Never Ending Battle Against Bubbles

Cavitation in ship propellers and rudders is a never-ending battle between human ingenuity against the destructive power of bubbles! The bubbles in question are vapour cavities in liquid that are liquid free zones. Cavitation is a physical phenomenon characterized by the rapid formation, growth and then collapse of bubbles which are caused by pressure or velocity variations within flowing liquid. Marine propellers and rudders operating at sea allow such conditions to develop and so suffer from cavitation. The effects of cavitation include noise, vibration, and erosion.

Cavitation can incur significant repair, maintenance and replacement costs and compromises efficiency and performance. It is a significant research topic dating back to 1756 when Euler reported his observations on the loss of performance in water wheels.

New Cavitation Research

Cavitation research is enriched by three new publications from City, University of London

1. The 4th edition of Professor John Carlton’s seminal book:

   What is new in the 4th edition?
   The chapter on ship resistance and propulsion has been significantly extended to embrace high speed craft: particularly in relation to hydrodynamically supported vessels, aerostatically driven and aerodynamically driven propulsion. Similarly, the discussion on high-speed propellers has been considerably extended. A new chapter on propeller-ice interactions and operation in arctic climates has be introduced. This includes information on ice types and mechanical properties; ship resistance and propulsion in ice; a discussion on models of propeller action; model testing; ice interaction induced cavitation as well as considering the results of ships operating in ice" Extract from the preface.

2. Dr Ioannis Armakolas doctoral research:

3. Paper by Dr Ioannis Armakolas and Professor John Carlton FREng:

(Continued on page 2)
Cavitation Erosion Fracture Mechanisms and their Detection in Ship Rudders

For his doctoral research Dr Armakolas investigated the underlying fracture mechanisms of common shipbuilding alloys and explored whether cavitation erosion can be monitored, by using quantitative and qualitative data. The following explanation is a reduced version of the abstract from his thesis.

"An experimental test rig was built, based on the induction of cavitation by ultrasonic means. This made possible a series of tests, including mass loss and acoustic emission measurements, microscopic observations, and the examination of protective coatings in analogous contexts. Acoustic emissions were also examined, with the aim of, characterizing the materials that could potentially be utilized for erosion monitoring.

Specimens were initially exposed to ultrasonically induced cavitation under identical experimental conditions. Mass loss was periodically measured thus materials were categorized in that respect while the positive effect of cathodic protection on the resulting erosion was confirmed. Examination through optical and scanning electron microscopes was conducted thus the fracture mechanisms and macroscopic characteristics of cavitation erosion were identified, for each of the examined materials. Results showed that, erosion initiates through plastic deformation (orange peeling) before proceeding into ductile and brittle, due to work hardening, fracture, whereas the extent and crack propagation characteristics of each phase, depend on the material’s mechanical properties and crystalline structure.

Acoustic emissions were also examined. The aim here was to characterize the materials and evaluating the potential for erosion monitoring. Upon the successful establishment of acoustic thresholds for cavitation erosion, in the case of small specimens, a small model rudder was also examined under an analogous context, although in that instance, cavitation localization was also considered, through a triangulation source location technique. In that instance, cavitation induced erosion, was effectively monitored and characterized both in terms of intensity and location. A model rudder twice as large as the small one was then examined in order for any possible scale effects to be identified. Cavitation induced erosion, was again effectively monitored, both in terms of intensity and location, although results indicated that the method should be optimized, with respect to the parameter of size.

As such, the future researcher could enhance the ship rudder monitoring system, by means of optimizing the analytical procedures in order to overcome any possible scale effects, further adapting the characteristics of the system to match the size of the objects to be monitored and eventually lead to the full – scale application of the system. Sea trials would also be of great benefit and importance towards the direction of forming a cavitation erosion monitoring system." Access thesis

Marine Propeller and Rudder Cavitation Erosion from Full Scale Observations and the Results of a Research Programme by Dr Ioannis Armakolas and Professor John Carlton

"This paper aims to present an ongoing research programme conducted by the Marine Engineering group at City, University of London which is oriented towards the evaluation of ultrasonically induced cavitation erosion in relation to materials commonly used in propellers and rudders, such as grade DH36 steel, stainless steel 254 and cupronickel 70-30, both from a quantitative and qualitative point of view. As such the relevant experimental procedures that were followed, including mass loss and acoustic emission measurements as well as microscopic and fractographic observations, along with the most important findings, are presented and explained.

Results indicate that the proposed experimental procedure can form a baseline upon which efficient and effective evaluation of different materials in relation to ultrasonically induced cavitation erosion can be conducted. Moreover, the development of an acoustic emission – based cavitation erosion monitoring system for rudders, oriented towards the evaluation of erosion both in terms of intensity and location, is also presented. Results, from measurements conducted on small specimens and a reduced-scale model rudder, indicate that the system can potentially be used as means of cavitation erosion monitoring in full scale rudders. " Access online
Professor James Crabbe Appointed as New External Examiner for the MSc in Maritime Operations and Management

Our esteemed external examiner Professor Chengi Kuo FRSE has been an invaluable critical friend of the programme. He has completed the full term of service and retired in October 2018. We extend a very warm welcome to our new external examiner Professor James Crabbe.

A former Governing Body Fellow of Wolfson College University of Oxford, Professor James Crabbe is an Emeritus Professor of Biochemistry, and Honorary Professor at Changchun University of Science and Technology, China.

In 2018, he won the Annual Scientific Award of the International Institute of Engineering and Technology, and gave the Stanley Gray Prestige Lecture of the Institute of Marine Engineering, Science & Technology (IMarEST) at Trinity House, London.

Professor Crabbe's research includes how organisms adapt and evolve in extreme environments, from coral reefs and climate change to plants in the desert and in Tibet. He has been a Senior Research Associate in the Zoology Department at Oxford University, Executive Dean of Creative Arts, Technology & Science at Bedfordshire University, and Head of Animal and Microbial Sciences at Reading University. In 2006, he won the 6th Aviva / Earthwatch International Award for Climate Change Research.

In 2008, he received the Award of Outstanding International Contribution to the Creative Industry of China. Professor Crabbe is a Vice-President of IMarEST and Honorary President of the Charity for Access Ability and Communications Technology (AACT). He is Chair of Governors of Central Bedfordshire Further Education College and has been a National Leader of Governance.

Choosing Shipping and Networking

Mrs Valerie Stringer Module Leader for Maritime Marketing, which is an elective module on the MSc in Maritime Operations and Management, has contributed to a short video produced by the Institute of Chartered Shipbrokers entitled “Why choose shipping”.

The Professional Qualifying Examinations form the pinnacle of the qualification awarded by the Institute of Chartered Shipbrokers. Their assessment comprises 7 exams which can be taken over 5 years. MSc Maritime Operations and Management graduates can apply for exemptions from three examinations which is the maximum permitted.

Networks Matter Explains Mrs Valerie Stringer

“The students are made aware by me of shipping related clubs/societies available to them in London. For example, they are invited along to Institute of Chartered Shipbrokers social evenings and seminars, some jointly held at The Baltic Exchange and whilst some are free of charge, there is a special rate for students at others. There is also the Shipping Professionals Network in London which has recently announced the election of its first female Chair, Patricia Scholtmann.

Two of last year’s cohort attended the WISTA Lectures with me at Clarkson’s which, after the lectures, gave networking opportunities and both were offered interviews and subsequent internships and employment. More recently a vacancy at Intercargo was brought to my attention and I was able to alert our students to this opportunity. Finally, the relationship with our students goes beyond the classroom and several students, not just those whose dissertations I have supervised, keep in touch with me from time to time to keep me aware of their career progression. In addition to obtaining their MSc, some want to take advantage of the exemptions they can then obtain from doing their Professional Qualification with the ICS and thereby furthering their future career prospects. Networking is critical in our industry it is not just what you know, but WHO you know. When students keep in touch and I can see a match I am able to introduce them to future potential employers.”
The Conversation on Cyber Security and Unmanned Ships

The Maritime Operations and Management advisory group meet on Monday 14th January. A standing item on the agenda is to review the curriculum. A very productive discussion was had about emerging trends and issues. Following this the programme is being updated to include and expand two topics: ‘Autonomous Shipping’ and ‘Cybersecurity’.

Meanwhile some of our readers will be familiar with the ‘The Conversation’ an independent source of news and views, sourced from the academic and research community. The news room of ‘The Conversation’ is based at City, University of London. A recent articles from ‘The Conversation’ echo the advice from the Maritime Operations and Management advisory group. This article and the latest guidelines from the International Camber of Shipping are covered in the edition of Making Waves (pages 4,5,6).

Why 50,000 ships are so vulnerable to cyberattacks

Authors Keith Martin Professor, Information Security Group, Royal Holloway. Roy Hopcraft, PhD Researcher, Royal Holloway June 13, 2018 2.15pm BST

The 50,000 ships over 100gt sailing the sea at any one time have joined an ever-expanding list of objects that can be hacked. Cybersecurity experts recently displayed how easy it was to break into a ship’s navigational equipment. This comes only a few years after researchers showed that they could fool the GPS of a superyacht into altering course. Once upon a time objects such as cars, toasters and tugboats only did what they were originally designed to do. Today the problem is that they all also talk to the internet.

The story so far

Stories about maritime cybersecurity are only going to proliferate. The maritime industry has been slow to realise that ships, just like everything else, are now part of cyberspace. The International Maritime Organisation (IMO), the UN body charged with regulating maritime space, has been late and somewhat slow in considering appropriate regulation when it comes to cybersecurity.

In 2014, the IMO consulted their membership on what maritime cybersecurity guidelines should look like. Two years later they issued their interim cybersecurity risk management guidelines, which are broad and not particularly maritime specific. And now, unsurprisingly, ships are being hacked.

Complexity of the maritime industry

There are several core issues that make cybersecurity for the maritime industry particularly challenging to address.

First, there are many different classes of vessel, all of which operate in very different environments. These vessels tend to have different computer systems built into them. Significantly, many of these systems are built to last over 30 years. In other words, many ships run outdated and unsupported operating systems, which are often the ones most prone to cyber-attacks.

Second, the users of these maritime computer systems are constantly in flux. Ship crews are highly dynamic, often changing at short notice. As a result, crew members are often using systems they are unfamiliar with, increasing the potential for cybersecurity incidents relating to human error. Further, the maintenance of onboard systems, including navigational ones, is often contracted to a variety of third parties. It is perfectly possible that a ship’s crew have little understanding of how onboard systems interact with each other.

A third complexity is the linkage between onboard and terrestrial systems. Many maritime companies stay in constant communication with their vessels. The cybersecurity of the ship is also dependent, then, on the cybersecurity of the land-based infrastructure that makes this possible. The implications of such dependencies was made clear in 2017 when a cyber-attack on the systems of A.P. Moller-Maersk resulted in cargo delays across their entire fleet. This is particularly challenging for the IMO who can govern the likes of port regulations, but have very little control over the wider systems and processes of maritime operators.
(Continued from page 4)

Steps in the right direction

In 2017, the IMO amended two of their general security management codes to explicitly include cybersecurity. The International Ship and Port Facility Security Code (ISPS) and International Security Management Code (ISM) detail how port and ship operators should conduct risk management processes. Making cybersecurity an integral part of these processes should ensure that operators are at least conscious of cyber-risks.

Hopefully, this is the start of a more holistic approach to maritime cybersecurity regulation. The knowledge gained from these new cyber-risk assessments may enable the IMO to develop a broader set of cybersecurity regulations. There is a lot of low-hanging fruit to be picked, for example by harmonising some equipment requirements with existing cybersecurity standards adopted by other sectors.

Turning the ship around

The maritime industry is undoubtedly behind other transportation sectors, such as aerospace, in cybersecurity terms. There also seems to be a lack of urgency to get the house in order. After all, the cyber-specific amendments to the ISM and ISPS don’t come into force until January 1 2021, and they only represent the beginning of a journey. So the maritime industry seems particularly ill-equipped to deal with future challenges, such as the cybersecurity of fully autonomous vessels.

On the positive side, the slow and steady approach to the development of cybersecurity regulations at least provides the opportunity to learn from other sectors and fully understand maritime cybersecurity risks, rather than make hasty ill-informed decisions.

Development of robust maritime cybersecurity regulations is going to be a very slow, and possibly painful, process. But, the ship has started turning.

Cyber Security Onboard Ships a Risk Management Approach

The International Chamber of Shipping has published guidelines on cyber security and safety management. To download click here.

Extract page 1

“Ships are increasingly using systems that rely on digitisation, digitalisation, integration, and automation, which call for cyber risk management on board. As technology continues to develop, information technology (IT) and operational technology (OT) onboard ships are being networked together – and more frequently connected to the internet. This brings the greater risk of unauthorised access or malicious attacks to ships’ systems and networks. Risks may also occur from personnel accessing systems on board, for example by introducing malware via removable media.

To mitigate the potential safety, environmental and commercial consequences of a cyber incident, a group of international shipping organisations, with support from a wide range of stakeholders (please refer to annex 5 for more details), have participated in the development of these guidelines, which are designed to assist companies in formulating their own approaches to cyber risk management onboard ships. Approaches to cyber risk management will be company- and ship-specific but should be guided by the requirements of relevant national, international and flag state regulations. These guidelines provide a risk-based approach to identifying and responding to cyber threats. An important aspect is the benefit that relevant personnel would obtain from training in identifying the typical modus operandi of cyber attacks.”

Cyber risk management as set out in the guidelines p.4
Graduates 2017-18

Master of Science in Maritime Operations and Management

Theodoros Argyriadis
Peter William John Cook*
Christina Gkouzou
Stefania Hadjiyianni
Spyridon Ioannidis
Spyridon Kalogirou*
Zehra Kiran*
Eleni Koulianou*
Panagiotis Mentzelopoulos
Motaz Ahmad S Nejaim
Alexandros Nikolouzos
Anthoula Christina Rassia
Georgios Saflianis
Nikolaos Tsilikas

* with distinction

Graduation Day at the Barbican 2019

Congratulations to the class of 2017-2018

Photo credit  Andrew Cook

Some of our graduates on Tuesday 29th January 2019 after the ceremony.

Live stream has been achieved, to watch the video click here.
The Business Benefits of ‘Over’ Compliance by Peter Cook

UK ports which have been audited against and are compliant with internationally recognised port security standards, over and above those required (ISPS Code), would be more profitable because the additional port security standards would reassure current clients and attract new customers.

Around ninety-five percent of all trade moving into and out of the UK arrives and departs the country by sea. Ports are crucial to the economy and comfortable existence of the country. The maintenance, safety and security of these maritime focal points is paramount to the nation. The UK has 120 commercially active ports, 51 of which are classified “major”, along its 12,500km island coastline, handling 98 per cent of the commercial maritime traffic.

However, ports by their very nature are business entities, therefore a plethora of commercial, physical, criminal and terrorism threats are prioritised by the private companies that run them, according to the perceived risks.

This thesis focuses on how three of the largest ports, in the UK, approach the security of their operational activities. It asks whether the concept of specific port security is outdated and should be replaced by the all-encompassing term "supply chain security", in which ports are a vital link. It reviews the current threats to port and supply chain security, including cyber security, and looks over the horizon at the technological tidal-wave of the fourth industrial revolution, and how the UK and the supply chains, it is part of, can adapt to this paradigm shift. Whilst there will be many exciting opportunities, there also loom some foreseeable and nascent security threats, managerial and governance challenges. The study ends by offering some innovative ideas and suggestions to help retain the initiative against the security threats that lie ahead.

An Analysis of the Dry Bulk Market's Slow Recovery in Recent Years, the Impact on Turkish Shipowners and Future Prospects by Zehra Kiran

The aim of the research was to carry out an analysis of the dry bulk market’s slow recovery in recent years, both globally and specifically as affecting Turkish shipowners, and to analyse prospects of its future development. The research question is “What characteristics has the recovery of the dry bulk market in recent years displayed, and how have they impacted on shipowners in Turkey and the sector’s future prospects?”.

Four research objectives were: 1) identify global dry bulk market trends in the last decade, and their effects in Turkey; 2) evaluate the case of Turkish dry bulk shipping from the point of view of global trends and national measures; 3) analyse factors holding back recovery of the dry bulk market after the 2008 global financial crisis and related measures taken by the sector and governments; and 4) formulate expected future trends for the dry bulk market globally.

The research is carried out through review of secondary literature, and a case study of Turkey. The research showed that continuing credit exposure and overcapacity and low freight rates as key trends affecting Turkish shipowners since 2008. This has led to a series of bankruptcies among Turkish shipowners and held back growth. This has forced operational cost- and capacity-cutting measures, as well as restructuring of credits. Some optimism for future markets is however justified in the light of a new equilibrium between supply and demand, and recent statistics. The inherent uncertainty of prediction in the sector, and possible trade wars, cause continued uncertainty.

One recommendation for future academic research would be to consider the increasing role of the finance sector in driving the dry bulk market. This places higher importance on future research that seeks to analyse the global economy beyond dry bulk metrics.

For industry, a key recommendation would be to manage risks in future growth through caution in credit exposure, but also by considering increased use of financial hedging tools.
Induction Day, Welcome to the Class of 2018-2019

MSc Maritime Operations and Management 2018 cohort in Greece. Photograph taken at the Hellenic Lloyd’s Register Training Facility Piraeus Greece.

MSc Maritime Operations and Management 2018 cohort in London. Photograph taken in the Franklin Building City, University of London

Physical distance from London to Piraeus is 1490 miles. All students have access to City University of London’s online infrastructure and are enrolled in the same Moodle Space.

Franklin Building City, University of London.

View from the Lloyd’s Register Training Facility Piraeus Greece.
Student Representatives London and Greece

Student representatives are elected by the cohorts in Greece and London. They represent the cohort at the Student Staff Liaison Committee Meeting (SSLC). The representatives reflect the diversity within the Maritime Operations and Management programme.

Jaime Chikhalikar
A third generation Master Mariner with over 17 years of practical experience at sea.
Attaining Masters Unlimited License in 2011 from the MCA, UK. Captain of NYK Group in 2014.
Elected as an Associate Fellow of the Nautical Institute in May 2015.
“Being in command of a ship has enabled me to make management decisions for the ship and crew, communicate with the office, handle authorities of various countries and assist in inspections worldwide. The experience and skills acquired during my sailing time, along with the various competency courses that I have completed throughout my maritime career, have given me a good foundation to study this course. I have always wanted to pursue a Master Degree and found this course to be the most suitable in helping me achieve this.”

Ioannis Zikas
Mechanical engineer with a Diploma from the University of Patras, Greece.
Master of Business Administration from the University of Leicester, UK.
Member of the Society of Naval Architects and Marine Engineers (SNAME) of the USA. Member of the Chartered Management Institute (CMI), UK. “I am a senior officer of the Hellenic Coast Guard and I deal with ships' inspections for the last twenty-five years. I have participated in many international fora and committees in the IMO and in the European Union (Brussels) representing Greece. I am Flag State inspector, ISM-ISPS Code auditor, MLC 2006 surveyor, Recognized Organizations auditor and Port State Control Officer.”

Elli Anemogianni – Sinanidi
Graduated with a Ptychion (BA) in French Language and Literature, from Kapodistrian University of Athens.
BA in Economics from the American Degree College, in Athens, Greece.
“After taking a course in Maritime Economics, I developed a strong interest in shipping, as it is a versatile industry where anything can happen. After exploring the market, I chose City for the quality of education and the focus on professions that it offers.”

Spyridon Chiotis
“I have been in the Shipping Industry for the last 18 years. My current occupation is in a shipping company with 21 ships under my supervision and six new buildings on order. My first involvement with shipping was during my service in the Hellenic Navy as a petty officer for five years. I was appointed DPA (Designated Person Ashore) 2006. I was employed by a U.S. interests, Piraeus-based company as DPA and CSO (Company Security Officer) with 33 ships under my supervision. In the same time, I was also appointed Training Manager, and Managing Director in our crewing agency based in Russia. As of 2011, I have undertaken the position of DPA, Safety & Security department Manager, Training Manager, IT manager, and Maritime Labour Convention (MLC) responsible Officer.”

Agata Kolodziej
Bachelor Degree from University of Economics in Wroclaw. “I have worked as a training and development specialist in logistics and in the hospitality business in Poland and Norway and travelled widely in North America, South America, Europe, Asia and to Australia. Amongst other things I was involved in financing and promoting a culinary book - Oczami Mistrza i Przyjaciol and with the finance and marketing of a well-known gastronomic group, Krawczyk Restaurant. In 2018, while working in the conference department I become interested in the shipping industry. I visit Singapore and meet with a friend who works in shipping. After extensive research, I decisioned to apply for the Master Degree in Maritime Operations and Management at City University of London.”

Grigoris Angelopoulos
Degree in Mechanical Engineering from the School of Technological Application, Educational Institute West Greece.
Internship at A.M NOMIKOS Transworld Maritime Agencies S.A. “I have always been passionate about pursuing a career in Maritime trade. Working as Assistant Superintendent Engineer has been a tremendously rewarding experience for me. Moreover, through this program I believe that I will be able to socialize with international students and feel empowered by new experiences, and networking opportunities.”
Student Voices: Reflections on their Journey so far and the Voyage ahead

**Mustafa Beyoglu** (From Cyprus.)

“I am really excited for the upcoming challenge of living in such a multicultural as well as a metropolitan City of London. I believe will broaden my horizons not only academically but also socially providing me with the skills needed to compete in such a hectic field.”

**Saurabh Dhaul**

(From India.) “Shipping runs in my blood and I have a history of sailors in my family. I started my career in shipping in 2010 and have sailed as a navigating officer on numerous oil/chemical ships for almost 6 years. I have successfully carried out various industry/state inspections during my time on the ship working alongside a multi-national crew.”

**Vasiliki Ketse**

“After 5 years on board tanker and bulk carrier vessels up to the level of Chief Officer I am now employed by a shipping company as HSQE & Security Officer-Marine Auditor. My main role is in Internal auditing (ISM, ISPS, MLC,ISO inspections), TMSA vetting performance, PSC, security, navigational, incidents investigation, risk assessment and in general management of health, safety, quality and environmental protection issues of the managed fleet vessels.” “I am also a dance coach in Latin Ballroom dancing”.

**Dimitra Kotta Kyriakou**

“I hail from a Greek family with tradition in this industry and I was acquainted with merchant shipping from early age. I was awarded the Republic of Cyprus full scholarship of excellence to study Finance, Commerce and Shipping at the Cyprus University of Technology in Limasol. I am a member of the Institute of Chartered Shipbrokers. Since my graduation I have been working continuously in various Ship Management companies in Hong Kong, Singapore, Cyprus and London. In my most recent employment with Wallem Group Ltd. in Singapore office, I was managing 3 vessels, two bulk carriers and one containership.”

**Theodoros Theodorou**

“I graduated in 2011 from the Marine Academy of Syros and then served onboard ships from 2011 to 2013 as a 2nd officer responsible for the safety and for the navigation. After obtaining the Captain Class B’Certificate I commenced working onboard ships as a Chief Officer. I was responsible for the good maintenance of the ship’s deck, the cargo operations, risk management, safety and compliance with the latest Nationals and International rules. Currently, I am working on a shipping company as a marine superintendent.”

**Gorkem Yukselen**

“I have a degree in Civil Engineering from Izmir Dokuz Eylul University. After graduation, I got a scholarship from the Republic of Turkey, Ministry of Transportation and Infrastructure. I applied to MSc MOaM to specialize in "Port Area Management and Operations". What I will learn during this master programme is a step towards achieving my goal. I believe that I will have a great improvement in the business environment by learning the financial and economic parameters realized in the maritime and shipping sector in more detail. In addition, my decision-making skills will be improved more in line with the legal and technical aspects of maritime industry.”

(Continued on page 12)
A Heart Warming Signal Received 9th September 2018

Extract from the letter: “I would like to thank you for the “life navigation lessons”, useful for turbulent seas ahead. Indeed, when preparing us to face the challenging environment of our industry, you chose to utilise an exemplary code of conduct and even a unique sense of humour, in an attempt to change our mindset for the best. This may seem as the hardest route of education; nonetheless, it is undoubtedly the most efficient and rewarding: as the proverb goes, “give a man a fish and you feed him for a day; teach a man to fish and you feed him for a lifetime”.

Taking everything into consideration, it has been a pleasure participating in this academic voyage. As education is lifelong process to which I am committed, kindly be informed that I happily remain at the disposal of the university research and alumni communities.....”

(Continued from page 11)

More Student Voices

Nikoleta Brouzou
I graduated from Merchant Marine Academy of Aspropyrgos, as a Captain C’ Class. Has worked on Tanker Vessels, as a 2nd Officer in Greek Shipping Company. “The reason that I believe that the MOaM it will be helpful for me is because it is an opportunity to understand how the shipping industry works from the asshore side. It will expand my expertise, and it will obtain an integrated view of the subject.”

Gerasimos Georgitis
“I am a Master Mariner, and Captain on on Bulk Carrier type Vessels. I have worked as a deck officer holding the ranks of 2nd Officer with navigational and safety duties, as a Chief officer with major responsibilities in cargo operations, safety and security. I have been promoted to Master, holding the full responsibility and management of all relevant operations of a merchant vessel transporting commodities in bulk worldwide.”

Ioannis Kasimatis
“Served as Master Mariner A Class on tanker vessels, eager to learn and enhance my professional background and industry knowledge. Currently working as a Ship Operator on TSAKOS COLUMBIA SHIPMANAGEMENT S.A.”

Andreas Pantazis
“I am a Master Mariner with 13 years seagoing experience including command experience on bulk cargo vessels (handy-max/supramax/kamsar-max). Currently I am serving as a port captain & DPA in Piraeus based shipping company. I have substantial shore and commercial experience, including Ship Management, HSSE (DPA) for Fleet Management vessels Bulk carriers, overseeing Company ISM, monitor the safety and pollution-prevention aspects of the operation of the vessel, conducting training, ship audits, and supervising vetting inspections. I have expertise in ISM/MARPOL/STCW matters and worldwide PSC trends and regulations. I also have expertise in Resilience in Maritime Sector and Total Management Quality including crowd crisis analysis, media management techniques and multicultural processes in shipping industry.”

Georgios Lampropoulos
“I am working as Master on board Crude oil tankers. After graduating from the Merchant Marine Academy of Ipeiros I started working as a Second Officer for 2 years in Container vessels and for 2 years in Crude oil Carriers. From 2010 until April 2015 I was working on board Crude Oil Carriers as a Chief Officer and from April 2015 as Master.”
Anna Ziou is Policy Director (Safety & Environment) UK Chamber of Shipping. Here she writes about ambition and being a role model.

“I am Policy Director at the UK Chamber of Shipping, where I head the Safety and Environment policy team. As part of my job I regularly attend IMO meetings as an advisor of the UK Delegation and work closely with many organisations, including the International Chamber of Shipping (ICS) and the European Community Shipowners’ Associations (ECSA).

Early in my working life I realised that a master’s degree was essential for career progression. As I was working full-time for the UK Chamber of Shipping, I was looking for a course that would provide me both with specialist knowledge and skills and be able to accommodate my other commitments. The MSc in Maritime Operations and Management (MOaM) fitted these criteria. I was enrolled on the course in 2013 and graduated in 2016.

Embarking on a part-time master’s degree while working full time means that balancing the conflicting demands of work, personal life, and academic studies is challenging. Block attendance is required during the module and independent study for coursework and exams are significant time commitments.

The reality of being a mature student is studying at weekends even though I was fortunate enough to have a supportive employer who took an interest in my study and provided additional leave days. Looking back a supportive family was even more critical. From my experience I think three factors contributed to a positive outcome. First time management and planning to anticipate clashes and busy periods. Second identifying crossovers between my coursework and my job projects; and third, being realistic about what was achievable e.g. the number of modules that I could take each year.

The journey to MSc graduation has made me a very confident person. Six months after graduation I was promoted to Policy Director and concurrently I embraced another one of life’s adventures by becoming a mum to a baby girl.

I enjoy my current job because I can apply the knowledge and leadership skills acquired during the course on the business side. When things get too busy and overwhelming in life, I look back to what I have achieved, and this motivates me to overcome new challenges. I am proud to have career ambitions and want to contribute to shaping the future of the maritime industry. I want to provide a role model to my daughter and the next generation of women in the maritime industry.”

UK Chamber of Shipping

The UK Chamber of Shipping is the trade association and voice of the UK shipping industry with more than 180 members from across the maritime sector. The Chamber works with Government, parliament, international organisations and others to champion and protect the industry on behalf of their members. The mission of the organisation is to deliver trusted specialist expertise, lobbying and influence at a UK level on maritime issues across national, European and international government and governmental bodies.