

# Weaponization of Outer Space

## *Written Material Outline*

### Introduction

- Summary of the discussion focus: the legal aspects of space weaponization, particularly the use of nuclear weapons.
- Introduction of Professor Frans von der Dunk and his credentials.

### Key Laws and Treaties Discussed

1. Outer Space Treaty (1967)
  - Summary: Establishes the framework for international space law, including the prohibition of placing nuclear weapons or any other weapons of mass destruction in orbit around Earth, on celestial bodies, or in outer space in any manner.
  - Prohibits military activities, such as establishing military bases, testing weapons, and conducting military maneuvers on celestial bodies.
2. Partial Test Ban Treaty (1963)
  - Summary: Prohibits all test detonations of nuclear weapons except for those conducted underground, thereby preventing nuclear tests in the atmosphere, underwater, and in outer space.
  - Importance in the context of preventing the escalation of arms in space.
3. Moon Agreement (1979)
  - Summary: Supplements the Outer Space Treaty by specifying that the Moon and its natural resources are the common heritage of mankind, aimed at preventing the Moon from becoming a conflict zone.
  - This agreement explicitly prohibits any country from placing weapons of mass destruction on the Moon or any other celestial body.

### Key Points from the Interview

- Discussion on the current geopolitical context of space weaponization, with references to historical incidents.
- Professor von der Dunk's insights into the practical implications of deploying nuclear weapons in space and the associated legal and physical challenges.

### Incidents and Discussion

- Starfish Prime Incident
  - An example of high-altitude nuclear test conducted by the USA in 1962 that led to unexpected consequences on satellites.
- Cosmos 954 Incident
  - A Soviet satellite that crashed in Canada in 1978, spreading radioactive debris and highlighting the risks associated with nuclear-powered satellites in orbit.
- What Qualifies as a WMD in Outer Space
  - Definition under the Outer Space Treaty involves nuclear, biological, or chemical weapons that can cause widespread, long-lasting or severe damage.
  - The practical aspects of such weapons in the vacuum of space, where traditional explosive effects (blast waves) are null due to the absence of an atmosphere.

#### Additional Resources

- Books and Articles:
  - "The Handbook of Space Law" edited by Frans von der Dunk, providing a comprehensive overview of international space law.
  - "Space Law: A Treatise" by Francis Lyall and Paul B. Larsen, detailing the legal aspects and treaties related to space.
- Online Resources:
  - United Nations Office for Outer Space Affairs (UNOOSA): Provides documents and resources on space law and the Outer Space Treaty.
  - Secure World Foundation: Offers resources and reports on sustainable and peaceful uses of outer space.

#### Conclusion

- Summary of the potential future of space law as discussed by Professor von der Dunk.
- The importance of international cooperation and compliance with existing treaties to prevent the weaponization of space.