

SPACE LAW

Presentation to NZ Central Agencies
17 February 2016

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Australian Defence Force



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SCHEDULE

- 0830 - 0910 Space treaties
- Regulation of electro-magnetic spectrum
- 0915 - 0955 Launch State liability and domestic legislative implementation
- 1000 - 1040 Australian space regulatory approach, including bilateral agreements
- BREAK
- 1055 - 1135 Space law challenges generally
- 1140 - 1220 Space law challenges from a national security perspective
- Regulation of space-based remote sensing
- 1225 - 1300 International fora and proposals to address challenges

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SPACE TREATIES

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SOURCES

- Five space-specific treaties
 - Outer Space Treaty (1967)*
 - 98 Ratifications + 27 signatures
 - Rescue and Return Agreement (1968)*
 - 90 ratifications + 24 signatures
 - Liability Convention (1972)*
 - 86 ratifications + 24 signatures
 - Registration Convention (1975)
 - 51 ratifications + 4 signatures
 - Moon Agreement (1979)
 - 13 ratifications + 4 signatures



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SOURCES

- Major UN General Assembly space-specific resolutions
 - Exploration and Use of Outer Space (1963)
 - Artificial Earth Satellites for TV Broadcast (1982)
 - Remote Sensing of the Earth (1986)
 - Use of Nuclear Power Sources (1992)
 - Benefit to All States for Use of Space (1996)
- Other areas of law



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INTERNATIONAL LAW 101

- Nature / enforceability
- Actors in international law
- Sources – pros, cons and proof
 - Article 38, Statute of the International Court of Justice
 - Treaties
 - Customary international law
 - “the general principles of law recognized by civilized nations”
 - “judicial decisions and the teachings of the most highly qualified publicists of the various nations, as subsidiary means for the determination of rules of law”

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INTERNATIONAL LAW 101

- Treaty-making
- Interpretation
 - Vienna Convention on the Law of Treaties, Art 31 “A treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose.”
 - Operative provisions vs preamble
 - Preparatory works as a supplementary means of interpretation

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INTERNATIONAL LAW 101

- Conflict of laws
 - *Lex specialis derogat legi generali*
- Resolution of disputes
 - No international police force
 - Art 2 Charter of the United Nations
- The effect of hostilities on treaties and other legal obligations
- Strategic perspective on international law

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WHERE IS SPACE LAW MADE?

- Committee on the Peaceful Use of Outer Space (COPUOS)?
- United Nations Office of Outer Space Affairs (UNOOSA)?
- Conference on Disarmament (CD)?
- International Civil Aviation Organization (ICAO)?
- International Telecommunication Union (ITU)?

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BASIC PRINCIPLES OF SPACE LAW

- No legal delimitation
- Non-appropriation
- Freedom of use
- Peaceful purposes
- Weaponisation
- International law
- National responsibility
- Registration
- Jurisdiction and control
- Cooperation, mutual assistance and due regard
- No harmful interference
- Rescue and return
- Liability



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WHERE

- *Outer Space Treaty* does not set a boundary, nor define 'space object'
- *Convention on International Civil Aviation 1944* ('*Chicago Convention*') defines 'aircraft'
- "Any machine that can **derive support in the atmosphere from the reactions of the air** other than the reactions of the air against the earth's surface."

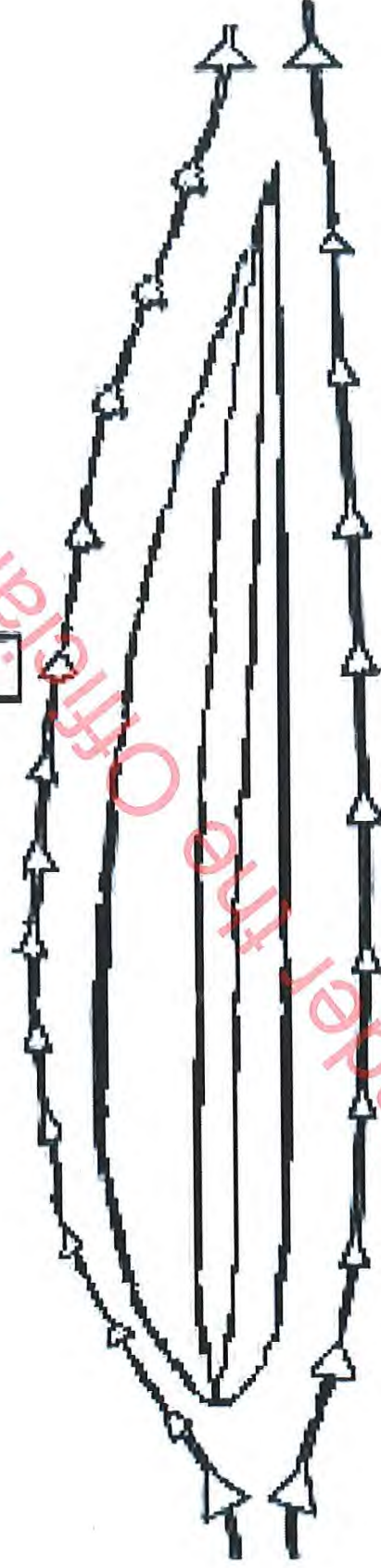


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AIRFLOW IS FASTER OVER THE TOP OF THE WING;
THUS THE LOWER AIR PRESSURE

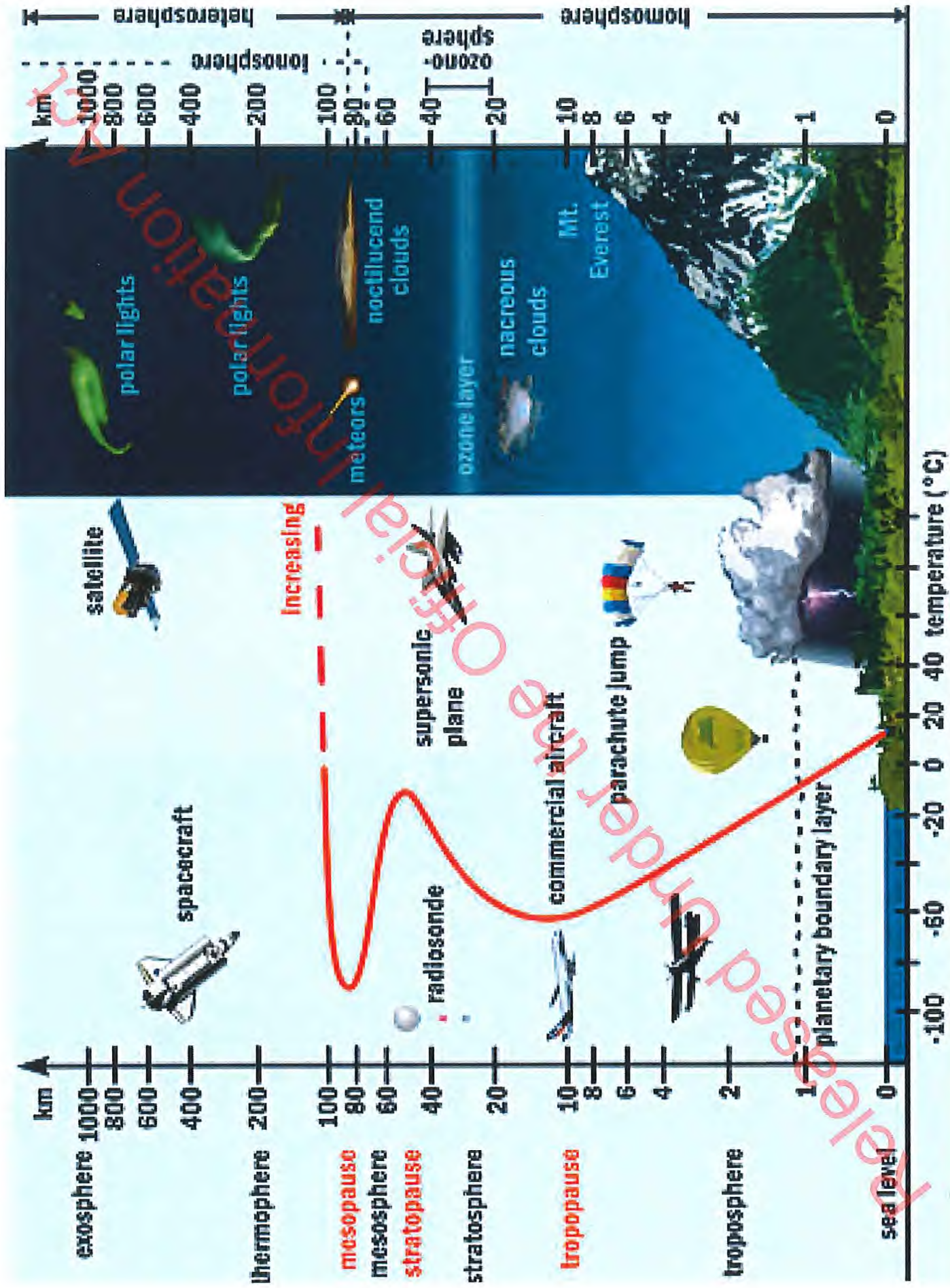
LIFT

L



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AIRFLOW IS SLOWER UNDERNEATH THE WING; THEREFORE,
THE AIR PRESSURE IS GREATER/HIGHER



NON-APPROPRIATION

- Outer Space Treaty, Art II: "Outer space, including the Moon and other celestial bodies, is not subject to national appropriation by claim of sovereignty, by means of use or occupation, or by any other means."



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FREEDOM OF USE

- Outer Space Treaty, Art I: “Outer space, including the Moon and other celestial bodies, shall be free for exploration and use by all States without discrimination of any kind, on a basis of equality and in accordance with international law, and there shall be free access to all areas of celestial bodies.”



PEACEFUL PURPOSES



Outer Space Treaty **Preamble**: “Recognizing the common interest of all mankind in the progress of the exploration and use of outer space for peaceful purposes.”

Art IV: “The Moon and other celestial bodies shall be used by all States Parties to the Treaty exclusively for peaceful purposes.”

Art I: “The exploration and use of outer space, including the Moon and other celestial bodies, shall be carried out for the benefit and in the interests of all countries, irrespective of their degree of economic or scientific development, and shall be the province of all mankind.”



THE ANTARCTIC ANALOGY

- Article I

1. Antarctica shall be used for peaceful purposes only. There shall be prohibited, inter alia, any measures of a military nature, such as the establishment of military bases and fortifications, the carrying out of military maneuvers, as well as the testing of any type of weapons.

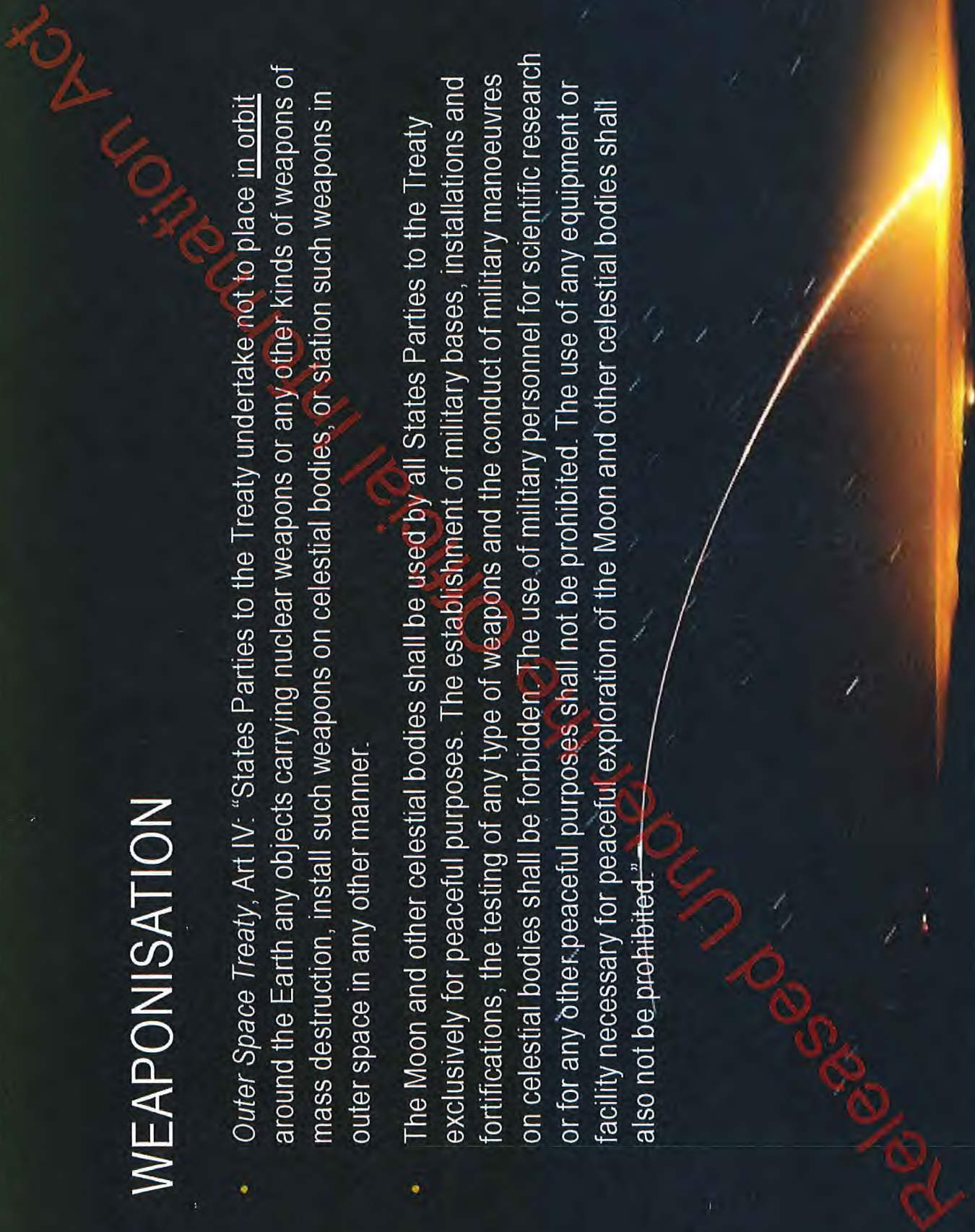
2. The present treaty shall not prevent the use of military personnel or equipment for scientific research or for any other peaceful purposes.

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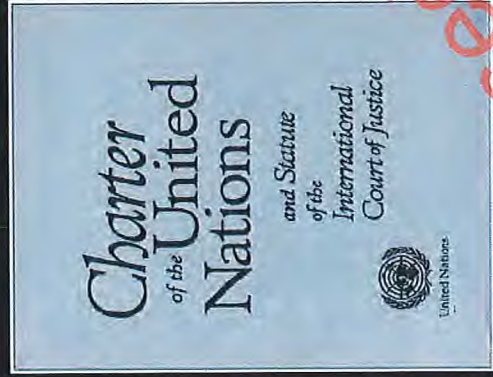
WEAPONISATION

- *Outer Space Treaty, Art IV:* “States Parties to the Treaty undertake not to place in orbit around the Earth any objects carrying nuclear weapons or any other kinds of weapons of mass destruction, install such weapons on celestial bodies, or station such weapons in outer space in any other manner.
- The Moon and other celestial bodies shall be used by all States Parties to the Treaty exclusively for peaceful purposes. The establishment of military bases, installations and fortifications, the testing of any type of weapons and the conduct of military manoeuvres on celestial bodies shall be forbidden. The use of military personnel for scientific research or for any other peaceful purposes shall not be prohibited. The use of any equipment or facility necessary for peaceful exploration of the Moon and other celestial bodies shall also not be prohibited.”



INTERNATIONAL LAW

- *Outer Space Treaty*, Art III: “States Parties to the Treaty shall carry on activities in the exploration and use of outer space, including the Moon and other celestial bodies, in accordance with international law, including the Charter of the United Nations, in the interest of maintaining international peace and security and promoting international cooperation and understanding.”



- Art 2(4) – prohibiting a threat or use of force
- Art 51 – inherent right of national and collective self-defence
- Target only legitimate military objectives



NATIONAL RESPONSIBILITY

- *Outer Space Treaty*, Art VI: “States Parties to the Treaty shall bear international responsibility for national activities in outer space, including the Moon and other celestial bodies, whether such activities are carried on by governmental agencies or by non-governmental entities, and for assuring that national activities are carried out in conformity with the provisions set forth in the present Treaty. The activities of non-governmental entities in outer space, including the Moon and other celestial bodies, shall require authorization and continuing supervision by the appropriate State Party to the Treaty.”

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REGISTRATION

- Registration Convention, Art IV – States must provide:

- Date and location of launch

- Designator

- Basic orbital parameters

- General function of the satellite

USA 161 / Adv-KH 11-4 (26934 2001-044-B)

2010/05/23

00:06:06 UTC

00:06:19 UTC



RES: 0.28" / p RANGE: 608-9 km MAG: 3.3

R. Vandelbergh

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JURISDICTION AND CONTROL

- *Outer Space Treaty*, Art VIII: “A State Party to the Treaty on whose registry an object launched into outer space is carried shall retain jurisdiction and control over such object, and over any personnel thereof, while in outer space or on a celestial body.”

IntelSat-22



COOPERATION, MUTUAL ASSISTANCE AND DUE REGARD

- *Outer Space Treaty*, Art IX: “In the exploration and use of outer space, including the Moon and other celestial bodies, States Parties to the Treaty shall be guided by the principle of cooperation and mutual assistance and shall conduct all their activities in outer space, including the Moon and other celestial bodies, with due regard to the corresponding interests of all other States Parties to the Treaty.”



NO HARMFUL INTERFERENCE

- *Outer Space Treaty*, Art IX: "If a State Party to the Treaty has reason to believe that an activity or experiment planned by it or its nationals in outer space, including the Moon and other celestial bodies, would cause potentially harmful interference with activities of other States Parties in the peaceful exploration and use of outer space, including the Moon and other celestial bodies, it shall undertake appropriate international consultations before proceeding with any such activity or experiment."



RESCUE AND RETURN

- The *Rescue and Return Agreement* establishes a regime for rescuing any space object or astronaut within a State's jurisdiction or beyond the limits of any State's jurisdiction and returning it to the State of registry.



LIABILITY

- The *Liability Convention* establishes fault-based liability in respect of damage between to objects in outer space and absolute liability for a space object that falls to Earth.



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Prefer

OTHER AREAS OF LAW APPLICABLE TO OUTER SPACE

- Counter-proliferation laws
- Nuclear strategic agreements
- Regulation of electro-magnetic spectrum
- Environmental law
- Liability / State Responsibility
- Law on the Use of Force by States
- Law of Armed Conflict
- Domestic law
- Terrestrial host nation laws

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TECHNOLOGY AND KNOWLEDGE-SHARING

- Export/arms control laws (domestic and international)
- 1963 *Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and Under Water**
- 1987 *Missile Technology Control Regime**
- 1996 *Wassenaar Arrangement**
- 2002 *Hague Code of Conduct Against Ballistic Missile Proliferation**
- Domestic implementation, such as US *International Traffic in Arms Regulations (ITARs)*
- UNSCR 2087 (and previous) and 7 February 2016 Press Statement of UN Security Council President vs Art I, *Outer Space Treaty*
- Barriers to entry for space aspirant States?

