

‘CURRENT DEVELOPMENTS IN AIR AND SPACE LAW’

EDITORS

PROF. (DR.) RANBIR SINGH
Vice Chancellor, National Law University, Delhi

PROF. SANAT KAUL
Chairman, IFAAD

PROF. (DR.) SRIKRISHNA DEVA RAO
Registrar & Professor of Law, National Law University, Delhi



NATIONAL LAW UNIVERSITY PRESS



Published by
National Law University, Delhi
Sector-14, Dwarka, New Delhi-110078
+91-11-28035818; +91-11-28034255
Website: <http://www.nludelhi.ac.in>

© NLUD Press 2012

Price: Rs. 595.00

ISBN: 978-81-923638-4-4

No part of this publication can be reproduced in any form or by any means without prior permission of the Vice Chancellor, National Law University, Delhi

Note: Due care and diligence has been taken while editing and printing this book. Neither the author nor the publisher of the book holds any responsibility for any mistake that may have inadvertently crept in.

The publisher shall not be liable for any direct, consequential, or incidental damages arising out of the use of this book.

In case of binding mistake, misprints, or missing pages etc., the publisher's entire liability, and your exclusive remedy, is replacement of this book within one month of purchase by similar edition/reprint of the book.

Printed and bound in India.

PREFACE

While India's aviation and space activities have taken off, there has not been enough study of the issues which are coming up in aviation and space, especially in the non-technical sector. International Foundation for Aviation, Aerospace & Development (India Chapter) has been keen to discuss and disseminate the knowledge of air and space issues in India including legal issues. In this connection, it has been holding seminars and conferences over the last few years.

On the occasion of the third international conference of Air and space law National Law University, along with International Foundation for Aviation, Aerospace and Development (India Chapter) and MC Gill University, Canada is pleased to present the papers of the earlier two conferences in a book form. Earlier conferences in 2009 and 2011 were held at National Law University, Delhi. The expert conference was conceived in the context of the phenomenal growth of Indian aviation sector as well as developments in its space programme.

Air and space law is a complex subject. It can only be studied as an organic whole which requires a collaborative effort in knowledge production and dissemination by examining the particulars viz security and safety laws, liability issues, environment, air route structures, regulation of air services and bi-lateral air agreements in the framework of entirety.

The last two expert conferences set up by the organising partners took up the challenge and invited scholars from far and wide both from within and outside India to share their research on different dimensions related to the air and space law. Issues as wide as like air environment, Safety, Security, Liability, General Issues, Space Tourism, Space Debris, Militarization of Outer Space and Sub-Orbital flights, Space Medicines have all been discussed with papers presented. Concerned scholars found that most of the air and space law is operation in multiple jurisdictions which sometimes leads to inefficient operations extremely difficult and profitable for the airline industry. Scholars in both the conference unanimously felt that national laws need to be more coherent and uniform to enable the smooth passage of mass air transport across national boundaries. Also it was shared across the spectrum of opinion of experts that legal regime on air and space law is lagging far behind the actual developments and it was uniformly recommended to bridge the gap as a policy prescription to overcome the difficulties in the area.

One of the most interesting aspects of this conference was student participation. There was overwhelming student's participation which enriched the debate with fresh ideas. Students from almost all the National Law Universities and other law institutions in India participated in the conference.

We have now come out with a volume of this conference published as a book. Dr. Maheshwar Singh, Associate Professor, National Law University, Delhi

have worked tirelessly at various stages in the setting up the conference. This entire endeavour would not have seen the light of the day without the active and generous support of Prof (Dr.) Ranbir Singh, Vice-Chancellor, National Law University Delhi. He has always been extremely helpful and has provided direction for arranging this event.

Prof. Ranbir Singh
Vice Chancellor, NLUD

Dr. Sanat Kaul
Chairman, IFAAD

Prof. Srikrishna Deva Rao
Professor of Law & Registrar
NLUD

CONTENTS

AIR LAW

<i>Preface</i>	(iii)
Chicago Convention Revisited: Review of Chicago Convention and Bilateralism in Air Services <i>Dr. Sanat Kaul</i>	... 1
Aviation Industry: Emerging Legal Challenges <i>Prof. (Dr.) Ghanshyam Singh</i>	... 13
Air Law <i>Prof. Saligram Bhatt</i>	... 23
Aviation Environmental Protection: Imperative for a Sustainable Movement through Omission of (Toxic) Emission <i>Debasis Poddar</i>	... 26
Aviation Environmental Protection: Toward a Quieter Movement in (Larger) Public Interest <i>Debasis Poddar</i>	... 43
Aviation Pollution—Impact On Environment <i>Dr. K. Malathi</i>	... 59
Constitutionality Of India's Anti Hijack Policy <i>Hardeep Singh</i>	... 69
Second International Conference on Current Developments in Air and Space Law Aviation Safety: International Standards And India <i>Shazia Siddiqui & Nishant Awana</i>	... 80
Need of Reforming the Aviation Security and Airport Security Measures in India—A Comparative Analysis <i>Shreya Rastogi & Swarnali Chanda</i>	... 89
Responsibility And Liability For Unlawful Interference In International Civil Aviation <i>Aviral Dhirendra & Aditi Kapoor</i>	... 103
Regional Developments through Aviation in India—Creation of New Regional Airports and Regional Airlines <i>Debabrat Mishra</i>	... 116

Product Liability in Aviation <i>Pratik Chandra & Sonakshi Verma</i>	...	127
Anti-Trust Issues With Respect To Frequent Flyer Programs And Code-Sharing Agreements That Persist In The Aviation Industry: The Indian Context <i>Vikrant Pachnanda</i>	...	142
Night Curfew And Aeronautical Noise—An Analysis Of The Developments In Indian Aviation Industry <i>Nidhish Meena</i>	...	159
The Legal Regime Governing Air Passenger Compensation In India: Evolution And Conditions Of Applicability <i>Medhavi Singh</i>	...	170
Strategic Flexible Planning And Real Options For Airports To Gain Competitive Advantage <i>Sneha Thakur & Vertika Verma</i>	...	183
Air Law And Economic Developments <i>Prof. Narahari Lenka</i>	...	197
Aviation Claims In India: Some Thoughts Regarding The New Montreal Convention <i>Stephan Eriksson</i>	...	200

SPACE LAW

Space Law in the 21st century <i>Tanja Masson-Zwaan</i>	...	203
Property Rights In Outer Space: Perspectives And Insights <i>Ketan Mukhija</i>	...	213
Issues in Protection of Intellectual Property Created in Outer Space: An Indian Outlook <i>KD Raju</i>	...	223
Need to Harmonise TRIPS Agreement of WTO and International Space Law Regime for the Betterment of Humanity <i>S. Elumalai</i>	...	239
Outer Space Colonisation: Outer Space Tourism <i>Dr. Shobalata Udupudi & Ms. Soma Battacharjya</i>	...	243
Remote Sensing Satellites: Legal Issues In Emerging Technology <i>Animesh Sinha</i>	...	247

Equitable Use Of Geo Stationery Orbit—Need For Legal Protection Of The Rights Of Developing Countries <i>Dr. Anil G. Variath</i>	... 267
Territorial Sovereignty In The Outerspace: Spatial Issues <i>Dr. Hemlata Sharma & Pooja Singh</i>	... 272
Space Medicine and the Law <i>Dr. Lily Srivastava</i>	... 284
A New Frontier in Travel: Sub Orbital <i>Dr. Sanat Kaul</i>	... 297
International Space Law Regime and Protection of Environment: Emerging Issues <i>Dr. Y. Padmaja Rani</i>	... 312
Jurisdiction In Outer Space: Challenges Of Private Individuals In Space <i>Jyotima Nagvanshi & Aishwarya Sharma</i>	... 324
I.C.T. And Regulatory Framework In India With Reference To Satellite Communication: An Overview <i>Ashok Kumar & Dr. Priti Saxena</i>	... 342
Outer Space Debris: An International Obligation To Mitigate And Control <i>Amrendra Kumar Ajit</i>	... 351
Current Developments in Space Tourism: Space Tourism—‘A Tool To Break The Existing Shackels’ <i>Aditya Jain & Priyank Jagawanshi</i>	... 364
Commercialization Of Space: Emerging Legal Issues <i>Aditya Sharma & Vikramaditya</i>	... 377
Space Tourism—Legal Issues and Challenges with Special Reference to India <i>Malay Adhikari</i>	... 385
India And Outer Space: India And Militarisation Of Outer Space <i>Soumya Shekhar & Purushottam Anand</i>	... 399
Space Law with Special Reference to Space Debris <i>Prof. Satish C. Shastri & Dr. Madhu Shastri</i>	... 408
Space Tourism—Future Industry <i>Ms. Priti Atrey</i>	... 419
Commercial Space Activities—Space for a ‘Space Law’ <i>Prof. Arun Kumar Sharma & Dr. Sonia Jain</i>	... 432