## **Contents**

List of Abbreviations and Acronyms	7
Introduction	15
Maritime Force Logistic System in National and Multinational     Operations	19
1.1. The General Structure of Maritime Logistic System	19
1.2. The Maritime Force Logistic System in National Operations	23
1.3. The Maritime Force Logistic System in Multinational Operations	34
The Organizational Structure of MF Logistic System in Multinational Operations	41
1.5. The Modes of Multinational Logistic Support to Maritime Component	49
1.6. The Logistic Support for Polish Navy Ships within NATO Multinational Force	e62
2. Logistic Interoperability of Ships	71
2.1. Ship Logistic Support as the Function of Logistic Interoperability	71
2.2. Interoperability Identification	72
2.3. The Maritime Force Interoperability	74
2.4. Ship Logistic Interoperability Determinants	76
2.4.1. General Operational Standards Logistic Interopearability	
2.4.2. Materiel Standards Interoperability	79
2.4.3. General Equipment Requirements Logistic Interoperability	80
2.5. The Ship Logistic Interoperability Evaluation	82
3. Ship Logistic Support	93
3.1. Structure of the Ship Logistic Support System	93
3.2. The Shipboard Materiel Logistic Subsystem	102
3.2.1 General Principles of Materiel Support to Ships	102
3.2.2. Feeding Ship Crews	104
3.2.3. Managing Uniform Supplies on board Ships	111
3.2.4. Supplying Ships with POL	112

3.2.5. The Role and Tasks of Maritime Services in Provision of Logistic for Ships	115
3.2.6. The Process of Supplying a Ship with Equipment and Materiel of Maritime	
Services	
3.3. The Functioning of the Shipboard Logistic Subsystem	
3.4. The Functioning of Medical Subsystem on board a Ship	131
. Logistic Capability of the Ship an Her Environment	139
4.1. The Notion of Ship Logistic Capability	139
4.2. The Structure of Ship Logistic Capacity	143
4.3. Ship Endurance	148
4.3.1. The Notion and Significance of Endurance	148
4.3.2. Logistic Determinates of Ship Endurance	150
4.4. Ship Environment Logistic Potential	162
4.5. Cooperation Relations of Ship Logistic System with Her Environment	167
. Replenishment at Sea	171
5.1. Progress in Modern Replenishment at Sea Methods	172
5.2. Planning and Procedures for Replenishment at Sea	
5.3. Methods of Cargo Transfer during Sea Transit	196
5.3.1. Classification of Methods of Cargo Transfer during Sea Transit	196
5.3.2. Replenishment of Liquid Cargo at Sea	198
5.3.3. Solid Cargo Transfer – Horizontal Methods	208
5.3.4. Vertical Replenishment at Sea Methods	219
5.4. Solid Cargo Handling Equipment	225
5.5. Transfer of Personnel	231
. Contemporary Naval Logistic Ships	235
6.1. Classification of Naval Logistic Ships	235
6.2. Designations of the Basic Classes of Logistic Ships	238
6.3. Basic Standards for Logistic Support Ships	242
6.4. The Logistic Ships of NATO Countries	246
6.5. The Polish Navy Logistic Ships	248
nnex 1. Classification of Combat Support and Logistic Support Ships	253
nnex 2. Logistic Support Ships of NATO Countries Excluding	262
US Navy Ships	203
nnex 3. US Navy Logistic Support Ships	277
Annex 4. Symbols of Transfer Stations and Examples of Handling  Equipment	201
LYUIPIIICII	∠O I

Annex 5. Silhouettes and Location of Transfer Stations on Some Logistic Ships of NATO Countries	. 283
Bibliography	. 295
List of Figures	. 301
List of Tables	. 303