

Lloyd's MIU Handbook of Maritime Security

Edited by
Rupert Herbert-Burns
Sam Bateman
Peter Lehr



CRC Press
Taylor & Francis Group
Boca Raton London New York

CRC Press is an imprint of the
Taylor & Francis Group, an **informa** business

LLOYD'S MIU 

The leader in global maritime information
www.lloydsniu.com

Lloyd's MIU, is a trading name of Informa UK Limited. Registered in England under no. 1072954. Registered office: Mortimer House, 37 – 41 Mortimer Street, London, W1T 3JH. Lloyd's is the registered trademark of the Society incorporated by the Lloyd's Act 1871 by the name of Lloyd's.

Lloyd's MIU, is a trading name of Informa UK Limited. Registered in England under no. 1072954. Registered office: Mortimer House, 37 - 41 Mortimer Street, London. W1T 3JH. Lloyd's is the registered trademark of the Society incorporated by the Lloyd's Act 1871 by the name of Lloyd's.

Auerbach Publications
Taylor & Francis Group
6000 Broken Sound Parkway NW, Suite 300
Boca Raton, FL 33487-2742

© 2009 by Taylor & Francis Group, LLC
Auerbach is an imprint of Taylor & Francis Group, an Informa business

No claim to original U.S. Government works
Printed in the United States of America on acid-free paper
10 9 8 7 6 5 4 3 2

International Standard Book Number-13: 978-1-4200-5480-4 (Hardcover)

This book contains information obtained from authentic and highly regarded sources. Reasonable efforts have been made to publish reliable data and information, but the author and publisher cannot assume responsibility for the validity of all materials or the consequences of their use. The authors and publishers have attempted to trace the copyright holders of all material reproduced in this publication and apologize to copyright holders if permission to publish in this form has not been obtained. If any copyright material has not been acknowledged please write and let us know so we may rectify in any future reprint.

Except as permitted under U.S. Copyright Law, no part of this book may be reprinted, reproduced, transmitted, or utilized in any form by any electronic, mechanical, or other means, now known or hereafter invented, including photocopying, microfilming, and recording, or in any information storage or retrieval system, without written permission from the publishers.

For permission to photocopy or use material electronically from this work, please access www.copyright.com (<http://www.copyright.com/>) or contact the Copyright Clearance Center, Inc. (CCC), 222 Rosewood Drive, Danvers, MA 01923, 978-750-8400. CCC is a not-for-profit organization that provides licenses and registration for a variety of users. For organizations that have been granted a photocopy license by the CCC, a separate system of payment has been arranged.

Trademark Notice: Product or corporate names may be trademarks or registered trademarks, and are used only for identification and explanation without intent to infringe.

Library of Congress Cataloging-in-Publication Data

Herbert-Burns, Rupert.

Lloyd's MIU handbook of maritime security / Rupert Herbert-Burns, Sam Bateman, Peter Lehr.
p. cm.

Includes bibliographical references and index.

ISBN 978-1-4200-5480-4 (hbk. : alk. paper)

1. Merchant marine--Security measures. 2. Shipping--Security measures. 3. Harbors--Security measures. 4. Maritime terrorism--Prevention. 5. Sea control. I. Bateman, W. S. G. (Walter Samuel Grono) II. Lehr, Peter. III. Lloyd's (Firm) IV. Title. V. Title: Handbook of maritime security.

VK203.H48 2008

363.12'3--dc22

2008023679

Visit the Taylor & Francis Web site at
<http://www.taylorandfrancis.com>

and the Auerbach Web site at
<http://www.auerbach-publications.com>

Contents

List of Figures.....	xi
List of Tables.....	xiii
Foreword.....	xv
Acknowledgments and Sponsoring Organizations.....	xvii
Introduction.....	xxi
Editors.....	xxix
Contributors.....	xxx

SECTION 1 The New Maritime Security Environment

Chapter 1 Security in the Maritime Domain and Its Evolution Since 9/11	3
<i>Catherine Zara Raymond and Arthur Morriën</i>	
Chapter 2 Lifeline or Pipedream? Origins, Purposes, and Benefits of Automatic Identification System, Long-Range Identification and Tracking, and Maritime Domain Awareness.....	13
<i>Martin N. Murphy</i>	
Chapter 3 Maritime Forces and Security of Merchant Shipping in the Mediterranean Sea and Northern Indian Ocean.....	29
<i>Russell Pegg</i>	
Chapter 4 Evolving U.S. Framework for Global Maritime Security from 9/11 to the 1000-ship Navy	39
<i>Chris Rahman</i>	
Chapter 5 Maritime Terrorism: Locations, Actors, and Capabilities	55
<i>Peter Lehr</i>	
Chapter 6 Distinctions in the Finer Shades of Gray: The “Four Circles Model” for Maritime Security Threat Assessment	73
<i>Hans Tino Hansen</i>	

SECTION 2 Industry Sectors: Threats and Responses

Chapter 7 Implications and Effects of Maritime Security on the Operation and Management of Merchant Vessels.....	87
<i>Steven M. Jones</i>	

- Chapter 8** Maritime Terrorism: Threat to Container Ships, Cruise Liners, and Passenger Ferries 117
Peter Chalk
- Chapter 9** Tankers, Specialized Production Vessels, and Offshore Terminals: Vulnerability and Security in the International Maritime Oil Sector..... 133
Rupert Herbert-Burns
- Chapter 10** Security in the Maritime Sector of the Liquefied Natural Gas Industry 159
Peter Martin
- Chapter 11** Offshore Oil and Gas Industry Security Risk Assessment: An Australian Case Study 169
Lee Cordner

SECTION 3 *Legal Frameworks for Maritime Security*

- Chapter 12** The 1988 SUA Convention and 2005 SUA Protocol: Tools to Combat Piracy, Armed Robbery, and Maritime Terrorism 187
Robert C. Beckman
- Chapter 13** Interdiction and Boarding of Vessels at Sea: New Developments and Old Problems 201
Stuart Kaye
- Chapter 14** Long-Range Identification and Tracking Systems for Vessels: Legal and Technical Issues 215
Martin Tsamenyi and Mary Ann Palma
- Chapter 15** International Legal Regulatory Framework for Seafarers and Maritime Security Post-9/11 233
Martin Tsamenyi, Mary Ann Palma, and Clive Schofield

SECTION 4 *Regional Responses*

- Chapter 16** Maritime Security Threats in Post-9/11 Southeast Asia: Regional Responses 253
Rommel C. Banlaoi
- Chapter 17** Maritime Dynamism in Indo-Pacific Region..... 271
James A. Boutilier

- Chapter 18** The North Atlantic Treaty Organization's Evolving Role in Maritime Security Operations..... 277
Robert Snoddon

SECTION 5 National Responses

- Chapter 19** U.S. Maritime Transportation and Port Security: An Update and Analysis of Current Efforts 287
Ashley W. Craig and John F. Seher
- Chapter 20** Setting, Strengthening, and Enforcing Standards for U.S. Port Security 299
Bruce B. Stubbs and Scott C. Truver
- Chapter 21** Managing Port and Ship Security in Singapore..... 307
Joshua Ho
- Chapter 22** Canada and the ISPS Code..... 315
John W. Lavers
- Chapter 23** The ISPS Code: The Australian Experience and Perspective..... 327
Devinder Grewal
- Chapter 24** ISPS Code: Implementation in Malaysia..... 337
Noor Apandi Osnin
- Chapter 25** Do British Military Intelligence and Royal Navy Operations Have a Part to Play in the Fight against Organized Crime in the Maritime Domain? 345
Peter Dodd
- Index**..... 351