'Space Law' and 'Space Policy' - An Introduction

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What is 'law'?



'A tool of social engineering to order society'



What does 'law' try to achieve?

Ethical goal: maximize fairness & justice





Practical goal: maximize foreseeability & stability

Where does it differ from 'policy'?



- ◆ Legality *versus* illegality
 - Invokable in a court of law
 - Rigid system: elements ≈ precisely worded
 - Including system & procedure for change

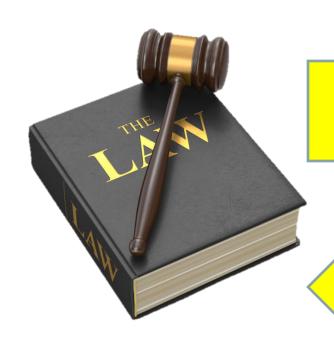


- Desirability *versus* non-desirability
 - *Not* (directly) invokable in a court of law
 - Fluid system: guidelines, actions, incentives
 - Including funding decisions



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Relationship 'law' & 'policy'



Provides baseline parameters & limitations

> Provides inputs & tools for interpretation & change





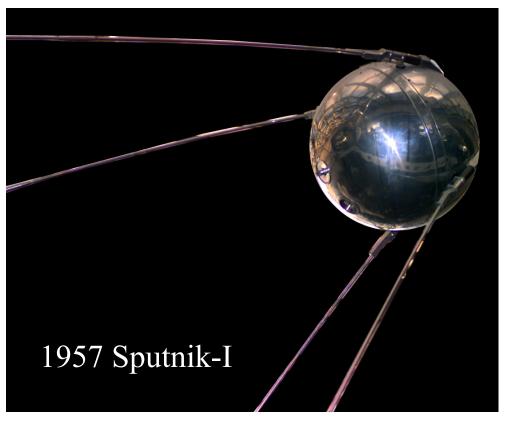
What is 'space law'?

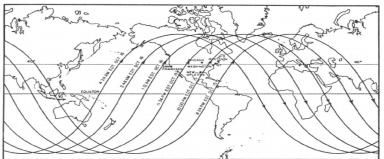
'The totality of all legal rules having a significant impact, even if implicitly or indirectly, on at least one type of space activity or major space application'



Wherever You Go, the Lawyer Goes

The beginnings of space law



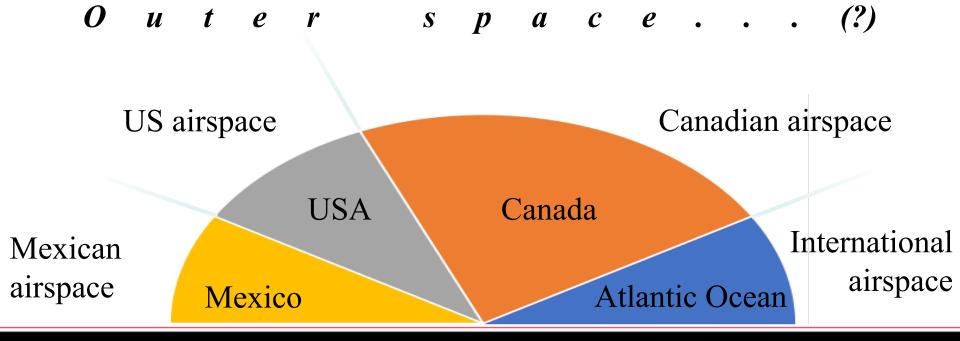


First legal issue immediately arose!



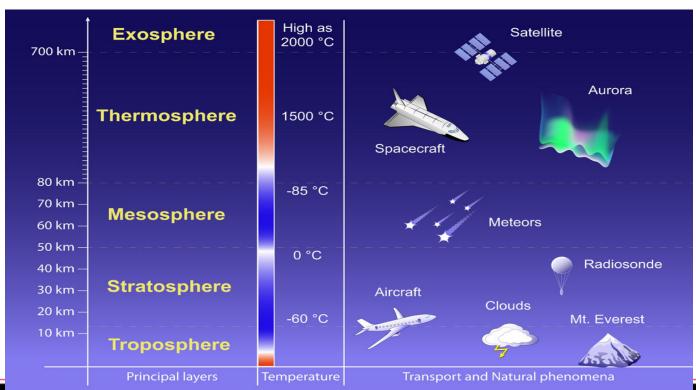
Was overflight of the US allowed?

Airspace subject to sovereignty underlying State!



Where does outer space start?

LAYERS OF THE ATMOSPHERE

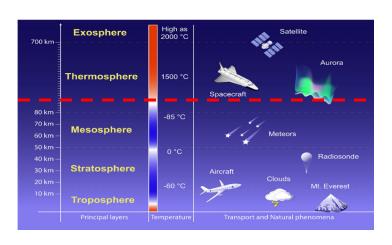




Where does outer space start?

State practice:

- Some: no need (yet)
- Others differ in preference
- Some convergence at 100 km:
 - 1. Nice round figure
 - 2. Russia & China in proposals for treaties on space activities
 - 3. Pakistan & Germany in discussion documents on aerospace planes
 - 4. United States & European Union in documents on space technology
 - 5. Australia, Kazakhstan, Nigeria, Denmark, Indonesia, Brazil & Turkmenistan in national space legislation



Space law → space activities

◆ Three main characteristics of space activities









Why even spend money on space?

◆ Traditionally three rationales







A domain of States

- ◆ Only States were interested in investing in military security, prestige & science
- & Few States had technology, could provide funds & could afford risks involved in space activities
- → Space law also very State-oriented
- → Logically inter-State law = international law



→ 'International space law'?

- 1. Treaty law
 - States agree on texts & decide to become party (or not)
- 2. Customary international law
 - 1. Usus (custom)
 - 2. Opinio iuris (sense of legal obligation)
- $\leftarrow \rightarrow$ National (space) law?



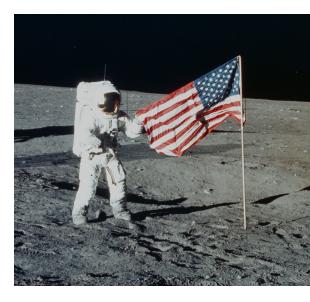
1. Inner core

1. International: exclusively & comprehensively space

- ◆ 1967 Outer Space Treaty
 - 112 parties; 23 signatories
 - Including all major spacefaring nations
 - Considered customary international law
- ◆ 1968 Rescue Agreement
- ◆ 1972 Liability Convention
- ◆ 1975 Registration Convention

Main principles (1)

◆ "Outer space, including the Moon and other celestial bodies, is <u>not</u> subject to national appropriation by claim of <u>sovereignty</u>, by means of use or occupation, or by any other means" (Art. II, OST)



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◆ Space = 'global commons' → freedom of space activity for States = baseline rule

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Main principles (2)

- ◆ States responsible for all national space activities, also if undertaken by private companies, & their compliance with international space law → required to authorize & supervise private space activities
- ◆ States liable for all damage caused by space objects in the launch of which they were involved, also if owned/ operated by private companies, & forced to compensate'

Main principles (3)

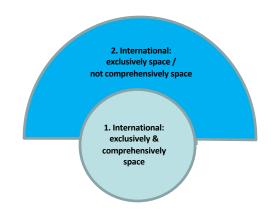
- ◆ General international law, including the UN Charter, also applies to space and space activities
- ◆ Exploration and use of outer space should be for the benefit and in the interests of all States
- ◆ Prohibited to orbit or station weapons of mass destruction anywhere in outer space
- ◆ No military bases, installations, weapons testing or maneuvers whatsoever on celestial bodies Nebraska Law

Main principles (4)

- ◆ States must register space objects they launch both in a national and in an international register, kept by the United Nations
- ◆ States should try to avoid harmful contamination of outer space & harmful interference with other States' activities in outer space, & consult in case there is a potential for harmful interference to arise



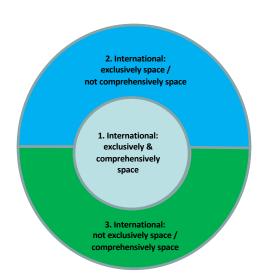
2. 'Northern' part first ring



- ◆ Main examples
 - 1998 Agreement ISS
 - Agreements international satellite communication organizations
 - 1975 ESA Convention
 - 1979 Moon Agreement
 - 1986 UN Principles on Remote
 Sensing
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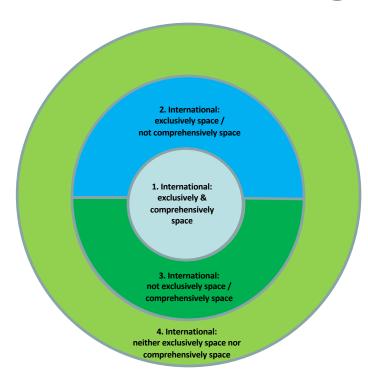
3. 'Southern' part first ring



- ◆ *Main examples*
 - International regime on use of radio frequencies & orbits (as per ITU)
 - International law on military activities & use of force ('LOAC')
 - International regime on sensitive dual-use technologies (MTCR & Wassenaar Arrangement)

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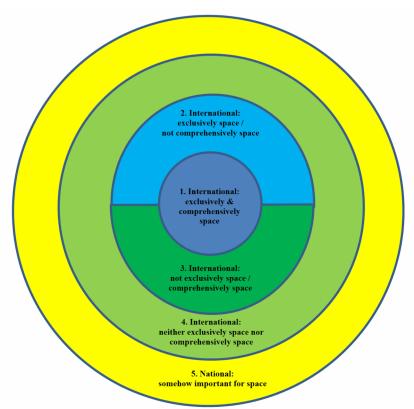
4. Second ring



- ◆ *Major examples*
 - Intellectual property rights
 ← → space laboratories / remote sensing satellite data
 - Air law ←→ human spaceflight
 - International trade law ←→
 satellite communications
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5. Third ring...of national space law



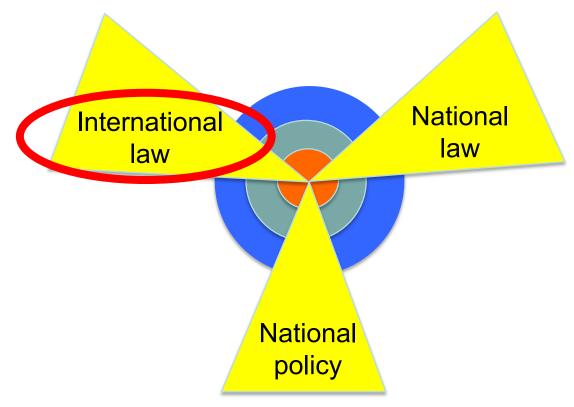
- All national law
 somehow relevant to
 outer space & space
 activities
 - Most importantly:
 establishing
 authorization regimes
 for private sector space
 activities

National space law: the status quo





National space law & policy





International to national law (1)

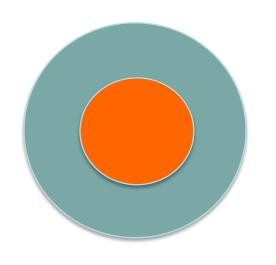


Hardcore obligations

Hard rules international space law which national space law <u>has</u> to comply with without further ado



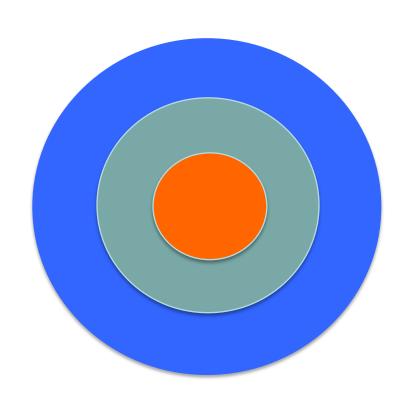
International to national law (2)



General obligations

Grey area international space law which national space law **has** to comply with, but is given various options / is left discretion within the parameters given

International to national law (3)



General discretion

No specific international space law – national space law enjoys complete discretion





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