

The Woomera Manual Initiative

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1. Space law

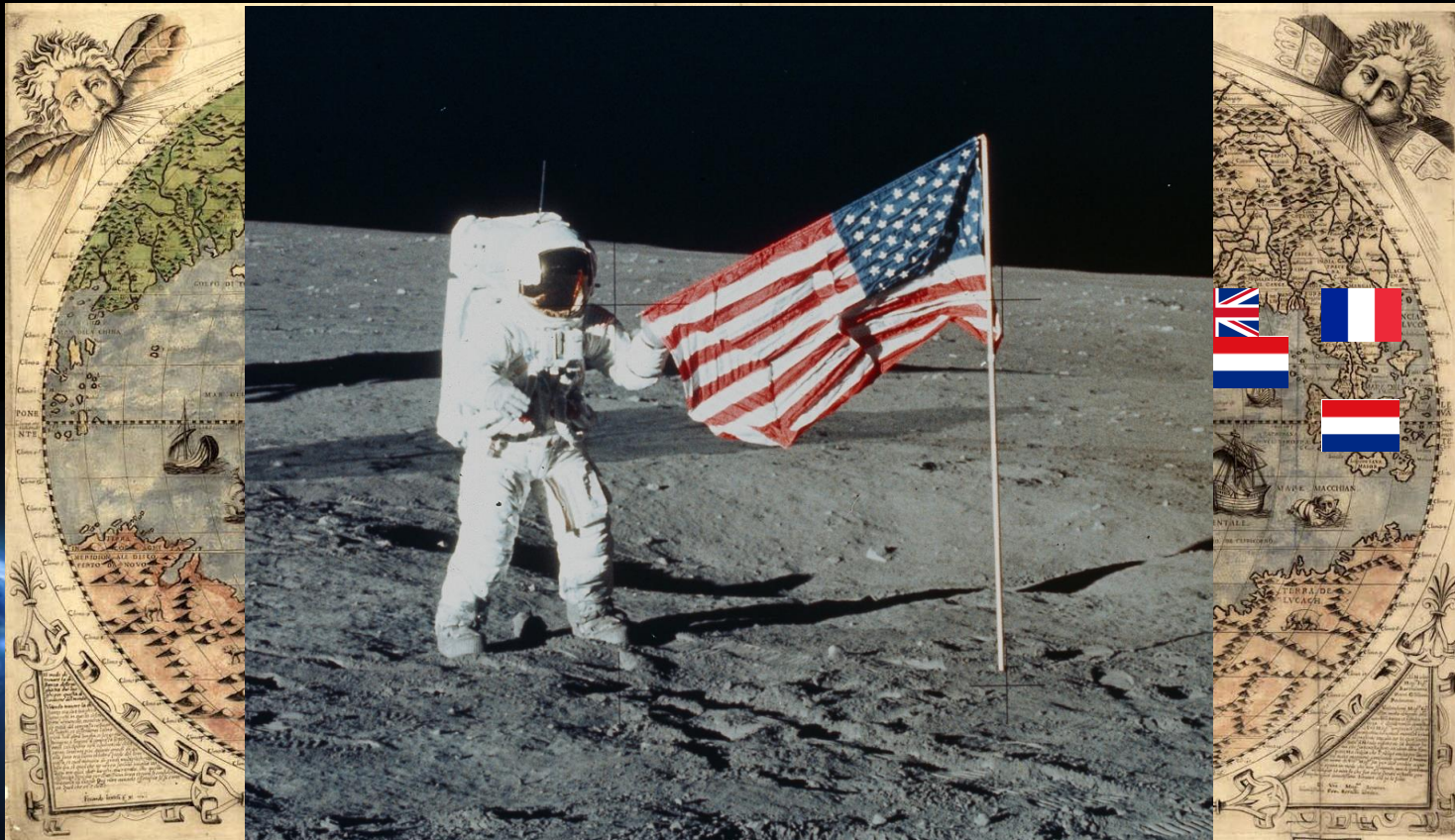
- 1957 Sputnik-I
 - 1967 Outer Space Treaty
 - ‘Magna Charta’ of space law
 - Ratified by 107 states
- Follow-on treaties
 - 1968 Rescue Agreement
 - 1972 Liability Convention
 - 1975 Registration Convention
 - 1979 Moon Agreement

"This new socialist society can turn even the most daring of man's dreams into a reality!"
~ TASS press statement 4 October 1957



General principles

- Outer space not subject to territorial sovereignty – ‘global commons’ (Art. II)



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Privatization?

- States responsible for national space activities if conducted by private entities (Art. VI)
 - Required to authorize & supervise those
 - National space legislation to do so!



Military uses (1)

- Article IV, Outer Space Treaty, 1st sent.
 - *“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.”*
 - **So what does that mean...?**



Military uses (2)

- Article IV, Outer Space Treaty, 2nd sent.
 - ‘Moon & other celestial bodies to be used exclusively for peaceful purposes; establishment military bases, installations & fortifications, testing any type of weapons & conduct of military manoeuvres on celestial bodies forbidden; use military personnel & equipment for scientific research / any other peaceful purposes allowed’
 - **So what does that mean...?**

Military uses (3)

- Beyond Art. IV, Outer Space Treaty?
 - Art. III, Outer Space Treaty
 - *“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.”*

→ ...

2. General public international law

- Prohibits only certain kinds of weapons
 - *E.g.* land-mines; biological & chemical
 - ↔ Fate of the proposal for a Treaty on the Prevention of the Placement of Weapons in Outer Space, the Threat or Use of Force against Outer Space Objects (PPWT)
 - ↔ Focuses on use of weapons, *i.e.* use of force

Use of force (1)

- Article 2(4), UN Charter
 - *“All Members shall refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any state, or in any other manner inconsistent with the Purposes of the United Nations.”*
 - **So what does that mean in the context of outer space & space activities?**

“Force”?



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“Territorial integrity”?

- Refers to ‘territory’, that is part of the earth demarcated by boundaries



which constitute ‘quasi-
f registration according
nvention?

“Political independence”?

- Can a state be ‘dependent’ for its ‘political existence’ upon satellite infrastructure?
 - Can that refer to economic / social / religious independence as well?



“Of a State”?

- What if private satellites are subject to unfriendly actions arguably / possibly amounting to use of force?
 - Even US military increasingly uses commercial satellites for many of its activities
 - Does Article VI, Outer Space Treaty, also ‘work the other way around’?



Use of force (2)

- Exception #1: Article 51, UN Charter (pt. 1)
 - *“Nothing in the present Charter shall impair the inherent right of individual or collective self-defense if an armed attack occurs against a Member of the United Nations, until the Security Council has taken measures necessary to maintain international peace and security.”*



“Armed attack”?

- Does ‘armed attack’ equate with ‘force’ of Article 2(4), UN Charter?
- ↔ Is it of a more severe character?
- Again: does it include ‘cyber attacks’?



“Against a [UN] Member”?

- Does ‘armed attack’ against a satellite amount to ‘armed attack against a UN Member state’?
 - Again: ‘quasi-territory’ if registered by that state – but not territory



“Self-defense”?

- What would the right of ‘self-defence’ mean in case of an ‘armed attack’ on a satellite?
 1. Negating the effects of the ‘attack’?
 2. Making sure opponent cannot ‘attack’ again inflict damage on his ‘attacking potential’?
 3. Retaliate to make sure opponent does not do it again?
 - What if your satellite is only temporarily incapacitated?
 - What if third states also use opponent’s satellite?

Role UN Security Council?

- What if Security Council does ***not*** take “*measures necessary to maintain international peace and security*”?



Use of force (3)

- Exception #1: Article 51, UN Charter (pt. 2)
 - *“Measures taken by Members in the exercise of this right of self-defense shall be immediately reported to the Security Council and shall not in any way affect the authority and responsibility of the Security Council under the present Charter to take at any time such action as it deems necessary in order to maintain or restore international peace and security.”*

Use of force (4)

- Exception #2: Article 42, UN Charter
 - *“Should the Security Council consider that measures provided for in Article 41 would be inadequate or have proved to be inadequate, it may take such action by air, sea, or land forces as may be necessary to maintain or restore international peace and security. Such action may include demonstrations, blockade, and other operations by air, sea, or land forces of Members of the United Nations.”*

Role UN Security Council?

- Can Security Council take other actions than “*by air, sea or land forces necessary to maintain international peace and security*”, read: endorse member states to undertake such actions?



Use of force (5)

- Exception #3: ‘inherent right of self-defence’ ...
 - Based on customary international law
 - Discussions on possibility for ‘abuse’
 - Discretion to determine scope of right?
 - Pre-emptive self-defence
 - Correlation with (absence) UN Security Council action under Article 51, Charter?

‘Self-defence’?

- Does customary international law on self-defence address self-defence in cases where space infrastructure is involved, either on the part of the ‘attacking’ state or on the part of the defending one?



Use of force (6)

- Exception #4: use of force not meeting standards of UN Charter / right of self-defence – but e.g. that of a ‘reprisal’
 - If compliant with other major principles: measure of last resort, proportionality, protection of basic human rights ...



‘Measure of last resort?’

- Does that make sense in the context of targeting a satellite as part of self-defence?



‘Proportionality’?

- How would you define ‘proportionality’ in matters of space (infrastructure)?
 - A satellite for a satellite?
 - What if opponent has incapacitated only one of your operational satellites among twenty but himself has only one operational satellite?
 - What if third states also use opponent’s satellite?
 - Take out the ground station by kinetic force?
 - May run the risk of human casualties!

‘Basic human rights?’

- In this context primarily ‘right to life’
 - Absence of humans on board satellites seemingly establishes lower threshold for right to exercise self-defence against them



3. (Other) Manuals

- Many questions, few ready-made answers
- ↔ Battle-field commanders do not have the time to undertake extended academic studies
- ‘Manuals’ were developed to provide them with the general state of the law
 - *E.g.* Oxford Manual on Naval Warfare (1913)
 - More recently: Tallinn Manual on Cyber Warfare (2013)

The essence

- Non-binding guidelines on the application of the relevant body of international law in particular contexts
 - Drafted by independent experts / academics, supported by states – yet results not necessarily condoned by such states
 - Divided into sections quoting ‘black letter rules’ & accompanying commentaries, explaining most acceptable interpretation(s), relevant customary law & general principles

Towards a Manual on space?

- Increasing discussion on ‘militarization’ / ‘weaponization’ of outer space
- & Conceptual similarities between ‘cyber space’ & ‘outer space’
- *‘Let’s translate Tallinn Manual-approach to space context’*
 - MILAMOS project – confused *lex lata* with *de lege ferenda* & omitted rigorous analysis customary international law

Relevance?

- **Business Insider, 07-12-2017:**

The space kingdom of Asgardia says it's the first nation with 'all of its territory in space'

- **A non-governmental organization called Asgardia wants to become the first kingdom and nation-state in space.**
- **On Wednesday, the group deployed its first satellite into orbit around Earth.**
- **Asgardia claims the small satellite's deployment means it is "the first nation to have all of its territory in space."**

"Asgardia will be a space nation that is a trans-ethnic, trans-national, trans-religious, ethical, peaceful entity trying to settle the humanity in space "

Are you kidding me?



- A 'State' under international law has:
 1. A territory
 2. A permanent population living on such territory
 3. Effective government over both
 4. Recognition by existing states (generally speaking)
 - Cf. Palestine & Taiwan

This is terminological pollution...

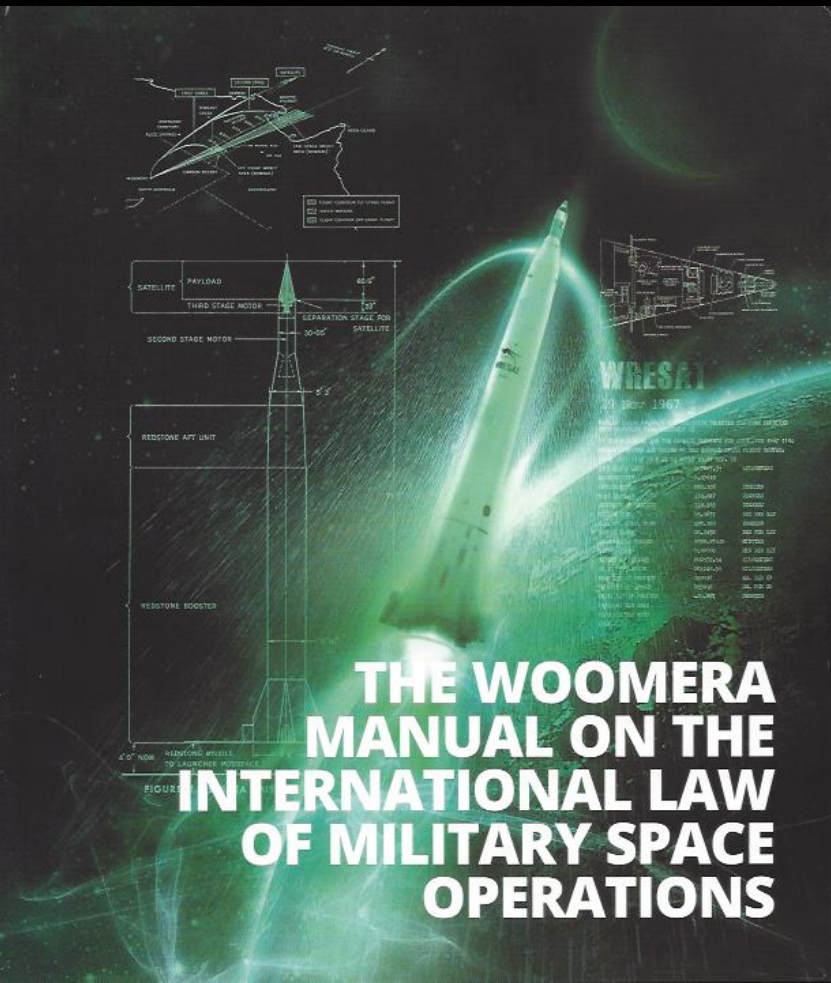
... with consequences!

- *Would kinetic and/or cyber interference with Asgardia's satellite amount to an 'armed attack', to the 'use of force against the territorial integrity or political independence', to a 'threat to international peace & security'? Would 'someone' be entitled to exercise 'self-defense', use 'counter-force' & reprisals, invoke UN Charter obligations?*

The Woomera Manual



- Woomera wants to get it right
- To be completed 2020
- Founding institutions



- Current partners



Mission

- To develop a Manual that objectively states the law on military use of space
 1. Five UN space treaties
 2. UN Resolutions on prevention arms race in outer space as reflective of customary law
 3. Initiatives such as PPWT & International Code of Conduct for Outer Space Activities (ICOC)
 4. UN Charter & general international law on armed conflict & use of force

Rationale

- Heavy reliance countries on space infrastructure economically, socially & militarily → disruption could be devastating
- Possibilities of conflict extending to outer space increasing
- Vulnerabilities space infrastructure
- New legal instruments not very likely to be developed successfully

Aim

- To “*articulate and clarify extant law applicable to military activities associated with the space domain, especially that which is relevant in periods of tension*”
- Both *jus ad bellum* and *jus in bello*
- Analyse space operations & terrestrial operations using space infrastructure & possible responses from the perspective of the law

Drafting

- Legal experts space law & law on use of force & armed conflict in personal capacity
- Drafts Rules & Commentary
 - Rules: succinct statements international law in military space context
 - Commentary: expands on interpretation, discusses application issues & provides examples of relevant scenarios
- Discussions at Workshops including engagement of state officials

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