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Thomas Lamb, Editor

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Author Biographies for Volume II

Chapter 27

Professor Horst Linde graduated as Diplom-Ingenieur/ Naval Architecture in 1965 at the Berlin University of Technology. Between 1965 and 1968, he worked with the German shipyard Deutsche Werft AG, Hamburg, in the department ship design and ship sales, and between 1968 and 1974 with the German shipping company Hamburg-Südamerikanische Dampfschifffahrts-Gesellschaft Eggert & Amsinck, Hamburg, (the Hamburg-Süd group) in the field of fleet planning, preliminary ship design, ship purchasing and ship operation, being in charge, for example, for planning and putting into operation series of container ships, bulk carriers and multipurpose ships, in close cooperation with U.S. and Australian subsidiaries of the Hamburg-Süd group. In 1974, he was appointed as Full Professor for marine transport and ship design at the Berlin University of Technology, Faculty of Transport Technology, Institute of Land and Sea Transport a position that he still holds.

Chapter 28

Allan M. Friis graduated as a M.SC. in Mechanical Engineering with specialization in Naval Architecture from the Technical University of Denmark in 1958. He served a 4 year apprenticeship as a shipwright at Aarhus Skibsvaerft, prior to attending university. After graduation he worked for 5 years at different Danish shipyards and the Danish marine consultant, Knud E Hansen, 8 years as a superintendent with two shipping companies including Esso international Services, and 7 years with Consultant Klaus Dwinger A/S. In 1977 he established his own consultancy, Marineconsult A/S, which amalgamated with Klaus Dwinger A/S to become Dwinger Marineconsult, in 1981. He was Managing Director of the company for 12 years. Since retiring he has been giving lectures and later acted as officially appointed examiner at the Department of Ocean Engineering at The Technical University of Denmark. He recently took the lead in co-authoring a comprehensive set of ship design notes for the students. He has been President of a Marine Research Advisory Committee, Member of DNV Technical Committee, Chairman of the Ship Division of the Danish Society of Engineers, the Danish Marine technology Association, and is a Fellow of RINA.

Chapter 29

Michael Osborne graduated with a B.Sc. in Naval Architecture from Newcastle University (UK) in 1966. In 1968 he joined Lloyds Register of Shipping, working on research and development projects in London, then as a Ship Surveyor in Newcastle and Poland. In 1980 he joined Shell International Marine, working on a variety of research and construction projects. In 1986 he became Chief Naval Architect and currently has the position of Technology Development Manager within Shell International Trading and Shipping. In between he has managed various new construction activities, the Shell fleet operational support unit, and structural approvals for pre-charter vetting. Mike is a Fellow of the Royal Institution of Naval Architects, a past President of their London Branch, a member of the ABS Technical Committee and is currently Chairman of the Tanker Structures Cooperative Forum.

R. Keith Michel graduated from Webb Institute of Naval Architecture in 1973 with a BS in naval architecture and marine engineering. He is president and chairman of the board of Herbert Engineering Corp. where he has been involved in the design of ships and related research for the last thirty years. He also serves as director and advisor to Herbert Engineering's marine software company, Herbert Software Solutions, Inc. His experience includes conceptual, preliminary, and contract level design of commercial ships. These designs have been primarily double-hulled vessels, including containerships, tankers, bulk carriers, RO-RO ships and barges. He is a Fellow of SNAME and a recipient of SNAME's Centennial medal and David W. Taylor medal, and currently serves as chair of the Marine Board of the National Academy of Sciences.

Chapter 30

Peter A Ridley, Senior Specialist with Chevron Texaco. Graduated as a Marine Engineer from Glasgow College Nautical Studies 1975, qualified as 1st Class Engineer (Combined) from South Glamorgan Institute of Technology 1984. Served as a sea going engineer, and shipyard superintendent with Texaco Overseas Tankship. Since 1995 has been involved with upstream offshore projects the contracting, design and construction of various offshore floating systems including FSUs, FPSOs and Drill-ships

Chapter 31

Matthew R. Werner graduated from Webb Institute of Naval Architecture in 1995 with a BS in naval architecture and marine engineering. After graduation he joined the naval architecture department of General Dynamics, Electric Boat Corporation in Groton, Connecticut. While at Electric Boat he worked on concept, preliminary, and detailed designs for nuclear powered submarines and provided engineering support to shipyard functions including vessel dry-docking and construction block transportation. In 1997, he earned a MS in Ocean Technology from Webb Institute of Naval Architecture. In the spring of 1998, he left Electric Boat and joined the technical and operations department of a New York based chemical tanker owner/operator serving as a vessel manager, technical superintendent, and project manager. In 1999 he was appointed as the project manager for a new vessel acquisition project for a series of three IMO I/II stainless steel chemical tankers. In the spring of 2002, he joined the faculty of Webb Institute as a member of the Marine Engineering Department. He earned his MBA from Long Island University in December of 2002, and actively consults in the areas of ship management, operations, and vessel repair and design.

Chapter 32

Takashi Fujitani Ph.D. graduated from the University of Tokyo in 1961. After retirement from IHI (Ishikawajima Harima Heavy Industries Co.ltd.) as a naval architect, he is now working for Tokyo LNG Tanker Co.Ltd. as a technical adviser. He was given the doctor degree of engineering from the University of Tokyo and awarded prizes of the ministry of transportation of Japan, and the ministry of science and technology of Japan for his contributions developing the new LNG carrier design, SPB.

Hirohiko Emi Ph.D. graduated from the Hiroshima University in 1957, and joined Nippon Kaiji-Kyokai Classification Society. In 1987 he received his doctorate in engineering. He was general manager of research institute since 1989 and retired from society in 1999. Thereafter, he has employed himself in developing a database on hull structures called HullExpert.

Akinori Abe Ph.D.is a general manager of Basic Design Department of IHI Marine United Inc. Japan. He received his B.Sc from the Department of Naval Architecture in the University of Tokyo in 1977. He joined Ishikawajima-Harima Heavy Industries Co. Ltd (IHI) in 1977 as a structural engineer and has been in charge of the development of IHI SPB LNG containment system. His main field is the structural design and safety assessment of gas carriers or specialized vessels. He received his Ph.D. degree from the University of Tokyo in 2001 for his research on structural design of gas carrier.

Chapter 33

Hang Sub Urm Ph.D. is a principal surveyor of Det Norse Veritas in Korea. He received his BSc. and MSc. from the Department of Naval Architecture in Seoul National University in Korea in 1981 and 1984 respectively. He joined Daewoo Shipbuilding and Marine Engineering Ltd. Co. (DSME), one of the largest shipyards in the world in 1983 as a structural engineer and was awarded for a scholarship for a Ph.D. study from the company in 1988. He received his Ph.D. degree from University of Newcastle upon Tyne in England in 1991. He joined Det Norske Veritas in 1998 as a principal surveyor and worked in Oslo, Norway for development of class rules and design guidelines for three years.

Jong Gye Shin Ph.D. is a professor of Ship Production in the Department of Naval Architecture and Ocean Engineering and the Head of Digital Shipbuilding Innovation Center at Seoul National University, Seoul, Korea. He received his BSc. and MSc. from the Department of Naval

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Chapter 34

Katsuyoshi Nishimura graduated from University of Tokyo with B.Sc. degree in Naval Architecture and joined Mitsui Engineering & Shipbuilding Co., Ltd. (M.E.S.) in 1975. He has been engaging in hull structure of commercial vessels, offshore structures and high-speed crafts.

Hideo Uetani graduated from Osaka University with B.Sc. degree in Naval Architecture and joined M.E.S. in 1973. He has engaged in hull outfittings of commercial vessels and offshore structures and is working as a project manager of Newbuilding Projects of LNG and LPG Carriers.

Hisashi Hohga graduated from Mizushima high school and joined M.E.S. in 1972. He has been engaged in machinery outfittings of commercial vessels, offshore structures and high-speed crafts.

Yukinori Torii graduated from Osaka University with M.Sc. degree in Naval Architecture and joined M.E.S. in 1980. He has been engaging in initial planning of commercial vessels.

Chapter 35

Thomas Lamb is a Research Scientist, Director of the Shipbuilding Research Lab and NAVSEA Ship Production Science Program, and an adjunct professor in the Department of Naval Architecture and Marine Engineering at the University of Michigan. He served a 5 year apprenticeship as a Shipwright in HM Dockyard, Rosyth, in Scotland from 1950. He received his Honors B.Sc, from Kings College, Durham University in 1958 and an MBA from Tulane University in 1990. He is a Fellow of the Society of Naval Architects & Marine Engineers, the Royal Institution of Naval Architects and the Institute of Marine Engineering Science and Technology, and a Member of the American Society of Naval Engineers, the Society of Logistic Engineers and the International Council on Systems Engineering. He is a Registered Professional Engineer in Washington and Wisconsin, a British Chartered Engineer and a European Engineer.

Markku Kanerva is Director, Business Development, with Deltamarin Ltd in Raisio, Finland. He graduated in naval architecture and marine engineering from the Helsinki University of Technology in 1974. He has worked at Valmet and Wärtsilä Shipyards in Helsinki and Turku dealing with hydrodynamics, model tests, ice going ships, project designs as well as sales and marketing. Since 1985 Mr. Kanerva has worked for consulting and engineering companies responsible for R&D, project design, sales and marketing and business development. He has been involved in developing new ship concepts and machinery configurations for several shipowners including ferries, cruise ships, tankers and ro-ro ships. Safety has been one of the leading themes throughout his work.

Chapter 36

Peter Zink received a B.Sc degree in Naval Architecture from Web Institute in 1972 and a M. Eng, in Naval Architecture from the University of California, Berkeley in 1975. From 1973 through 1974, he worked as an engineer for the University of California, Berkeley on a project investigating large amplitude ship motions and capsizing in following and quartering seas. In 1976 he joined American President Lines and worked in both the engineering and the marine operation departments. Since 1983, he has been employed at Herbert Engineering where he is currently a principal engineer. His career has focused primarily on ship structures and containership design. He is a SNAME member and has served as a local section chairman.

Eugene Van Rynbach received a B.Sc. degree from the University of California, Berkeley in Mechanical Engineering and Naval Architecture in 1974 and a M. Sc. in Transportation Management from SUNY Maritime College in 1991. He started working with container ships in 1979 at Sea-Land Service, Inc. as a new construction supervisor in a 12 ship construction program in Japan. This was followed by two years of work at American President Lines as a Staff Engineer. He then joined a consulting engineering company, from 1982 to 1989, where he worked again with Sea-Land Service doing plan approval for the D7 class new construction program and the D9J class lengthening program. In 1989 he again joined Sea-Land Service in the Marine Technical Services group where he remained until the sale of Sea-Land Service in 1999. Since then he has been working for U. S. Ship Management, which operates 19 U. S. flag containerships, as Manager, Marine Technical Services. During his over 20 years involvement with container ships he has managed many vessel modification, conversion, new construction, repair and operations projects, including acting as technical manager

for the construction of nine container ships in Japan and the conversion and speed up of three container ships in Germany. He is a member of SNAME and the ABS Americas Technical Committee.

Chapter 37

Kai Levander is managing the Technology unit within Kvaerner Masa-Yards Inc. The Technology unit undertakes research and product development work for both outside customers and Kvaerner Masa-Yards' own shipyards. The Technology unit specialises in cruise ships, ferries, transportation systems, fast vessels and arctic operation. Kai Levander has been with Wärtsilä Marine and Kvaerner Masa-Yards since 1969, mostly working with research and development tasks. He has been the innovator in many ship projects such as the *Finnjet* Gas Turbine ferry and the Baltic cruise ferry *Silja Serenade* with the atrium street. Among his cruise ship projects the All-Outside-Cabin concept of MS *Royal Princess*, the *Windstar* sailing cruise ship, the Diamond SWATH-Cruiser and the new Carnival and Costa Panamax vessels can be mentioned. For Royal Caribbean the Technology unit has been involved in the development of all their cruise vessels, including the Millenium and Vantage class ships and the Post Panamax Voyager ships.

Since 1995 Kai Levander is Assistant Professor in Ship Design at the Norwegian University of Science and Technology, Department of Marine Technology in Trondheim.

Chapter 38

Jennifer Knox is principal of a ship design consultancy based in Sydney Australia. The company carries out many projects related to RoRo Passenger ferries. An honours graduate of the School of Naval Architecture, University of New South Wales, Jennifer also holds a Bachelor of Commerce Degree. In 1991 she commenced employment as a naval architect at ADI Garden Island naval dockyard. There she was responsible for docking of naval and commercial vessels and provided design assistance during repair and refit projects. She also managed various research projects involving hydrodynamics and high-speed ship performance. After 5 years she moved to the Copenhagen office of Knud E. Hansen, where she worked on concept design and stability analyses of passenger vessels and hydrodynamics including performance optimisation and ship motion studies. In 1998 together with her Danish naval architect husband Hans Stevelt she established the ship design consultancy Lightning Naval Architecture. Jennifer is a member of RINA and an associate member of SNAME.

Chapter 39

Joseph P. Fischer graduated from the University of Michigan with a BSE degree in Naval Architecture and Marine Engineering in 1959. He worked as a naval architect for R.A. Stearn, Inc. of Sturgeon Bay, WI until 1977 when he joined American Steamship Co. Buffalo, NY as Vice President of Engineering leading to Vice President of Operations. In 1986 he returned to R.A. Stearn, then a subsidiary of John J. McMullen and Associates, as Director of Engineering. In 1996 Mr. Fischer purchased the assets of R.A Stearn and started Bay Engineering, Inc. where he is Owner and President. Mr. Fischer is a fellow of SNAME and a member of ABS Americas Technical Committee and Great Lakes Technical Committee. He is a registered professional engineer in the state of Wisconsin.

Edward L. Shearer is President and owner of Shearer & Assoc., Inc., Metairie, LA. He received BSE and MSE degrees in Naval Architecture and Marine Engineering from the University of Michigan. He is a registered Professional Engineer in the states of Pennsylvania, Louisiana and Texas. Shearer has worked for such companies as Newport News Shipbuilding & Dry Dock, Litton Systems (Ingalls Shipbuilding), Nashville Bridge Company, Hillman Barge and Construction, Equitable Shipyards, Inc., and Halter Marine, Inc. (Trinity Marine Group, Inc.). He has over thirty years experience in engineering of barges, tugs, towboats, dry docks and other inland and offshore marine vessels. He received the 2000 Engineering Alumni Merit Award from the University of Michigan, Engineering School, Department of Naval Architecture and Marine Engineering. He is a Certified Marine Surveyor (CMS) by the National Association of Marine Surveyors, a member of the Society of Naval Architects and Marine Engineers and a member of the ABS Western Rivers Technical Committee as well as participating in various Coast Guard committees dealing with tank vessel design, construction and operation.

Chapter 40

Brian Veitch Ph.D.has held the Terra Nova Project Research Chair in Ocean Environmental Risk Engineering at Memorial University since 1998. He has B.Eng. and M.Eng. degrees in Naval Architectural Engineering and Ocean Engineering from Memorial University of New-

foundland, Canada, and a Dr.Tech. from Helsinki University of Technology, Finland.

Neil Bose Ph.D.graduated in Naval Architecture and Ocean Engineering from Glasgow University in 1978 and with a Ph.D. in hydrofoil design in 1982, also from Glasgow University. He was Chair of Ocean and Naval Architectural Engineering at Memorial University from 1998 to 2003 and is the Canada Research Chair in Offshore and Underwater Vehicles Design from 2003.

Ian Jordaan Ph.D.is a University Research Professor at Memorial University, prior to which he held the NSERC-Mobil Industrial Research Chair in Ocean Engineering for ten years, also at Memorial. He has been heavily involved in standards development for ships and offshore structures that operate in ice. He has B.Sc. (Eng.) and MSc (Eng.) degrees from the University of the Witwatersrand, South Africa, and a Ph.D. from University of London, King's College.

Mahmoud Haddara Ph.D. has a Ph.D. in Naval Architecture from the University of California, Berkeley. He teaches at Memorial University where he also served as the interim Dean of Engineering in 2002/3. He worked as an engineer in Port-Said Shipyard. Dr. Haddara has over 90 publications in the areas of ship motion and parametric identification.

Donald Spencer graduated from the Technical University of Nova Scotia in 1979 as a mechanical engineer. He completed a Masters of Marine Technology at University of Newcastle upon Tyne in 1981. Shortly thereafter he joined the new ice basin at the Institute for Marine Dynamics (Canada) where he worked for 10 years as a research officer. He has been with Oceanic Consulting Corporation since 1998.

Chapter 41

Jakob Pinkster was born in 1949 at Wildervank (near Groningen) in The Netherlands. At the age of 2 his parents emigrated to Dublin, Ireland. After secondary school, he continued his education at Bolton Street College of Technology in Mechanical Engineering. Later he continued his education in The Netherlands at the Delft University of Technology in Naval Architecture, and graduated with an M.Sc. After approximately ten years in the marine industry and some three and a half years teaching at a Polytechnical College he became assistant professor in ship design at the Technical University of Delft. He now holds the current position of assistant professor of ship hydromechanics at the same university. Besides experience with a broad variety of ship types, he has also been involved with fast marine vehicles with regard to design, construction, testing, troubleshooting, and research.

Chapter 42

Richard White is a technical journalist and marine consultant. He began his career as an engineering cadet with the Shaw Savill & Albion shipping line, continuing as a ship's engineer in the company's fleet before returning to shore and studying where he received his Honours B.Sc. in mechanical Engineering. He lectured in marine Engineering at the South Shields Marine College for some years and then after a period in boatyard management, entered the world of technical journalism as Technical Editor of *The Motor Ship*. From there he moved to help start *Marine Propulsion* and was the magazine's first deputy Editor before taking over as Editor of *International Power Generation*. He then returned to his main interest, smaller vessels, and spent 13 years as Editor of *Ship and Boat International*. In 1998 he was the founder and for 3 years Editor of the niche publication *Offshore Support Journal*. He now combines consultancy work for some of the leading companies in the marine industry with editorial contributions to a number of technical journals. He is a Chartered Engineer and a Member of RINA and serves on the Institution's Small Craft Committee. Richard White was commissioned by Rolls-Royce to write this chapter.

Chapter 43

Paul Geiger is Senior Vice President- Engineering at Friede & Goldman, Ltd., Naval Architects and Marine Engineers, Houston, Texas. He joined F&G in 1984 and served in the capacities of Chief Mechanical Engineer and Chief Project Engineer before attaining his present position.

Prior to joining F&G he was employed by Avondale Shipyards, Inc., Avondale, LA from 1965 to 1984 where he gained design experience in both the Hull and Mechanical Engineering departments and project management experience in the Project Management department.

He received his B. Sc. degree in Mechanical Engineering from Louisiana State University, Baton Rouge, LA, in 1965. He is a Member of the Society of Naval Architects & Marine Engineers and is a Registered Professional Engineer in the state of Louisiana.

He is the author and co-author of several professional publications, including "Offshore Vessels and Their Unique Applications for the Offshore Designer" published in SNAME "Marine Technology," January 1995. Paul also served on the "Control Committee" for the 1992 Edition of SNAME "Marine Engineering" (Harrington).

Chapter 44

Philippe Goubault is currently working as chief naval architect and contract engineer for the French R&D firm PRINCIPIA Marine. He is in charged of European and Naval Architecture contracts in the company. His recent achievements in this position include the development of initial ship design software with special capabilities in developing innovation. Prior to this, he has headed the design office of CMN shipyard for three years, working on megayacht and small combatant ship designs. He also spent nearly ten years in the 1990's working with the US firm Band Lavis & Associates where he headed many ship design and cost assessment software developments, including the ship technology assessment software PASS™. His career had started with five years in the 1980's working for the French Navy design office where he was in charge of the Surface Effect Ship program.

John Allison has more than 41 years of experience as an Engineer Officer in the Royal Navy, in the aircraft and marine industries, and in university-level teaching and research. He is an acknowledged expert in the field of high-speed craft machinery and propulsion systems and has worked on the design of numerous vessels. Prior to joining Band, Lavis, & Associates in 1987 as Chief Engineer (BLA is now a part of CDI Marine), Mr. Allison was, for many years, responsible for all propulsion technology activities at Textron Marine Systems (formerly Bell Aerospace Textron). He has been engaged in the design, development, procurement, test and performance assessment of airscrews and marine propellers, waterjets, gas turbines and diesel engines, and has participated in numerous related technologies applicable to high-speed vessels. Other responsibilities included technical direction and management of defence-related research programs supporting Advanced Naval Vehicles of interest to each of the US Armed Forces. He has presented numerous papers to professional bodies that are relevant to marine propulsion in high-speed craft, singly or jointly with outstanding authors in the field. Professional affiliations include Fellow of the Royal Institution of Naval Architects (RINA), and the Institution of Mechanical Engineers, London, Member of SNAME, and the American Association of Naval Engineers (rt'd).

Chapter 45

Dr. Tony Armstrong is the Manager of R&D at Austal Ships in Australia, a manufacturer of high-speed aluminum vessels of all sizes. He served a 6-year student apprenticeship at Vickers Ltd in Barrow-in-Furness, graduating in 1969 with a BSc, and serving as a hull construction manager before emigrating to Australia in 1974. After working as a designer with a naval architectural consultancy firm, he then spent 3 years in Hong Kong as a Government Surveyor before returning to Australia as a partner with the same consultancy and became Managing Director in 1985. Selling the company in 1986, he joined Carrington Slipways, a builder of specialized craft, as Business Development Manager. In 1989 he joined Hercus Marine Designs as the Director of Design, with involvement in the first generation of large vehicle-carrying high-speed catamarans. Enrolling at the University of New South Wales with a scholarship from International Catamarans (Incat) in 1995, he obtained his PhD on the topic of the viscous resistance of catamarans. He joined Austal Ships in 1998 and has responsibility for all new design concepts. He is also an expert advisory committee member of the Australian Research Council and Chairman of the Technical Committee of the Australian Shipbuilders Association, in which role he supports the Australian Government delegation at IMO formulating new international legislation on ships. He is a Fellow of RINA.

Chapter 46

Dr. David Andrews was given the new Chair in Engineering Design at University College London (UCL)in 2000, following his retirement from the UK MOD where he was first Director of frigates and Mine Countermeasures and most recently the Team leader for the Future Surface Combatant Integrated Project Team. He directed the procurement of the first ocean-going trimaran R.V. TRITON. He joined the RCNC as a cadet and graduated from UCL with his M.Sc. in Naval Architecture in 1971. He then served with RCNC until 1980 when he returned to UCL as the MOD appointed lecturer in Naval Architecture. During his tenure at UCL he received his Ph.D. for his thesis *Synthesis in Ship Design*. He returned to UK MOD in 1986 until 1998. He then set up a new Design Research Group at UCL focusing on computer-aided preliminary ship design, trimaran design research, ship combat system integration and design methodology for complex systems. He is a Chartered Engineer, Fellow of RINA, and Fellow of the Royal Society of Arts. In 2000 he was elected ta fellow of the Royal Academy of Engineering.

Chapter 47

John Allison, See Chapter 44.

Chapter 48

Karsten Fach is head of department for Special Ships in division Ship Technology at Germanischer Lloyd (GL) in Hamburg, Germany. He is responsible for structural plan approval of special ships. Additionally he is Ship Type Manager for High Speed Craft. He joined GL's research division in 1986 shortly after he had graduated in naval architecture at the Institute for Naval Architecture in Hamburg where he received his Dipl.-Ing. degree. Most of the time he performed strength and vibration finite element analysis for non-conventional marine structures. For 5 year he was involved in the German research project Fast and Unconventional Ships, and for 3 years he was project leader for the German research project Technical Development of WIG.

Hanno Fischer is a renowned German engineer and designer of WIG and Aircraft. He started his activities in this field as the chief designer and then as the Technical Director of the firm Rheinflugzeugbau in 1958. Under the consultancy of the outstanding German engineer Dr. Lippish and his patents, he was responsible in the development of the X113 and X114 WIG craft. In 1979, together with Mr. Klaus Matjasic, he established the firm Fischer Flugmechanik, which designed the Airfish 1, 2 and 3 WIG craft. In 1992 Mr. Fischer started development of the Hoverwing technology resulting in the WIG prototype Hoverwing 2VT being built and tested. In 1997–2001, the first certified passenger WIG craft, Airfish 8, was designed and built under his leadership and put into operation in Australia. Besides many WIG projects, he is the designer of 14 aircraft and author of numerous patents in aviation. He was also the first person to apply composite materials in aviation.

Nikolai Kornev is a Professor of the Marine Technical University St. Petersburg (SMTU), Russia since 1992. He obtained his Honors Degree in Ship Hydromechanics in 1984 from the SMTU. He holds degrees of Cand. of Science in Ship Theory (1988) and Doctor of Science in Fluid Mechanics (1998) from the SMTU. Prof. Kornev is a specialist in fields of the WIG aerodynamics and design, fluid dynamics and numerical methods. He has provided practical analysis of aerodynamics and stability for numerous WIG craft. Prof. Kornev stayed at the KRISO 1995 (South Korea), Technical University Braunschweig 1995–1997 (Germany), Wismar University (1999-2000). He is a Fellow of the Humboldt Foundation and DAAD. Since 2002 he is a Professor in the University of Rostock, Germany where he teaches ship theory, fluid mechanics, computational fluid dynamics, LES and microflows.

Ulf Petersen is head of a research team at Germanischer Lloyd (GL) in Hamburg, Germany, focusing on safety and reliability aspects of marine structures and engineering systems. He joined the marine engineering research department of GL in 1990 where he has been responsible for a number of national and European research projects applying safety assessment techniques to ship propulsion systems, high-speed craft and Wing-In-Ground (WIG) effect craft. As advisor to the German government he contributed to the ongoing work at the International Maritime Organization on developing safety requirements for WIG craft. Prior to joining GL, Dr. Petersen worked as a lecturer and research officer at the Mechanical Engineering department of the University of Bath, UK. He received his doctorate at the University of Bath and his Dipl.-Ing. degree in Marine Engineering from the University of Hannover, Germany.

Chapter 49

Robert G. Allan is the President of Robert Allan Ltd., the longest established Naval Architecture Consultancy in Canada, begun by his grandfather in 1930. He received an honours degree in Naval Architecture for the University of Glasgow in 1971, and after working for two years in the UK, returned to Canada to join the family business in 1973. Assuming the ownership of the business in 1981, he has led the business into a position of world-recognition in the design of specialized commercial vessels of all types, but particularly tugs, escort tugs, fireboats, icebreakers, research vessels, and high speed patrol craft. Mr. Allan is a Registered Professional Engineer in the Province of British Columbia, a Fellow of the Society of Naval Architects and Marine Engineers, and a Fellow of the Royal Institute of Naval Architects.

Chapter 50

Robert G. Allan, see Chapter 49.

Kenneth D. Harford is the Engineering Manager of Robert Allan Ltd. He received a Bachelor's degree in Applied Science, Mechanical Engineering at the University of British Columbia, Vancouver, BC, Canada, in 1970. After 18 years of consulting engineering work in marine noise and vibration control, and in the design, manufacture, and installation of marine electronics and propulsion systems, Mr.

Harford joined Robert Allan Ltd. in 1988. His work at Robert Allan Ltd. has included the system engineering, and construction inspection for a wide variety of vessels but particularly tugs, high speed ferries, fireboats, icebreakers, research vessels, and high speed patrol craft. He is a Registered Professional Engineer in the Province of British Columbia, a Member of the Society of Naval Architects and Marine Engineers, and a Member of the Canadian Institute of Marine Engineering.

Paul S. Smith is Senior Marine Consultant for the Glosten Associates. He received his Bachelor's degree in Naval Architecture & Marine Engineering from the University of Michigan in 1975, and his Master's Degree in Ocean Engineering from MIT as a SNAME Scholar in 1979. He earned his MBA degree from the University of Washington in 2000, and now heads Glosten's Marine Logistics and Economic Analysis group. Prior to joining Glosten in 2002, he served as Vice President and General Manager of MARCO Pollution Control, where he led the design and construction of more than 70 oil recovery systems and oil spill response vessels, delivered on 6 continents. His career includes more than 20 years in ocean operations, primarily engaged in towing, salvage, and deep ocean search and recovery. Mr. Smith is a Member of the Society of Naval Architects and Marine Engineers, past chairman of the Pacific Northwest Section and a member of the ASTM Panel F-20 on Oil & Hazardous Materials Spill Control.

Chapter 51

Professor Vlasblom graduated in Construction Engineering at the College of Technology in Rotterdam in 1962. He continued his education at the Delft University of Technology. In 1968 he became "cum laude" Master of Science in Civil Engineering with a specialty in Hydraulics. From 1968 up 1992 he was associated with the research department of three major dredging contractors and for an intermission of 4 years with the Provincial Waterworks of North Holland. From 1992 to 1994 he was employed in Hong Kong as the Head of Planning and Production Department of the Airport Platform Contractors Marine Works JV. for the Chek Lap Kok Airport. Since 1994 he has been appointed as Professor of the Chair of Dredging Technology at the Delft University of Technology.

Jakob Pinkster, see Chapter 41.

Chapter 52

Frank van Hoorn is the President of Argonautics Marine Engineering, providing consulting services related to marine heavy-lift transportation to ship and barge owners, cargo designers, manufacturers and owners, marine warranty surveyors, etc. He received his M.Sc. in Naval Architecture from the Delft University of Technology in the Netherlands in 1983. He then joined Wijsmuller Engineering, working on the design of small workboats and tugs. He assisted Wijsmuller Salvage on-site for the salvage of the OCEAN RANGER offshore Newfoundland and assisted Wijsmuller Transport with the more complex heavy-lift transports. He transferred to Wijsmuller Transport in 1985 to focus entirely on heavy-lift transportation. In 1992 he moved to the U.S. and founded Argonautics Marine Engineering. He is a Member of SNAME and ASNE.

Chapter 53

Thomas Lamb, see Chapter 35.

Chapter 54

John C. Daidola, Ph.D. P.E., is Senior Vice President of AMSEC LLC/M. Rosenblatt & Son. He received BSE and MSE degrees in Naval Architecture and Marine Engineering from the University of Michigan and a Ph.D. in Naval Architecture from the Stevens Institute of Technology. He is a registered Professional Engineer in the States of New York and Florida. Dr. Daidola had previously been Senior Vice President, Engineering, for M. Rosenblatt & Son, Inc. naval architects and marine engineers, prior to its acquisition by AMSEC. He has over 30 years of experience in new ship design, production, alteration, repair, and research for both naval and commercial ships and offshore vessels. Dr. Daidola has directed the design of numerous vessels of all types. Design programs involving oceanographic ships have included monohull, catararan and SWATH hull forms addressing general oceanography, hydrographic, fisheries and estuarine study. He is a Fellow of the Society of Naval Architects and Marine Engineers and Chairman of its Technical and Research organization since 1999.

Chapter 55

Barry Tibbitts is a retired U.S. navy Captain and was the Chief Systems Engineer for John J. McMullen Assoc. in Washington, DC for ten years. He received his BS from the U.S. Naval Academy (1956) and MSME and Naval Engineer degrees from MIT (1965). He also graduated from the Naval War College in 1973. He served five years at sea in an aircraft carrier and two diesel attack submarines. Early tours as an engineering duty officer included the Ship Repair Facility, Yokosuka (Japan), Pacific Fleet HQ (Pearl Harbor), and as an advisor to the South Vietnam Navy. His

next assignment took him to Pascagoula, Mississippi where for five years as the Navy Deputy for Submarines he supervised, for the Government, construction or overhaul of nine nuclear attack submarines and six surface ships at Ingalls.

From 1976 to 1987, he served in a variety of senior technical management positions in Washington: aircraft carrier ship design manager, Director Naval Ship Engineering Center's Hull and Ship Design Divisions, Commander David Taylor Research Center (the former DTMB), and Director Naval Sea Systems Command's Ship Design Group. For ten years he chaired the NATO ship design group (NG/6). His last tour on active duty was as professor of Naval Construction and Engineering at MIT. His is both surface and submarine warfare qualified. Personal decorations include two awards of the Legion of Merit.

He has published many papers on naval ship design, acquisition and technology. He is the co-author of the Aircraft Carrier chapter in SNAME's "100 Years of Marine Technology". He is a Fellow of SNAME and of RINA, a member of SNAME's Ship Design Committee, a member of ASNE, lectures at the Defense System Management College (DSMC) and remains on the MIT faculty as a senior lecturer.

Chapter 56

Paul Sullivan is a Rear Admiral in the U.S. Navy and since his promotion to this position in September 2001 has been the Deputy Commander for Integrated Warfare Systems, Naval Sea Systems Command. He graduated from the U. S. Naval Academy in 1974 with a Bachelor of Science Degree in Mathematics.

Following graduation, Rear Admiral Sullivan served aboard the USS DETECTOR (MSO 429) from 1974 to 1977, where he earned his Surface Warfare Qualification. He then attended the Massachusetts Institute of Technology (MIT), where he graduated in 1980 with dual degrees of Master of Science (Naval Architecture and Marine Engineering) and Ocean Engineer. While at MIT, he transferred to the Engineering Duty Officer Community. His Engineering Duty Officer tours prior to command include Ship Superintendent, Docking Officer, Assistant Repair Officer and Assistant Design Superintendent at Norfolk Naval Shipyard, Deputy Ship Design Manager for the SEAWOLF class submarine at Naval Sea Systems Command (NAVSEA), Associate Professor of Naval Architecture at MIT, OHIO (SSBN 726) Class Project Officer and LOS ANGELES (SSN 688) Class Project Officer at Supervisor of Shipbuilding, Groton, CT; Team Leader for Cost, Producibility, and Cost and Operational Effectiveness Assessment (COEA) studies for the New Attack Submarine at NAVSEA; and the Director for Submarine Programs on the staff of the Assistant Secretary of the Navy (Research, Development and Acquisition). He served as Program Manager for the SEAWOLF Class Submarine Program (PMS 350) 1995 to 1998. During his tenure, the SEAWOLF design was completed, and the lead ship of the class was completed, tested at sea, and delivered to the Navy.

Captain Barry Tibbitts, see Chapter 54.