

PROCEEDINGS OF THE TWENTY-FIFTH COLLOQUIUM ON THE LAW OF OUTER SPACE

**INTERNATIONAL INSTITUTE OF SPACE LAW
OF THE
INTERNATIONAL ASTRONAUTICAL FEDERATION**

**September 27-October 2, 1982
Paris, France**

**Published and distributed by
AMERICAN INSTITUTE OF AERONAUTICS AND ASTRONAUTICS
1290 Avenue of the Americas/New York, N.Y. 10104**

TABLE OF CONTENTS

IISL Board of Directors, Members of the Board, and Honorary Directors	vii
--	-----

Introduction

Professor Dr. I.H. Ph. Diederiks-Verschoor	ix
--	----

LEGAL ASPECTS OF PROTECTION OF THE EARTH AND OUTER SPACE ENVIRONMENT

Harm Producing Events Caused by Fragments of Space Objects (Debris)

I.H. Ph. Diederiks-Verschoor	1
--	---

Space Monitoring Facilities and Environmental Protection

I.I. Kotlyarov	5
--------------------------	---

Use of the Vantage Point of Space to Protect the Earth's Environment

J.H. McElroy and K.D. Hodgkins	9
--	---

Some Remarks to the Legal Status of Celestial Bodies and Protection of Environment

M. Miklody	13
----------------------	----

Manipulation and Modification of the Outer Space Environment:

International Legal Considerations

A.L. Moore and J.V. Leaphart	15
--	----

Nuclear Batteries on Satellites and Protection of Environment—Legal Implications

M. Mucsi	23
--------------------	----

Legal Requirements for the World's Protection of Outer Space and Earth Environments

Within the Perspective of Directed Energy Weapons

C.C. Okolie	25
-----------------------	----

Traffic Rules for Outer Space

L. Perek	37
--------------------	----

Protecting the Earth and Outer Space Environment: Problems

M.S. Smith	45
----------------------	----

Protection of Outer Space Environment—Questions of Liability

I. Szilagyi	53
-----------------------	----

Environmental Hazards from Space Activities: Status and Prospects

of International Control

H.L. van Traa-Engelman	55
----------------------------------	----

Toward International Control of the Problem of Space Debris

E. Gordon	63
---------------------	----

Summary of Discussions	67
---	----

LEGAL ASPECTS OF THE PEACEFUL USE OF OUTER SPACE IN THE LIGHT OF ARTICLE IV OF THE 1967 OUTER SPACE TREATY

Satellite: Warring Weapon

A.A. Cocca	69
----------------------	----

Some Pragmatic Reflections on Article IV of the 1967 Space Treaty

B. Bakotic	73
----------------------	----

Peaceful Use and Self Defense in Outer Space	
A.J. Butler	77
Activities on Orbit and on Celestial Bodies—Two Notions of Peaceful Uses	
G. Gál	83
Expanding Article IV of the 1967 Space Treaty: A Proposal	
E. Galloway	89
Limiting the Use of Arms in Outer Space: Legal and Policy Issues	
S. Gorove	93
Weapons of Mass Destructions, Article IV Outer Space Treaty and the Relationship to General Disarmament	
C.-G. Hasselmann	99
The Problem of Demilitarization of Outer Space	
G. Zhukov	113
Notions of “Peaceful” and “Military” Space Activities	
Y. Kolossov	117
Article IV of the 1967 Space Treaty. Its Present Meaning and Possibilities of Further Development	
V. Kopal	119
Military Space Programmes	
P. Magno	127
To the Problem of the Right of Free Passage through the Airspace of Other States during the Post-Take-Off and Return Phases of Space Flights	
J. Malenovský	131
Peaceful Uses of Outer Space and National Security	
M. Menter	135
The Term “Peaceful” in Space Law	
G.C.M. Reijnen	145
“Killer Satellites” and Space Law Today	
J. Szabó	151
Against Arbitrary Interpretation of Some Important Provisions of International Space Law	
V.S. Vereshchetin	153
Responsibility for Activities in Outer Space with Special Reference to Article IV of the Outer Space Treaty of 1967	
R.K. Woetzel	159
Legal/Illusory Aspects of the Peaceful Uses of Outer Space in the Light of Article IV	
T.E. Wolcott	163
Some Observations on the Juridical Essence of the 1967 Treaty’s Article IV	
A. Gorbiel	165
Space Arms Control: A Difficult Process	
D.A. Vogt and T.N. Mervosh	167
The French Proposal for an International Satellite Monitoring Agency	
H.H. Almond	171
Summary of Discussions	185

DETERMINATION OF APPLICABLE LAW TO LIVING AND WORKING IN OUTER SPACE

Jurisprudential Philosophies of the Art of Living in Space: The Transnational Imperative	
P.M. Sterns and L.I. Tennen	187
The Law Applicable to Contracts on Space Activities	
K-H. Böckstiegel	203
Space Shuttle Flights and Correlation of Legal Regimes of Air Space and Outer Space	
V.D. Bordunov	211
Forming of the Principle “Common Heritage of Mankind” and the Rules of Customary International Law	
R.V. Dekanozov	215
Determination of Applicable Law to Living and Working in Outer Space	
L. Fekete	221
Determination of Applicable Law to Living and Working in Space	
H. DeSaussure and P. Haanappel	223
The Use of Comparative Method in Determination of Applicable Law to Living and Working in Space	
E. Kamenetskaya	229
Third World Space Activities	
V. Leister	237
UNISPACE 82 or the Attempt to Set Up a New International Order in Space	
O. de Saint Lager	241
Determination of Applicable Law to Living and Working in Outer Space: The Municipal Law Connection and the NASA/Hastings Research Project	
G.P. Sloup	245
Should There Be A Mortgage Convention for Space Activity Investors?	
J.T. Stewart Jr.	251
Legal Aspects of Ensuring the Security of Space Personnel Flights	
E.G. Vassilevskaja	261
Theory of Law Abuse and Space Law	
R. González Aninat	265
Some Conflicts in the Law Relating to Working in Space	
S.B. Rosenfield	273
Summary of Discussions	279

LEGAL ASPECTS OF DIRECT BROADCAST SATELLITES

The Role of Direct Broadcasting Satellites in the Integrated Communications Environment	
A.M. Rutowski	281
The Legal Aspects of the European Direct Television Satellite (L-SAT)	
G. Bourély	285
National Claims for the Using/Sharing of the Orbit/Spectrum Resource	
C.Q. Christol	295

Direct Broadcast Satellites and ECOSPACE	
E.R. Finch Jr.	305
United States Policy for Direct Broadcast Satellites	
J.F. Galloway	313
Some Observations on the Draft Principles of International Direct Television Broadcasting by Satellites	
He Qizhi	317
Transborder Broadcasting Satellite Service	
M.A. Rothblatt	321
Legal Aspects of Direct Broadcast Satellites	
E.D. Gaggero	325
Summary of Discussions	329

ADDENDUM

Report on Colloquium	
C.A. Colliard	331

ROUNDTABLE DISCUSSION

Energy from Outer Space—Problems of Technological Feasibility and International Cooperation

Introductory Note	
V. Kopal	337
Space Industrialization—The Context for Energy from Space	
P.E. Glaser	339
The Solar Power Satellite. A Programme for Development Aid	
R.C. Meiner	343
Energy from Space: Legal Implications of the Use of the Geostationary Orbit	
S. Gorove	347
Consequences of Transmission of Solar Energy from Outer Space	
A.A. Cocca	351
Legal Aspects of Solar Power Satellites Impact on the Environment	
I.H. Ph. Diederiks-Verschoor	355
Will the SPS Concept Materialize or Not?	
A. Lebeau	365
Summary of Discussions	367

APPENDIX

Statutes of the IISL	369
-----------------------------------	-----