

Monograph Series V: Conflicts in Space and the Rule of Law

Edited by: Maria Manoli and Sandy Belle Habchi

Centre for Research in Air and Space Law, Faculty of Law



- Addresses issues related to state-of-the-art military and securities technologies and activities
- Includes papers written by renowned academics and subject-matter experts
- Includes thought-provoking dialogues on the achievement of sustainable uses of outer space for peaceful purposes
- Highlights strengths and weaknesses of the current regulatory regime governing military uses of outer space

About Monograph Series V: Conflicts in Space and the Rule of Law

This manuscript contains papers presented at the 4th Manfred Lachs International Conference on Conflicts in Space and the Rule of Law. These carefully selected documents address issues related to state-of-the-art military and security technologies and activities, the development of military policies and doctrines, space security, exploitation of space natural resources, space sustainability, and the peaceful use of outer space for the benefit of all. Perhaps most importantly, this book addresses adequacies and inadequacies of current rules of international space law, public international law, and international humanitarian law with respect to conflict avoidance in outer space.

About the Authors

The authors of the papers included in this book were carefully selected from the 43 presentations made the 4th Manfred Lachs International Conference on Conflicts in Space and the Rule of Law. Here is a complete list of these renowned academics and subject-matter experts:

- Laura Grego
- Bhupendra Jasani
- Joseph N. Pelton
- Attila Matas
- Lucien Rapp
- Melissa De Zwart
- Sanat Kaul
- Ward Munters

- Jan Wouters
- · James D. Rendleman
- Brian D. Green
- Florence Gaillard-Sborowsky
- John D. Rummel
- · Philip De Man
- Maria Manoli
- · Deborah Housen-Couriel

- George Kyriakopoulos
- Jessica West
- Guy Phillips
- Paul Meyer
- Natália Archinard
- · John S. Goehring
- · José Monserrat Filho
- Peter Hulsroj
- · Anja Nakarada Pecujlic

Monograph Series V: Conflicts in Space and the Rule of Law

Table of Contents

Tribute to Professor José Monserrat Filho Ram S. Jakhu

I. INTRODUCTION

Protecting Planet Earth from Military and Non-Military Space Threats

II. TECHNOLOGICAL DEVELOPMENTS AND NEW THREATS – WEAPONS SYSTEMS, SPACE REGULATION, SUSTAINABILITY AND (PEACEFUL) USES OF OUTER SPACE

Current and Future Anti-Satellite Technologies: What Challenges Do They Present? Laura Grego

Military Uses of Outer Space and International Space Law Bhupendra Jasani

Urgent Security Concerns in the Proto-Zone Joseph N. Pelton

Conflicts Related to Radio Frequency Interference, Jamming, Frequency Misuse, Abuse of ITU Regulatory Procedures
Attila Matas

Space Industrial War: Towards a Risk of Creeping Takeovers in the Global Space Industry? Lucien Rapp

GOOGLE in Space? How Will Space Governance Accommodate Non-State Actors? Melissa De Zwart

GNSS and Conflict: Indian Perspective Sanat Kaul

III. EMERGING STRATEGIC SPACE ISSUES: AREAS OF POTENTIAL CONFLICT

The Road Not Yet Taken for Defusing Potential Conflicts in Active Debris Removal: A Multilateral Organization Ward Munters and Jan Wouters

Space Weapons according to Stewart James D. Rendleman and Brian D. Green

Space and Security Relationships Issues from a Political and Technological Point of View Florence Gaillard-Sborowsky

Selling Lunar Resources for Fun, Profit and Export: A Test That the OST Cannot Pass? John D. Rummel

Towards a Workable Exploitation of 'Celestial Bodies': Key Principles for Avoiding Conflicts Philip De Man

Commercial Space as a Source of Conflicts and the Need for 'Space Pluralism' Maria Manoli

IV. DIFFERENT FORMS OF USE OF FORCE

Space Security and Cybersecurity: Intersecting Challenges Deborah Housen-Couriel

Legal Challenges Posed by the Action of Non-State Actors in Outer Space George Kyriakopoulos

Contested Security: Maintaining Strategic Restraint Jessica West

Sorting Out Self-Defence in Space: Understanding the Conflicting Views on Self-Defence in the EU Code of Conduct P.J. Blount

Rules of Engagement (ROE) for Military Space Operations Guy Phillips

V. THE WAY FORWARD: MODELS FOR FUTURE GLOBAL SPACE GOVERNANCE

Dark Forces Awaken: The Prospects for Space Arms Control in an Adversarial Age Paul Meyer

Global Space Governance and the Role of Space Middle Powers Natália Archinard

Real-World Lessons on Achievable Space Governance from the International Code of Conduct for Outer Space Activities, the Iran Nuclear Agreement, and the Paris Climate Agreement
John S. Goehring

Toward a Collective Space Security José Monserrat Filho

Space through the Lens of Neutrality Peter Hulsroj and Anja Nakarada Pecujlic

VI. Annex

Conference Report



Monograph Series V: Conflicts in Space and the Rule of Law

Item #: 1006187

ISBN: 978-0-7717-0732-2 1 Volume......\$75.00

Distributed: Getzville; William S. Hein & Co., Inc.; 2018

order@wshein.com | 800-828-7571

