PROFESSIONAL QUALIFICATIONS

Manchester Ship Canal Pilot (Class 1)

STCW II/2 Masters Mariner (Unlimited) Revalidated February 2018

Higher National Diploma Nautical Science

Ordinary National Certificate

ACADEMIC QUALIFICATIONS

Master Business Administration Bachelor of Laws Degree (LLB) Hons Chartered Master Mariner (CMMar) Chartered Marine Technologist Post Grad Diploma Business development Post Grad Diploma in financial strategy Post Graduate Diploma in Marketing Employment Law and Practice Course Diploma in Computing

PROFESSIONAL ASSOCIATIONS Institute of Marine Engineering Science

and Technology (*IMarEST*- member of British Engineering Council) Honourable Company of Master Mariners Chartered Master Mariner Registration Authority Corporation of Trinity House, London. United Kingdom Marine Pilots Association European & International Pilot Associations London Maritime Arbitrators Association Chartered Institute of Arbitrators London Shipping Law Centre Nautical Institute

PUBLICATIONS AND ARTICLES

Marine Hydrodynamics (New Thinking) Complex Negative Pressure Fields Ship Generated Super-Cells Peculiar Water, Strange Effects New Thinking on Ship Generated Pressure Fields; Introducing concepts for predicting Bank suction and rejection. Pilot Training and Accreditation Froude – put to the test Hydrodynamics and Interaction Deep Water Ship-Handling Marine implications of Molecular Hydrodynamics Piloting at the Edge of Chaos Boundary Zones Nature of Water Re-issued annually. Last issue, January 2018 With Dangerous Cargo (Oil / Product) endorsement. Associated qualifications remain current. (i.e. ECDIS, MRM, Bridge Resources, Simulators etc) HND includes marine engineering knowledge, ship systems and technical familiarisation training. ONC in Nautical Science (Glasgow)

MBA - December 2012 LLB (Hons) - December 2007. Worlds first CMMar - conferred October 2017 CMarTech - Conferred 2012 OU Oct 2012 OU May 2012 OU August 2011 Post Graduate Diploma OU – 2005 Open University

Fellow 2012 and Chartered Marine Technologist Professional Review Examiner

Liveryman of the Company. Deputy Chair and Chartered Master Mariner Younger Brother. Member & Practicing Pilot. Member (practicing) Member (supporting) Member Member Fellow

August 2009. Nautical Institute 'Seaways' Magazine HCMM April 2010 December 2010 HCMM April 2011 Delivered to 2nd International Conference on Marine Hydrodynamics (Trondheim, May 2011).

Pilot Magazine (2011)
Research consultation paper. September 2011.
JV with Videotel Maritime International - June 2012.
JV with Videotel Maritime International - August 2013.
Pilot Magazine (March 2014)
Pilot Magazine (February 2016).
Nautical Institute (Seaways) March 2016.
Nautical Institute (Seaways) September 2017.

Self-directed learning, maritime research and personal development continues to be feature of my life and career.

EMPLOYMENT RECORD

April 2008 to Present

Company Director / Researcher / Maritime Consultant Series Editor – Lloyds Practical Shipping Guides.

Concurrent with my Pilotage work, I am a **Director** of **Norwest Interaction**, providing consultancy, technical support, expert witness services and developing bespoke training products for business and the maritime industry.

As a result of my technical and maritime specialisations, I was offered the position as **Series Editor for Lloyds Practical Shipping Guides**.

I have been elected as a Younger Brother of Trinity House in London and am a Liveryman of the Honourable Company of Master Mariners (HCMM), sitting on the company's Technical and Education committees. I am also deputy-chair of the Chartered Master Mariner Registration Authority.

I am the HCMM nominated Nautical Advisor to the Admiralty Court of Appeal.

I am regularly consulted as a Marine Technical Specialist and expert witness in maritime disputes (wet cases and cargo / technical issues) where I provide practical advice, technical / navigational / forensic evidence and analysis and offer soundly supported testimony in the event marine incidents or insurance claims.

As a technical advisor and consultant hydrodynamicist, I partnered with *Videotel Marine International (London)* in the development of mariner training and vessel safety productions. My combination of technical capability, personal research and practical know-how has proven unique when developing industry training programs.

I continue my research into Marine hydrodynamics and work with the UK fishing fleets, the Nautical Institute and other learned bodies to promulgate findings which explain the causes behind many vessel disasters. This personal endeavour was recognised by the Maritime Industry the State in awarding me the new Merchant Navy Medal.

I have been appointed as legal and technical advisor to a number of smaller UK ports that are not large enough to have their own legal departments. I am currently the principal marine, navigation and hydrodynamics consultant to the UK Environment Agency (EA). The EA have appointed me to provide arbitration services in respect of infrastructure development contracts. In addition to my maritime technical consultancy and commercial work, I provide pro-bono legal advice and support to several charitable organisations.

January 1998 to Present: Marine Pilot (Self Employed) Manchester Ship Canal. Company Director, Pilot Manager & Pilot Rep.

Self-employed as a ships Pilot on the *Manchester Ship Canal* - conducting acts of pilotage and specialising in restricted water ship-handling within the extremely confined waters of the canal. In addition to my regular pilot duties, I have acted as company Director, training director and pilot representative. I am a Senior Examining Pilot.

My role of pilot requires that I assume the conduct of those vessels to which I am appointed. Assuming the conduct of a vessel requires that the Master relinquishes control of navigation and manoeuvring of the vessel to me and I assume authority for deciding what happens with the vessel within my pilotage district.

As a working pilot I have undertaken considerable research into Ship Hydrodynamics and the effects of Interaction. My published findings are globally recognised as the prevailing theory in marine hydrodynamics and ship interaction and form the basis for many of the training courses offered by maritime education establishments.

In 2008, I set up my own business (**Norwest Interaction Ltd**) to facilitate the number of requests I was receiving to provide advice, training, consultancy and technical support.

July 1992 to December 1997: Ships Master / Rig Tow Master & Consultant / Chief Officer

Employed by *United European Car Carriers* of Grimsby as an Officer then Master, I was responsible for every aspect of shipboard management, navigation, personnel management, all aspects of safety, financial management and budget control, shipboard maintenance, surveys and preparation, cargo documentation, vessel certification and the upkeep of classification documentation.

I spent a considerable amount of time moving from ship to ship assessing marine and technical operations, preparing ships for technical inspections and dry-docks and then overseeing every aspect of dry-dock projects. The company was effectively using me as marine superintendent and dry-dock Master.

During leave periods, I was frequently invited to return to the offshore oil industry to conduct rig-moves and solve various operational, technical and marine related problems. My association with the offshore (Oil and Gas) industry continues through my consultancy role and I remain up to date with technical innovation and operational developments.

December 1987 to June 1992: Rig Operations / Stability Technician / Towmaster / Engineer.

Worked through various, Aberdeen based, offshore manning agencies (Including: *Wilrig Offshore, Transocean International Marine Services, Dolphin Drilling Ltd, Silver Marine (Offshore) Ltd, Noble Denton Marine Services, Conoco (LOGGS), Lasalle Petroleum Ltd and Shell (Offshore Oil and Gas) Exploration Ltd, etc)* working in the North Sea oil fields, also Newfoundland and the Grand Banks.

During this period, I gained considerable experience in all the marine and technical aspects of the oil exploration & development industry. Initially, I spent time working in control rooms learning the essential technical and operating systems and oilfield / rig administration, then progressed to working on deck as a Stability Technician and Barge Engineer. Thereafter, I advanced to Barge Master (Captain/OIM) and eventually was appointed Tow-master with ultimate responsibility for moving oil rigs (semi-submersibles / MODU's) from one location to another. On several occasions, as a result of my extensive maritime and marine-engineering background, I was appointed technical superintendent during rig upgrades and wet-docking.

As Master/OIM and Tow-Master I have conducted numerous short-sea and trans-ocean tows. Following several such appointments, I was appointed to remain with the rig whilst exploratory drilling and sub-sea infrastructure development operations were carried out. My most challenging appointments took place under Arctic conditions.

July 1984 to October 1987: Senior Marine Technical Surveyor / Port Captain / P & I Surveyor / Classification inspector

Employed by *SGS* as a Marine Technical Surveyor based in Saudi Arabia and was responsible for the setting up and overseeing of offshore ship-to-ship lightering operations in the Red Sea and Persian Gulf. I regularly investigated vessels where technical / mechanical issues or cargo problems arose. I represented P&I clubs and classification societies where pollution occurred, or technical problems arose.

My roles included: investigating pollution incidents, personal injuries, mechanical failure and war casualties. I gained experience inside oil terminals, refineries and was involved with operational commissioning of oil refineries. As a technical investigator, I gained experience in dealing with war-zone casualties and pollution control / prevention.

August 1982 to July 1984: Berthing Master / Hydrographic Surveyor/ Marine Consultant.

Worked for Humberside Sea and Land Services Ltd (Immingham) and was responsible for the conduct of vessels during mooring operations Duties also included shift and labour organisation, promoting and ensuring safe working operations, mooring personnel safety and training, terminal safety, labour relations, personnel administration. An ability to negotiate and tactfully mediate in a crisis were essential features in this employment.

Additional to this role, I became deeply involved in hydrographic survey operations on company operated river and tidal berths and was consulted during the construction of new berths and a gas terminal.

January 1982 to July 1982: Cargo and Marine Technical Surveyor (USA)

Employed by Caleb Brett (USA) as a Marine Technical surveyor covering the Eastern United States sea-ports.

In this position, I carried out cargo inspections and measurement of crude oil (VLCC) and product tankers. Additionally, I was involved in the loss/gain control of cargo, Crude Oil Wash (COW) inspections and certification, ships condition surveys and the setting up and administering ship-to-ship (STS) lightering operations offshore.

March 1978 to December 1981: Chief Officer / Extra Chief Officer / Port Captain

Employed by F.T Everard's & Sons Ltd of Greenhithe (Kent). I was responsible for the technical maintenance, cargo operations, navigation and the day to day running and management of the ship.

During my final 18 months with the company I spent most of my time in various dry-docks, effectively acting as the company dry-dock Superintendent and Port Captain with responsibility for preparing and managing all aspects of the various upgrade and repair projects. I became experienced in project management, hull inspection, damage and condition surveys, repair work scheduling, technical negotiation and personnel management.

January 1975 to March 1978: 2nd Officer / 3rd Officer

Following a successful cadetship with Denholm Ship Management (*Glasgow*) was promoted to Third, then Second, Officer. During this period, I accumulated operational experience aboard Product Tankers, Chemical Carriers, Molten Sulphur Tankers, Bulk Carriers, VLCC's & ULCC's. Additional to my seagoing service, I undertook a range of self-directed extra-curricular training courses that enhanced my industry requirement skills.