



History of the debate as to the delimitation of airspace and outer space

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Overview

- Origins and issues involved
- Theories
- COPUOS deliberations





Origins

- Delimitation of spaces/territories in general
- Issues of sovereignty and jurisdiction
- Long debate
- 1906 – with regard to the development of aerial photography: 4500 feet above the surface of the Earth as exclusive sovereignty (Fauchille, Regime Juridique des Aerostats)

Theories of definition and delimitation of outer space

- Late 1950s
- “No-present-need” theory
- Theories in favor of delimitation:
 - Functional approach
 - Spatial approach
 - Aerodynamic lift theory
 - Theories of arbitrary distances
 - The lowest point of orbital flight
 - Effective control
 - Bogota Declaration
 - Uniform legal regime

No need to demarcate

- No international tensions so far
- High seas demarcation experience
- Technical progress
- Definite legal regime as too stiff and difficult to alter
- Recognition of the right of passage through airspace
- Definition will accommodate interests only of those involved

Critique

- Coherent legal regime equals greater security and adherence to the rules agreed upon
- Space activities develop and intensify
- Accidents
- Necessity of clarity the applicable regime

Functional theory of delimitation

- Purpose of the activity, not space it takes place in
- To cover travel of space objects through airspace
- Based on the definition of the “aircraft”
- Large portion of the surface of the Earth is high seas

Spatial theories

- Aerodynamics:
 - Based on the features of the flight of aircraft, & the altitude it can fly at
 - Height at which aerodynamic lift ceases and centrifugal force takes over
- Lowest orbital flight
 - Ability of spacecraft to remain in orbit
- Arbitrary
 - Anything between 30 miles and ... 1.500.000 km(!)
- Effective control
 - Technological ability to retain control over the space above national territory
- Bogota Declaration
 - Satellites in GEO as part of the territory of the state below

Critique

- Different altitudes identified
 - Aerodynamics: 25, 50 miles
 - Orbital flight: 70-160 km
- Often a “grey” area exists between airspace and outer space
- Technological progress

Discussions in COPUOS

- 1966 – France
 - Scope of application of the legal regime
 - Functional/spatial
- 1968 – STSCT: not possible to identify scientific/technical criteria
- 1970-79 – no consideration
- 1984-85 – discussion on the priority basis
- 1987 onwards – proposals to remove from the agenda
- 1990 – issues related to aerospace systems/objects
- Till now – no sign of an agreement to be reached



Thank you!

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