Solas 2009 Consolidated Edition

This publication provides guidance to port State control officers (PSCOs) on the conduct of inspections of foreign ships, in order to promote consistency in the way inspections are carried out worldwide, and to harmonize the criteria for deciding on deficiencies found on board relating to the ship, its equipment or its crew, as well as the application of procedures.

Chapter V of the International Convention for the Safety of Life at Sea (SOLAS V) has been substantially revised. The new Regulations will come into force in the UK on 1 July 2002 under the Merchant Shipping (Safety of Navigation) Regulations 2002, and will replace the 1974 Chapter V (SOLAS V/74) Regulations. The Regulations apply to all UK ships on all voyages and to all other ships while they are in UK waters. This publication contains the full text for each Regulation, as determined by the International Maritime Organisation (IMO), along with explanatory guidance notes. It has been prepared to provide practical guidance to ship-owners, masters, crews and the shipping industry on the implementation of the new SOLAS Regulations.

The MSC adopted a new Code of International Standards and Recommended Practices for a Safety Investigation into a Marine Casualty or Marine Incident

(Casualty Investigation Code). Relevant amendments to SOLAS Chapter XI 1 were also adopted, to make parts I and II of the Code mandatory. Part III of the Code contains related guidance and explanatory material. The Code will require a marine safety investigation to be conducted into every marine casualty involving the total loss of the ship or a death or severe damage to the environment. The Code will also recommend an investigation into other marine casualties and incidents, by the flag state of a ship involved, if it is considered likely that it would provide information that could be used to prevent future accidents. The new regulations expand on SOLAS Regulation I/21, which requires administrations to conduct an investigation of any casualty occurring to any of its ships when it judges that such an investigation may assist in determining what changes in the present regulations might be desirable.

This book contains a selection of research papers presented at the 11th and 12th International Ship Stability Workshops (Wageningen, 2010 and Washington DC, 2011) and the 11th International Conference on Stability of Ships and Ocean Vehicles (Athens, 2012). The book is directed toward the ship stability community and presents innovative ideas concerning the understanding of the physical nature of stability failures and methodologies for assessing ship stability. Particular interest of the readership is expected in relation with appearance of

new and unconventional types of ships; assessment of stability of these ships cannot rely on the existing experience and has to be based on the first principles. As the complexity of the physical processes responsible for stability failure have increasingly made time-domain numerical simulation the main tool for stability assessment, particular emphasis is made on the development an application of such tools. The included papers have been selected by the editorial committee and have gone through an additional review process, with at least two reviewers allocated for each. Many of the papers have been significantly updated or expanded from their original version, in order to best reflect the state of knowledge concerning stability at the time of the book's publication. The book consist of four parts: Mathematical Model of Ship Motions in Waves, Dynamics of Large Motions, Experimental Research and Requirements, Regulations and Operations.

This book deals with ship design and in particular with methodologies of the preliminary design of ships. The book is complemented by a basic bibliography and five appendices with useful updated charts for the selection of the main dimensions and other basic characteristics of different types of ships (Appendix A), the determination of hull form from the data of systematic hull form series (Appendix B), the detailed description of the relational method for the preliminary

estimation of ship weights (Appendix C), a brief review of the historical evolution of shipbuilding science and technology from the prehistoric era to date (Appendix D) and finally a historical review of regulatory developments of ship's damage stability to date (Appendix E). The book can be used as textbook for ship design courses or as additional reading for university or college students of naval architecture courses and related disciplines; it may also serve as a reference book for naval architects, practicing engineers of related disciplines and ship officers, who like to enter the ship design field systematically or to use practical methodologies for the estimation of ship's main dimensions and of other ship main properties and elements of ship design.

This volume provides a detailed legal analysis of the fourth pillar of the international maritime regulatory regime, the comprehensive Maritime Labour Convention, 2006, and its provisions to achieve decent work for seafarers and a level playing field for shipowners.

In Navigating Straits: Challenges for International Law, internationally recognized international law scholars provide in-depth analysis of the legal challenges in straits concerning security, piracy, safety and environmental protection. All readers interested in international and law of the sea will find this seminal volume of interest.

Archimedes is held in high esteem by mathematicians, physicists and engineers as one of the most brilliant scientists of all time. These proceedings contain original, unpublished papers with the primary emphasis on the scientific work of Archimedes and his influence on the fields of mathematics, science, and engineering. There are also papers dealing with archaeological aspects and the myths and legends about Archimedes and about the Archimedes Palimpsest. Papers on the following subjects form part of the book: Hydrostatics (buoyancy, fluid pressure and density, stability of floating bodies); Mechanics (levers, pulleys, centers of gravity, laws of equilibrium); Pycnometry (measurement of volume and density); Integral Calculus (Archimedes as the father of the integral calculus, method of exhaustion, approximation of pi, determination of areas and volumes); Mathematical Physics (Archimedes as the father of mathematical physics, Law of the Lever, Law of Buoyancy, Axiomatization of Physics); History of Mathematics and Mechanics (Archimedes' influence in antiquity, the middle ages, the Renaissance, and modern times; his influence on Leonado da Vinci, Galileo, Newton, and other giants of science and mathematics); Ancient Machines and Mechanisms (catapults, water screws, iron hands, compound pulleys, planetaria, water clocks, celestial globes, the Antikythera Mechanism); Archimedean Solids (their rediscovery in the Rennaisance and their applications in materials science and chemistry); Archimedean Legends (how stories of golden crowns, eureka moments, naked runs, burning mirrors, steam cannons, etc., have influenced us

through the ages, whether true or not); The Cattle Problem (how its 18th century rediscovery inspired the study of equations with integer solutions); Teaching the Ideas of Archimedes (how his life and works have influenced the teaching of science, mathematics, and engineering).

The most important of the international conventions dealing with maritime safety is the International Convention for the Safety of Life at Sea (SOLAS) which covers a wide range of measures designed to improve the safety of shipping. It is also one of the oldest of its kind, the first version was adopted in 1914 following the sinking of the Titanic. There have been four more versions of SOLAS and the present version was adopted in 1974 and entered into force in 1980. This edition provides access to all SOLAS requirements, a consolidated text of the Convention, its protocols of 1978 and 1988 and all amendments in effect from 1 July 2009.

IGF = International code for ships fuelled by gases or other low-flashpoint fuels

The Maritime Environment Protection Committee (MEPC) at its fifty-first session in April 2004, approved a programme for the development of guidelines and procedures for uniform implementation of the Ballast Water Management (BWM) Convention, listed in Conference resolution 1 including additional guidance required but not listed in the resolution. The programme was further expanded at the fifty-third session of the MEPC in July 2005 to develop and adopt 14 sets of Guidelines, the last one being adopted by resolution MEPC.173(58) in October 2008. This 2009 edition reproduces the text of the

International Convention for the Control and Management of Ships' ballast water and sediments, the four Conference resolutions, and the 14 sets of Guidelines developed and adopted by the MEPC of the Organization

Supersedes previous consolidated edition

The Code on Alerts and Indicators 2009, is intended to provide general design guidance and to promote uniformity of type, location and priority for alerts and indicators required by the SOLAS Convention, including relevant performance standards, and by the MARPOL Convention, as well as by other associated instruments and codes. The Code will benefit designers and operators by consolidating in one document the references to priorities, aggregation, grouping, locations and types, including colours and symbols, of shipboard alerts and indicators. This new Code updates, revises and replaces the Code on Alarms and Indicators 1995.

The International Code on Intact Stability 2008 (2008 IS Code), presents mandatory and recommendatory stability criteria and other measures for ensuring the safe operation of ships, to minimize the risk to such ships, to the personnel on board and to the environment. The 2008 IS Code took effect on 1 July 2010. The 2008 IS Code features:a full update of the previous IS Code; criteria based on the best state-of-the-art concepts available at the time they were developed, taking into account sound design and engineering principles and experience gained from operating ships; influences on intact stability such as the dead ship condition, wind on ships with large windage area,

rolling characteristics and severe seas. This publication also presents Explanatory Notes to the 2008 IS Code, intended to provide administrations and the shipping industry with specific guidance to assist in the uniform interpretation and application of the intact stability requirements of the 2008 IS Code.

The Assembly, at its twenty-sixth session (23 November to 2 December 2009), adopted by resolution A.1023(26) the Code for the Construction and Equipment of Mobile Offshore Drilling Units, 2009 (2009 MODU Code), which had been developed following a thorough revision of the 1989 MODU Code adopted by resolution A.649(16). In adopting the 2009 MODU Code, the Assembly recalled in particular that, since the adoption of the 1989 MODU Code, the Organization had adopted a significant number of amendments to many of the regulations of the International Convention for the Safety of Life at Sea, 1974 (SOLAS) referenced in the Code, and also that the International Civil Aviation Organization (ICAO) had adopted amendments to the Convention on International Civil Aviation which impacted on the provisions for helicopter facilities as contained in the Code. The 2009 MODU Code provides an international standard for MODUs of new construction which will facilitate their international movement and operation and ensure a level of safety for such units and for personnel on board, equivalent to that required by the 1974 SOLAS Convention and the Protocol of 1988 relating to the International Convention on Load Lines, 1966, for conventional ships engaged on international voyages. The 2009 MODU Code supersedes the 1989 MODU Code for mobile offshore drilling units, the keels of which are laid or which are at a similar stage of construction on or after 1 January 2012. For MODUs constructed before that date, the provisions of the

1989 MODU Code still apply.

This user guide has been developed to consolidate existing IMO maritime security-related material into a companion guide to SOLAS chapter XI-2 and the ISPS Code so as to assist States in promoting maritime security through development of the requisite legal framework, associated administrative practices, procedures and the necessary material, technical and human resources. The intention is to assist SOLAS Contracting Governments in the implementation, verification, compliance with, and enforcement of, the provisions of SOLAS chapter XI-2 and the ISPS Code.

Now in its second edition Maritime Economics provides a valuable introduction to the organisation and workings of the global shipping industry. The author outlines the economic theory as well as many of the operational practicalities involved. Extensively revised for the new edition, the book has many clear illustrations and tables. Topics covered include: * an overview of international trade * Maritime Law * economic organisation and principles * financing ships and shipping companies * market research and forecasting.

This publication contains the amendments to the International Convention for the Safety of Life at Sea (SOLAS) 1974 and to its 1988 Protocol that were adopted by the Maritime Safety Committee (MSC) in 2010 and 2011. Resolution MSC.290(87) was adopted in May 2010 by the MSC at its eighty-seventh session and contains amendments to SOLAS chapter II-1, regulation 2 in Part A which adds a new definition and also adds, in Part A-1, a new regulation 3-10 on Goal-based ship construction standards for bulk carriers and oil tankers. These amendments were accepted on 1 July 2011 and entered into force on 1 January 2012. Resolution MSC.291(87) was also adopted by the MSC at its eighty-seventh session and adds

a new regulation 3-11 to chapter II-1 in Part A-1 on Corrosion protection of cargo oil tanks of crude oil tankers. This resolution also amends, in Part A, chapter II-2, regulation 1 "Application" and Part B, regulation 4 Probability of ignition. These amendments were accepted on 1 July 2011 and entered into force on 1 January 2012. Resolution MSC.308(88) was adopted in December 2010 by the MSC at its eighty-eighth session and contains amendments to chapters II-1 and II-2 and adds new regulations to chapter V "Safety of navigation". Further amendments were made to the appendix certificates. These amendments will enter into force on 1 July 2012 pending their acceptance on 1 January 2012. Resolution MSC.309(88) was also adopted by the MSC at its eighty-eighth session and contains amendments to the 1988 Protocol and modifications and additions to the appendix to the Annex to the 1974 SOLAS Convention. These amendments modify the safety certificate forms for passenger and cargo ships. These amendments will enter into force on 1 July 2012 pending their acceptance on 1 January 2012. Resolution MSC.317(89) was adopted in May 2011 by the MSC at its eighty-ninth session and contains an amendment to chapter III, Life-saving appliances and arrangements, regulation 1 which adds a new paragraph on lifeboat on-load release mechanisms. These amendments will enter into force on 1 January 2013, pending their acceptance on 1 July 2012.

SOLASConsolidated Edition 2009, Consolidated Text of the International Convention for the Safety of Life at Sea, 1974, and Its Protocol of 1988: Articles, Annexes and Certificates. Incorporating All Amendments in Effect from 1 July 2009SOLAS: Consolidated Edition 2009SOLAS, Consolidated Edition, 2009Consolidated Text of the International Convention for the Safety of Life at Sea, 1974, and Its Protocol of 1988 : Articles, Annexes and Certificates

Risk-based ship design is a new scientific and engineering field of growing interest to researchers, engineers and professionals from various disciplines related to ship design, construction, operation and regulation. The main motivation to use risk-based approaches is twofold: implement a novel ship design which is considered safe but - for some formal, regulatory reason - cannot be approved today and/or rationally optimize an existing design with respect to safety, without compromising on efficiency and performance. It is a clear direction that all future technological and regulatory (International Maritime Organisation) developments regarding ship design and operation will go through risk-based procedures, which are known and well established in other industries (e.g. nuclear, aviation). The present book derives from the knowledge gained in the course of the project SAFEDOR (Design, Operation and Regulation for Safety), an Integrated Project under the 6th framework programme of the European Commission (IP 516278). The book aims to provide an understanding of the fundamentals and details of the integration of risk-based approaches into the ship design process. The book facilitates the transfer of knowledge from recent research work to the wider maritime community and advances scientific approaches dealing with risk-based design and ship safety.

The 2020 edition of the 2011 ESP Code provides requirements for an enhanced programme of inspections during surveys of single-hull and of double-hull bulk carriers and single-hull and double-hull oil tankers, in accordance with the provision of SOLAS regulation XI-1/2 and in line with the IACS UR Z10 series. It provides, in particular, special requirements for: (1) Renewal, annual and intermediate surveys; (2) Preparation for surveys; (3) Documentation on board; (4) Procedures for thickness measurements; (5) Reporting and evaluation of surveys

The Code on noise levels on board ships has been developed to provide international standards for protection against noise under the provisions of regulation II-1/3-12 of the SOLAS Convention. The Code, adopted by resolution MSC.337(91), recognizes the need to establish mandatory noise level limits for machinery spaces, control rooms, workshops, accommodation and other spaces on board ships, and enters into force on 1 July 2014.The Code applies to new ships of a gross tonnage of 1,600 and above. The specific provisions relating to potentially hazardous noise levels, mitigation and personal protective gear contained in the Code may be applied to existing ships of a gross tonnage of 1,600 and above, as far as reasonable and practical, to the satisfaction of the Administration. The Code may be applied to new ships of a gross tonnage of less than 1,600 as far as reasonable and practical, to the satisfaction of the Administration. The Code includes: a format for noise survey reports; guidance on the inclusion of noise issues in safety management systems; - suggested methods of attenuating noise; and - a simplified procedure for determining noise exposure. These regulations, recommendations and advice are intended to provide Administrations with the tools to promote "hearing saving" environments on board ships. Although legally treated as a mandatory instrument under the SOLAS Convention, certain provisions of the Code remain recommendatory or

informative.

Amendment to 2015 consolidated ed. (ISBN 9780115534027). Amendment consists of loose-leaf pages that replace select pages from the main edition binder

This textbook provides readers with an understanding of the basics of ship stability as it has been enacted in international law. The assessment of ship stability has evolved considerably since the first SOLAS convention after the sinking of the RMS Titanic, and this book enables readers to familiarise themselves with the most up-to-date modern day methodology, as well as looking ahead to the effects on ship design over the next fifty years. The author not only explains the methodology of probabilistic ship damage as required by the International Maritime Organisation (IMO), but also details the new requirements to assess certain sizes and classes of ships to the seven second-generation ship stability requirements. Many textbooks that are currently used by undergraduates focus on the geometric-centric deterministic approach to the assessment of ship stability, whereas this book also includes material on the classes of ships that are now required to have probabilistic ship damage assessment, as has only recently been agreed by the IMO. Basic Naval Architecture: Ship Stability contains up-to-date information, making it ideal for university students studying ocean or marine

engineering, as well as being of interest to students on naval architecture and ship science courses. Highly illustrated and including chapter studies for ease of learning, the book is an ideal one-volume textbook for students.

Water covers more than 70% of the Earth’s surface, making maritime influences an important consideration in evaluating modern global economic systems. Therefore, the efficient design, operation, and management of maritime systems are important for sustainable marine technology development and green innovation. Marine Technology and Sustainable Development: Green Innovations examines theoretical frameworks and empirical research in the maritime industry, evaluating new technologies, methodologies, and practices against a backdrop of sustainability. This critical reference encourages the discussion and exploration of diverse opinions on the benefits and challenges of new marine technologies essential for marine and maritime professionals, researchers, and scholars hoping to improve their understanding of environmental considerations in preserving the world’s oceanic resources.

"This publication contains the amendments to the International Convention for the Safety of Life at Sea (SOLAS) 1974 and to its 1988 Protocol that were adopted by the Maritime Safety Committee (MSC) in 2008 and 2009."--P. v.

The International Code of Safety for High-Speed Craft, 2000 (2000 HSC Code)

applies to craft for which the keels are laid, or which are at a similar stage of construction, on or after 1 July 2002. The application of the both HSC Codes is mandatory under chapter X of the SOLAS Convention. This edition incorporates amendments that were adopted in 2004 and 2006.--Publisher's description.

The Code for the Construction and Equipment of Mobile Offshore Drilling Units, 1989 (1989 MODU Code) was adopted by Assembly resolution A.649 (16) and concerns MODUs built since 1 May 1991. The 1989 MODU Code superseded the 1979 MODU Code adopted by Assembly resolution A.414(XI). The Maritime Safety Committee (MSC) adopted amendments to the 1989 MODU Code in May 1991 and decided that, to maintain compatibility with SOLAS, the amendments should become effective on 1 February 1992. Further amendments were adopted in May 1994, to introduce the harmonized system of survey and certification (HSSC) into the Code, provide guidelines for vessels with dynamic positioning systems and introduce provisions for helicopter facilities. The Committee decided that the amendments introducing the HSSC should become effective on the same date as the 1988 SOLAS and Load Line Protocols relating to he HSSC (i.e. 3 February 2000), and that those providing guidelines for vessels with dynamic positioning systems and provisions for helicopter facilities should become effective on 1 July 1994. This publication contains a consolidated text of the 1989

MODU Code and the 1991 and 1994 amendments.--Publisher's description.

Ship management has constantly had to evolve to take into account the advancements in technology as well as the demands of the shipping industry. Having internet access and email on board ship has meant that the ship manager has to possess certain sets of skills to function effectively in the post, including computer literacy. The emergence of large multi-national ship management companies has also changed how business is conducted and this is turn means that the ship manager and tiers of management within the organization have had to evolve to cope with the demands of working with a multi-national workforce. Furthermore, since the mid-1980s there has been an ever expanding raft of legislation that is more restrictive for companies to meet, and a shrinking of profit margins has seen a shift in how companies are required to operate to survive. This book addresses the demands of 21st century ship management with the focus of the book as much about the people who manage ships as about the theory and practice of ship management.

This publication contains the consolidated text of the 1972 Convention as amended in 1981, 1987, 1989, 1993 and 2001 -- Foreword.

Ship Hydrostatics and Stability is a complete guide to understanding ship hydrostatics in ship design and ship performance, taking you from first principles through basic and applied theory to contemporary mathematical techniques for hydrostatic modeling and analysis. Real life examples of the practical application of hydrostatics are used to

explain the theory and calculations using MATLAB and Excel. The new edition of this established resource takes in recent developments in naval architecture, such as parametric roll, the effects of non-linear motions on stability and the influence of ship lines, along with new international stability regulations. Extensive reference to computational techniques is made throughout and downloadable MATLAB files accompany the book to support your own hydrostatic and stability calculations. The book also includes definitions and indexes in French, German, Italian and Spanish to make the material as accessible as possible for international readers. Equips naval architects with the theory and context to understand and manage ship stability from the first stages of design through to construction and use. Covers the prerequisite foundational theory, including ship dimensions and geometry, numerical integration and the calculation of heeling and righting moments. Outlines a clear approach to stability modeling and analysis using computational methods, and covers the international standards and regulations that must be kept in mind throughout design work. Includes definitions and indexes in French, German, Italian and Spanish to make the material as accessible as possible for international readers.