instruction were very well received by participants, whilst direct feedback from shipowners was that it was highly beneficial.

Since its establishment, this training course has undergone several updates and improvement to better reflect the rapidly changing marine technologies and their application, as well as practical troubleshooting guidelines based on experience. Eventually, the course evolved into Advanced Automation Troubleshooting, and was kept updated by an experienced marine electronics engineer who also works as a technical superintendent for a ship-owning client.

Another advanced marine engineering training course is now in development at KMSTC to complete the portfolio and cover a wider spectrum of marine electric and electronic training.

This training course will cover the basic principles of process control, power management systems, electrical safety procedures, theory and application of electricity, electrical machines, types of conductors and insulators, troubleshooting and testing of electrical and electronic components and devices. Utilising appropriate laboratory equipment and exercises, the course is designed to maximise the practical aspects of work carried out on-board.

This new course was put together with the assistance of a subject expert from Gdynia Maritime Academy and is planned to be offered at various Marlow training locations, including Ukraine, Russia and Poland.



Tailor-made training courses that are responsive to both company and industry needs



Newly developed integrated automation systems course at KMSTC, Ukraine

## MARITIME COMMERCIAL LAW COURSE

A maritime commercial law course was conducted in mid-October at Marlow's branch in Rostov-on-Dov, Russia, to help refresh knowledge and better prepare management level deck officers on the rapidly changing conditions and issues at sea.

The 3-day course was attended by 13 Captains among the crew managed fleet and was facilitated by Capt. Petr Shchadin of Marlow Navigation Vladivostok.

This course was first initiated in Manila a couple of years ago and is now being rolled out at various branches throughout the Marlow training network where flying instructors can visit.

Maritime commercial law course in Rostov-on-Dov, Russia



## QUALITY ASSURANCE IN TRAINING

### Quality Control & Feedback in Training

As part of the quality assurance process in training, Marlow has applied a number of new initiatives this year to better monitor and scrutinise results, as well as to obtain deeper insights/feedback into the quality of training.

Firstly, a scheduled on-site auditing and vetting system has been put in place for high-level training courses throughout the network. This is carried out by Marlow's training experts and external consultants on a regularly basis, who examine the course design documentation to ensure it conforms with the company's training policies and guidelines – a quality assurance training system based on a standard known as Quality in Maritime Education and Training – and in line with best industry practices and latest requirements for crew competence.

Qualitative feedback from participants is also collected in addition to the standard 'happy sheets', via telephone and face-to-face interviews, as well as an anonymous questionnaire.

To get an even wider view of training activities (and services to crew in general), Marlow recently conducted a comprehensive online seafarer survey, where almost 5,000 responses were gathered.

The results were encouraging:

- 95% strongly agree that training activities have improved their skills and job performances
- Around 94% rate the quality of training as very good or good
- Over 92% rate the training facilities as good or very good
- Over 92% rate the pre departure briefing/training as very good or good.
- Almost 87% rate the range/variety of training as very good or good, and
- Around 80% rate the organisation and planning of training as very good or good

Meanwhile, many said they would like to see even more real/hands-on training activities.

All results are in turn being investigated for further action. No doubt, such feedback is invaluable in improving training activities and their output, as well as raising the level of crew motivation.



95% of Marlow crew strongly agree that training activities have improved their skills and job performances



7 high level instructors from Ukraine and Russia attending the Train the Trainer course in Constanza Romania

### Training Course for Instructors in Constanza

In June, a group of Marlow trainers from Ukraine and Russia participated in a two-week training course for instructors at CERONAV maritime training centre in Constanza, Romania, as part of the continuous professional development programme.

#### This IMO Model Course 6.09 aims to:

- introduce outcome based approaches to maritime training
- facilitate delivery of training in the competence standards required by IMO Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended (STCW 2010)

- provide a useful induction for those with limited teaching experience, and
- introduce new approaches or serve as a reminder of techniques for more experienced trainers

#### Objectives of the course:

- Planning and preparation of effective teaching and instruction
- Selection of appropriate methods of instruction and teaching materials, and
- Evaluation of teaching process

Cadet programme examination in Manila



## EDUCATION IS THE BASIS FOR MARITIME TALENT

Marlow Navigation regularly visits maritime schools throughout the Philippines to test and recruit cadets to its highly sought-after training programme. In order to help improve success rates, whilst better preparing cadets to excel in the challenges ahead, the level of general education has been highlighted as an area of focus. As such, Marlow has introduced the Immersion Programme, which aims to support in reinstating the fundamentals in education, especially in trigonometry and physics, as well as other influential subjects for the maritime industry.

The selection of prospective officers and cook trainees for the maritime sector has become a growing challenge in the Philippines over recent years.

The main concern is the success rate during a school visit, i.e. number of passers compared to candidates, which remains rather low, at just below 20%. This can be attributed to several factors, but mostly put down to the general depth in education.

Despite having a good curriculum that follows the standards set out by the Department of Education, maritime schools are finding it challenging to maintain a consistent level of quality in classroom teaching. Skilled teachers are in short supply, whilst content of lessons and delivery is difficult to monitor and improve.

This was further verified during school visits over recent years. According to cadets, their teacher's approach did not so much promote independent thinking. They also confirmed that they would like to see both mathematics and physics taught with a much more established correlation to their technical subjects.

It may seem that such challenges are beyond the control of a private shipping company; quite the contrary. The situation presented an excellent opportunity to contribute to the enhancement of education at partner schools, and help steer the curriculum to a direction better suited to the global maritime industry.

### Immersion Programme in the Philippines

The Immersion Programme for Maritime College Faculty was launched by Marlow Navigation in the Philippines in cooperation with United Marine Training Center (UMTC), to establish stronger collaboration between the company and its partner schools, and in doing so, enhancing the quality of education.

Since the programme's initial launch in 2015, there have been 30 participants from four colleges, focussing mainly on faculty teaching math, physics and technical subjects. Such collaboration is expected to have a huge impact on the teaching methodologies and strategies of college instructors, which will in turn significantly improve student learning abilities.

The programme is as a win-win; for the schools and the company, as well as of course the industry at large. Schools will be able to improve the quality of their teaching, while the company will be able to increase the number of prospective officers that are recruited, trained and injected into the industry.

The Immersion Programme covers various topics on best practices, teaching strategies and methodologies. It provides maritime college faculty the opportunity to gain first-hand experience on UMTC's high-quality training, where they can observe and learn from cadet classes. The programme concludes with teaching demonstrations in front of an actual class on a topic of their choice.

Through this programme, Marlow expects to continue creating a positive impact on the quality of maritime education at its partner schools, and further contribute to generating new high-quality talent for the industry.

“The situation presented an excellent opportunity to contribute to the enhancement of education at partner schools and help steer the curriculum to a direction better suited to the global maritime industry”

Official examiners at UMTC during a recent walk-in exam



Seminar in session for the immersion programme in the Philippines



## TRAINING KEY FOR SUSTAINABILITY

Despite continued challenges in the shipping world, Marlow Navigation remained steadfast and committed to its training programmes in the Philippines and Ukraine, as well as regular upgrading activities throughout the company's global network as part of the standard matrix. Trends this year were stable and resilient, as represented in these key performance indicators. Indeed, training at Marlow is seen as a plan and preparation for the long-term, ensuring a constant and sustainable supply of quality seafarers.

The number of active seafarers out of the Marlow training programme increased by a good amount over the previous year, rising to just over 5,300 (see figure 1.1). Most of this change came from greater recruitment in Eastern European countries, namely Ukraine and Russia. The Philippines, however, remains Marlow's leading source country for seafarers out of training programmes, representing just under 60%, followed by Ukraine with just over 34%.

Overall, this increase is a very good indicator that clearly shows Marlow continues to absorb an ample amount of seafarers from within its training channels, and therefore continues to be less dependent on outside recruits. Officers on-board out of the training programme further verifies this, continuing its upward trend over the last six years (figure 1.2) to reach almost one quarter of total officers.

The strategy and goal at the company is to become even more self-sufficient in its crewing activities via

in-house training, especially with regards to officers. At the same time, fostering seafarers that are completely in line with the quality standards and disciplines of the company's policies, as well as that of its partners and clients. On a wider industry level, this is one of, if not the most important approach to ensuring future demands of (quality) seafarers are met. Investing in the future of shipping and its human element must be done with a holistic and long-term vision. In order for this trend to continue positively, the company, as well as the industry in general, must continue to support the development of new cadets by providing positions on-board that allows them to attain the necessary experience.

In 2016, officer self sufficiency ratios at Marlow, operational and management level, recorded an increase, and over recent years remains rather stable (figure 1.3).

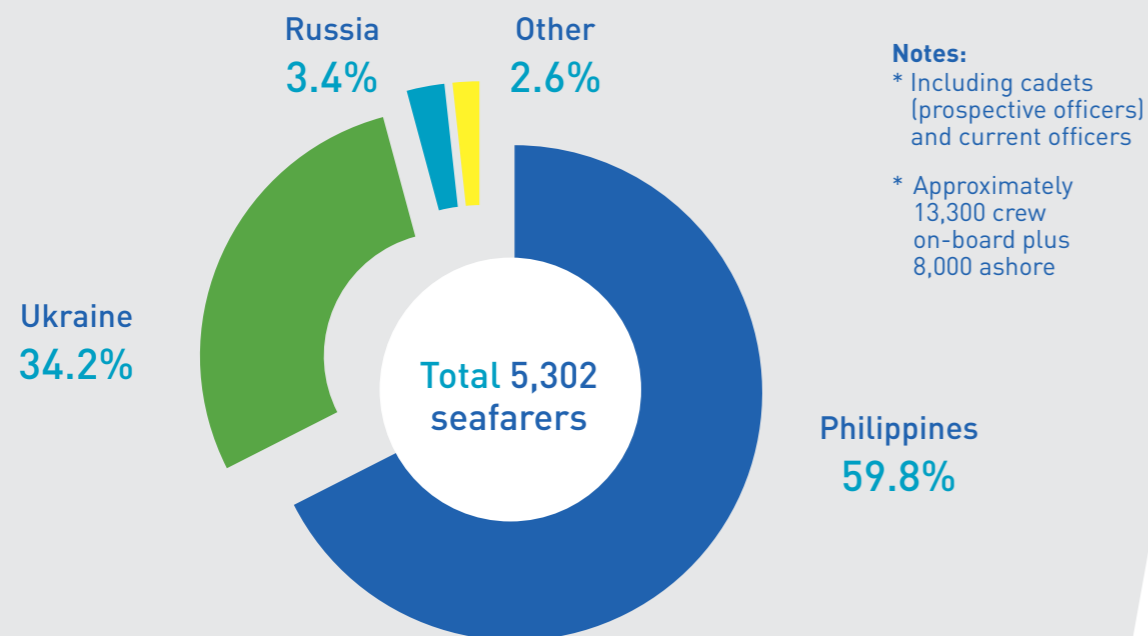
Anticipating a reduction of the number of vessels under crew management, the total cadet intake has however been reduced slightly, yet remained at over 700 first timers for the year 2016 (figure 1.4).

Promotions to rank saw marginal changes. Prospective officers to operational level officers actually increased, further verifying the great potential of talent from within a structured training programme.

Finally, course attendances for all Marlow crew remained strong.

### ACTIVE SEAFARERS OUT OF TRAINING PROGRAMME BREAKDOWN BY NATIONALITY (AS AT 31<sup>ST</sup> DEC 2016)

Fig. 1.1



**United Marine**  
Training Center

## CENTER OF EXCELLENCE

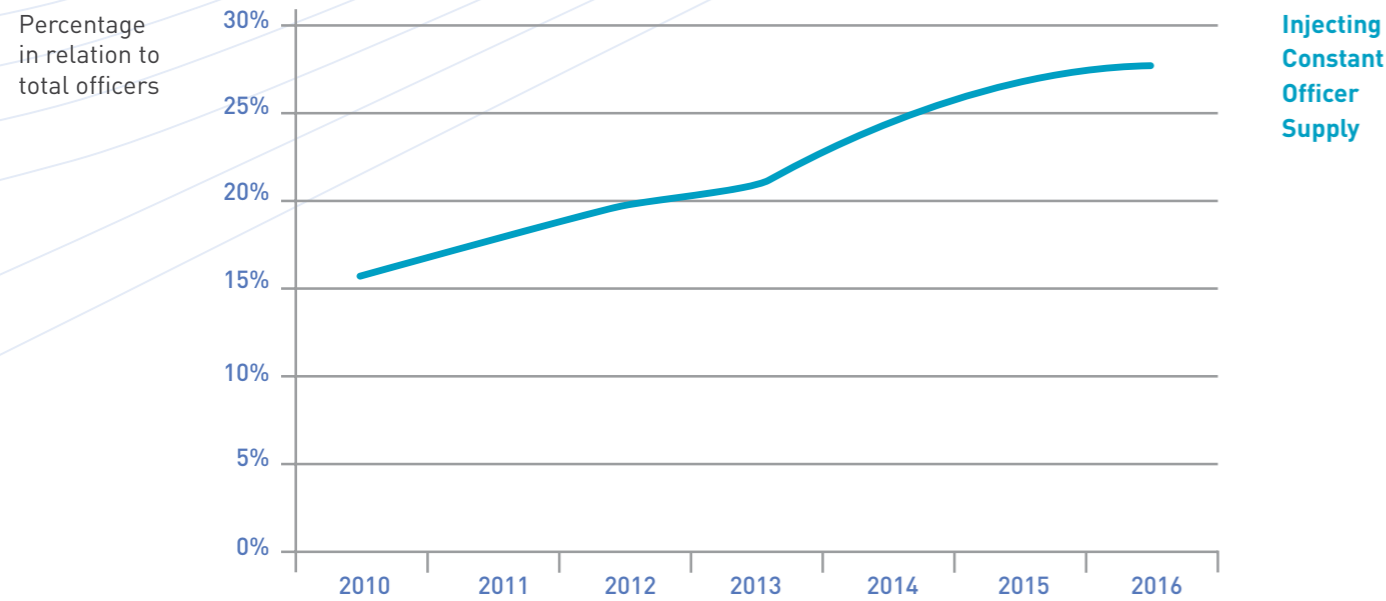


UNITED MARINE TRAINING CENTER, INC.  
2120 Leon Guinto Street, 1004 Malate,  
Manila, Philippines

[www.umtc.com.ph](http://www.umtc.com.ph)

## OFFICERS ON-BOARD OUT OF TRAINING PROGRAMME

Fig. 1.2



## INFOGRAPHIC 2016

Fig. 1.4

### TOTAL COURSE ATTENDANCES

AVERAGE OF 531 ATTENDEES PER DAY

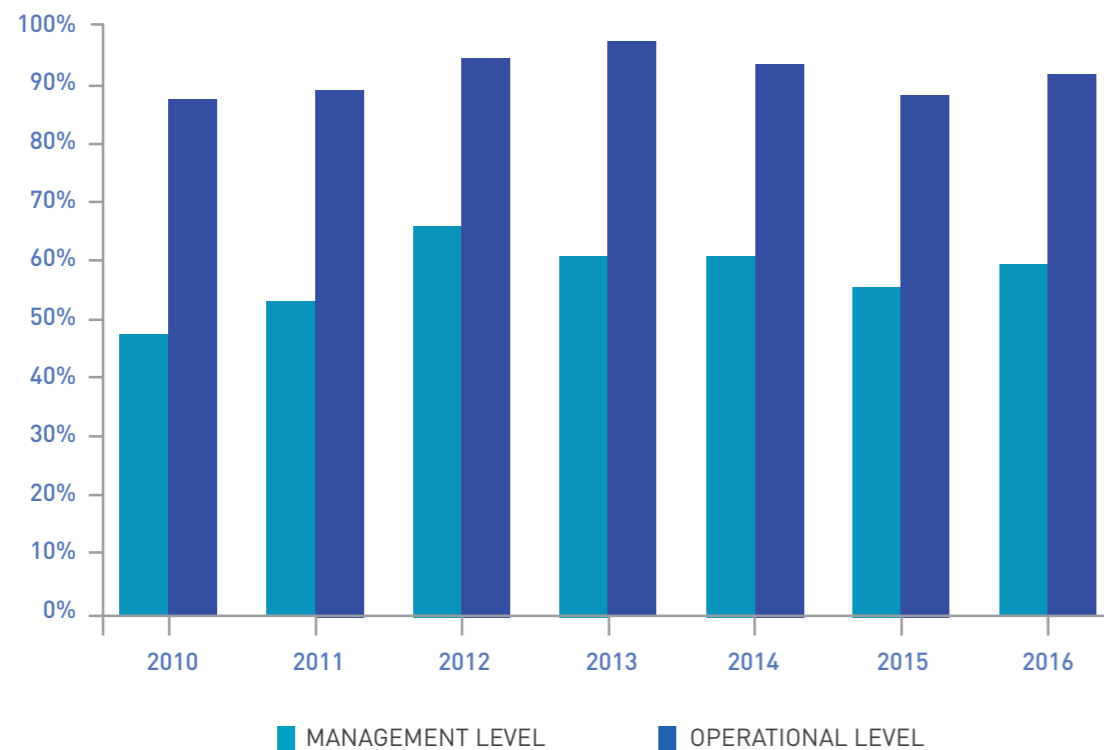


TOTAL 137,630

Includes training in the Philippines, Ukraine, Russia and Other Countries

## OFFICER SELF SUFFICIENCY RATIO PHILIPPINES & UKRAINE

Fig. 1.3



\*First time in rank out of Marlow company training



2016

### 703 Total Cadet Intake

Sponsored & non sponsored, including Deck, Engine, Electro technical and Culinary

426

Promotion of Prospective Officers to Operational Level Officers

232

Promotion of Operational Level Officers to Management Level Officers

126

Culinary Trainees to Cooks

## PROFILE

### DEDICATION, PASSION & FOCUS

Persistent, analytical and always interacting closely with colleagues, ashore and on-board, has allowed Captain Svilen Yankov to build up a successful working system for Marlow's maritime training.



Captain Svilen Yankov

Graduate of Nikola Vaptsarov Naval Academy in Varna, Bulgaria, Captain Svilen Yankov began his maritime career over 35 years ago as a cadet and worked his way up the ranks. Later, he moved into a shore-based position as Captain Superintendent for Marine Training Center (MTC) in Tarawa, dedicated to crew training for a pool of German ship-owners.

Now at Marlow Navigation for over 10 years, Captain Yankov is the Crew Training Administration Supervisor, based at the group's head office in Limassol, Cyprus. He oversees day-to-day training operations, data collection and analyses, planning and administration of cadet programmes in the Philippines and Ukraine, upgrading activities throughout the network, as well as online training such as Seagull and Safebridge.

According to Captain Yankov, one of the most important aspects of addressing crew training needs is the timely assignment and relevancy of the courses. Only then one could expect effective training outcomes.

Training is a rather complex process considering the number of crew handled at the company by the different operational groups in different countries and the availability of training resources at each location. Svilen, together with the other members of the crew training section at Marlow, are the vital link between crew operation and partner training centres. Working protocols and custom-built software

help Svilen and his team coordinate training activities and ensure smooth execution. This must all be constantly monitored and controlled via KPIs, trends and analytical reports.

Since being new to the profession, cadets require a somewhat different approach to ongoing supervision and guidance during in-house training and on-board. To do so, Svilen was involved in developing and implementing a unique company system called Career Guidance System (CGS) for monitoring the progress of cadets. This allows for close observation at any stage of their development.

Svilen's extensive experience both on-board and ashore, including working with many influential people in maritime training has given him a unique combination and level of proficiency that effectively supports crew, cadets and other training colleagues.



Professionalism and passion for maritime training

“ I have a strong emotional bond with seafarer training and education. Our company's strategic vision and dedication to invest in the development of its most valuable asset – its crew – via quality training substance and facilities, has presented me with exciting challenges and opportunities ”

# Offshore Courses (OPITO approved) STCW Marine Courses (with Manila amendments) Specialized Courses like:

Admiralty Commercial Law Course  
Port State Control Course  
Draught Survey Course  
High Voltage Course  
and many others.



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## MTC LEADING THE WAY IN SHIP SIMULATIONS

Simulators – not only for ship handling, but also for many other tasks in ship operations – have become a very important and efficient tool for the training and education of seafarers, pilots and other maritime personnel. At Marine Training Center (MTC) in Hamburg, approximately 80% of all training is conducted with the use of simulators. Managing Director, Heinz Kuhlmann offers us an analysis into this important technology, together with a glimpse of what we can expect in the near future.



*Managing Director, MTC,  
Heinz Kuhlmann*

This year, MTC decided to modernise the ship handling simulator and Radar/ECDIS simulator by installing the latest version ANS 6000 manufactured by Rheinmetall Defence Electronics.

After eight years of operation in two shifts, 16 hours daily, the simulator's hardware and software was changed during a two-week break in July. The next phase in July 2017 will comprise a complete overhaul of the visual system – hardware and software, projectors and modelling tools.

Four out of the simulator's six bridges at MTC are equipped with a visual system. One of the bridges provides a 360 degree round view, which has proven to be extremely helpful when manoeuvring large vessels in narrow waters or harbour basins.

The new system DISI – Extreme will provide additional features from the gaming industry, enhancing realism and appearance. Together with the visualisation tools for modelling of harbours, exercise areas and ships will be updated to achieve the highest level of realism. MTC maintains its own modelling department where visual and mathematical models for new ships are programmed, as well as harbours and exercise areas.

The capability of modelling with in-house resources has helped MTC quickly become one of the leading contributors for port simulation feasibility studies. Authorities and port operators often request these studies whenever new ports are planned or reconstruction works are being undertaken.

MTC has conducted feasibility studies across the globe, including in Malaysia, Angola, Poland, Panama and Germany. The port of Hamburg is one of MTC's largest clients. Whenever there is a new ship that is critical due to size or manoeuvring characteristics, MTC assists the harbour master to define vital factors, such as arrival or departure regulations, number of tugs to be taken, safety limits, among other. Based on the study, pilots are trained in the respective manoeuvre before arrival of the vessel. If the model of the ship is required before delivery from the shipyard, programming can take place in advance using manoeuvring data from model tank tests or sea trials.

## Ship Handling Courses & Pilot Training

Another area where MTC has been very influential is in conducting Human Element, Leadership and Management (HELM) courses, as certified by DNV GL. For deck officers, HELM combines the former BRM/BTM and MRM with the new regulations for HELM training; for engineers the ERM together with HELM. Both simulators – the ship handling and the engine simulator – are linked during the exercises. Engine and deck officers learn simultaneously, which in turn further enhances communication skills and teamwork between the two departments.

During recent years, insurance companies and P&I clubs have promoted Maritime Resource Management courses to their clients, so that by improving human behaviour, communication skills and teamwork on duty, they can significantly reduce accidents and related costs. Some shipping companies prefer their own bridge procedures, engine procedures, company standards and regulations to be integrated into this course. In these cases, MTC customises accordingly.

Pilot training is an essential business for MTC. More than 50% of German pilots conduct their training at MTC in accordance with the IMO A960 Resolution. This regulation makes pilot training mandatory for all active pilots. Most training takes place in the ship handling simulator but also includes other courses, such as training in medical, safety, fatigue, ECDIS, Azipod and technical courses.

Ship handling in the simulator is not only part of the education scheme for new pilots, but also obligatory for a number of days every year for all active pilots. Particularly if fairways are modified or turning circles in the port are changed, pilots must undertake training to familiarise themselves with the new circumstances. For instance, when the first 400 metre-long containership, the CSCL Globe arrived at Hamburg for the first time, all harbour pilots had already been trained with the manoeuvring characteristics of this ship, since the model was available at MTC before delivery from the shipyard.

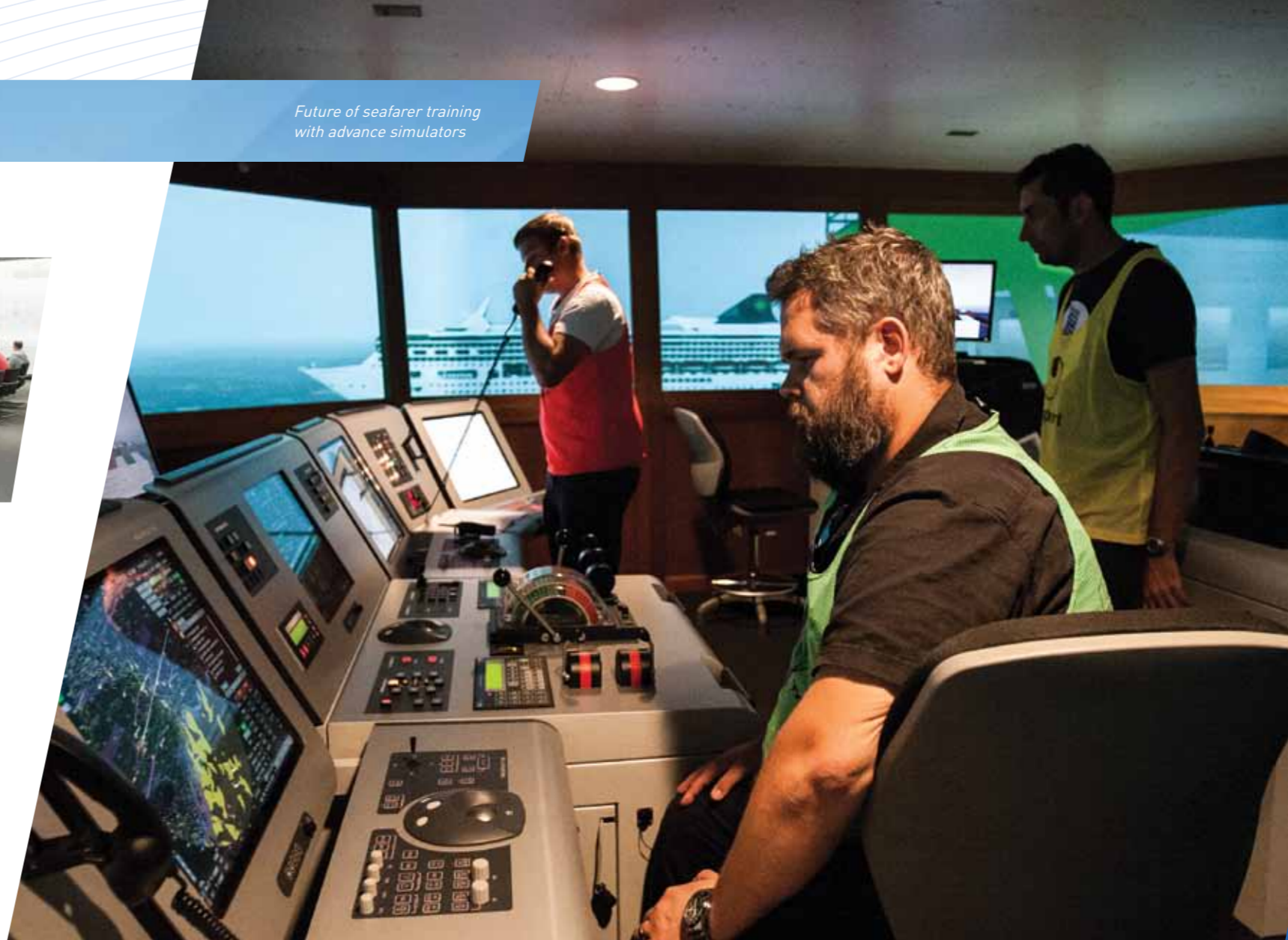
Crisis management is another important part of pilot training, such as what actions are to be taken in case of rudder failure, engine breakdown or other technical failure of the ship. The ship handling simulator is an important tool for this task, providing the virtual possibilities to push the limits without risk of damaging a real ship. Since pilots are very sensitive and demanding concerning the quality of the ships models, MTC has gained extensive knowledge on mathematical modelling, manoeuvring characteristics and hydrodynamic effects.

During the last two years, MTC has managed to shift a considerable part of the business from traditional cargo ship operators to cruise lines. Certainly there is high demand at the moment due to new regulations and safety requirements.

In order to fulfil the training requirements for the cruise industry, MTC has installed additional features on the bridges like voice and video recording for debriefing, as well as another navigation workplace for the Captain. In 2015, MTC commenced cooperation with ABB, the world's leader in Azimuth propulsion for cruise ships. This top class training is addressed to masters and officers of cruise ships using Azipod propulsion. All major cruise lines have been booking this training at Hamburg, and feedback from participants has been very positive. Manoeuvring instruments for Azipod are available on three of the simulator bridges and the models have been tuned accordingly to ensure best quality of this highly specialised training.



Marine Training Center (MTC) in Hamburg



“ MTC specialises in delivering high quality training and cooperates with other training centres within Marlow's network. For instance, course manuals, parts and expertise are regularly shared with UMTC to help ensure an equal and consistent level of quality with our own knowhow here in Germany.”



Simulators are an important and efficient tool for training seafarers

## The Future of Ship Simulation

Advancements in ship simulation technology should benefit greatly from progress in the gaming industry, which flourishes due to its vast commercialisation, therefore ability to invest more into research and development.

The gaming industry has achieved a high degree of realism and responsiveness. The task is to transfer this technology to ship simulators. This can only truly be achieved if the modelling tools and their use are further developed and can be programmed with all the fancy features the new visualisation software provides. This combination of modelling and visu-

alisation will further enhance realism and seafarer's expectations of training in a simulator.

Projection technology in particular is an area that has potential for improvements. Projectors are not improving at the same speed as the visualisation software. Once available, seamless curved displays with high resolution could be a solution, but only for bridges that have a smaller diameter or bridges with small viewing angle. However, for large bridges with a 12 metre diameter or more this would still be a rather expensive solution.

Overall, simulators will continue to progress and offer maritime training unique realism and advanced capabilities, further enhancing quality and safety in the industry.



## COMPETITIVE EDGE AT UMTC

Recently celebrating 10 years with the company and following a long-standing career in higher education, Training Director, United Marine Training Center (UMTC), Donald Bautista talks to us about maritime training in the Philippines and how UMTC continues to achieve its successful results.

### **From your experience, what are the main challenges with crew training in the Philippines, and how do you overcome these?**

In general, it is a challenge to convince the crew to attend training. They normally give you many "reasons" why they cannot attend. If you are able to convince them, the next challenge is to capture their interest and eventually to sustain this throughout the course.

We overcome this at UMTC by having a structured and facilitating approach in teaching. We value their opinion and experiences, as this keeps them engaged and adds to the learning outcomes for the rest of the group. Our instructors are trained to address these items and make the course more interesting and relevant not only for better training results, but also for them to want it more. As we say, "theoretical as necessary, practical as possible."

### **How does UMTC Manila maintain its competitive edge?**

The competitive edge of UMTC is in its people. We equip our people with the right tools to perform their job and excel. Especially the faculty who deliver the "core" aspects of our service. For instance, we introduced a faculty development programme that runs on a regular basis to help them overcome their weaknesses in delivering a course, e.g. how to teach mature-aged students, how to make an assessment, etc.

### **What research and development do you conduct in order to be innovative and adapt to the ongoing and rapid changes in the maritime industry?**

We have introduced a Faculty Competency Assurance Programme. This is a unique initiative, at least with maritime training centres, where faculty moves through instructor ranks depending on their abilities and results. Much like promotions in academia, moving from assistant faculty to associate, then full and senior positions as they develop and gain experience.

This ensures faculty remain dynamic, rewarded and motivated, whilst taking on new responsibilities and introducing innovative approaches in the delivery and substance of training.

With regards to training facilities, our team here at UMTC is always in tune with the latest trends, visiting events and exhibitions, and always speaking to partners and suppliers to ensure we constantly upgrade to the latest in technology and standards, whilst also providing our own feedback as to performances and expectations which in turn helps new advancements.

### **What do you foresee to be the new advancements in crew training facilities and techniques in the mid to long term?**

On the midterm, I see training providers will focus first on improving the teaching competence of faculty to deliver outcome-based training and the requirements that goes along with it.

In the long term, I see a more "hands-on" approach to training. More practical areas and therefore more practical activities. Whenever a practical area or equipment is not available, simulators will be there, which incidentally are also advancing in technology and realism.

The lectures or theoretical parts will be reduced to a minimum whilst practical activities on actual equipment will rise. I see more training vessels and more training facilities built like an actual vessel.

### **How important are the trainees' personal attributes, such as competence, attitude and motivation towards their training and development?**

Very important. Competence, attitude and motivation are the basic ingredients of an ideal trainee. Once they have it, best training results are imminent.

### **What about their general frame of mind and lifestyle outside training?**

Filipino seafarers are generally easy going, relaxed and try their best to avoid conflict. Once they have enough to feed the family, own a house, car and a small "Sari-Sari" store, they are generally content. This is not at all a bad trait. However, they might also no longer want to risk moving up the ranks and take on new responsibilities. Having said this, of course there those that are very ambitious and assertive enough to move up the ladder until they reach the highest rank.

### **Finally, tell us what motivated you to get involved with crew training, and what have been some of the highlights in your career?**

I can say that my entry to maritime training is "accidental." I was an Engineering Professor before I joined Marlow. At the time, I was a full time Professor at my alma mater, MAPUA Institute of Technology and at the same time, operating an engineering review centre for national board examinations. A visitor from Marlow dropped by our review centre's office to check for any possible cooperation, since Marlow was planning to launch an electrical cadetship programme. Just to be true to our promise to visit Marlow, I went to their office to see how the cooperation will work... and the rest is history!

I joined Marlow in 2006 as a Training Officer. In 2007, I was promoted to Academic Manager. Further promoted in 2013 as Training Administrator and in the same year as Training Director.

Over the years, it has been a great pleasure and fulfilment to see the development of so many trainees here in the Philippines. My inspiration and passion truly comes from teaching and seeing students succeed.

“The competitive edge of UMTC is in its people. We equip our people with the right tools to perform their job and excel”





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Marlow Navigation Corporate  
Head Office in Cyprus



# TRAINING JOURNAL 2016



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