SPACE LAW AND POLICY
WITH SIMULATED NEGOTIATIONS
[4]

# THE LIABILITY CONVENTION OF 1972

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# SPACE NEWS:

22 April 2016 [CCTV America]

"China plans to land on Mars by 2020"

China's Mars mission will attempt to recreate the success of the U.S. Viking 1 mission, which landed a rover on the red planet four decades ago.

http://www.cctv-america.com/2016/04/22/china-plans-to-land-on-mars-by-2020

28 April 2016 [SPACE.com]

"SpaceX Will Launch Private Mars Missions as Soon as 2018"

※ India launched Mars mission in 2013 already.

# BEFORE STARTING…
# Q: RES COMMUNIS?

High Seas

Antarctica

Outer space

Deep Seabed

# BEFORE STARTING…
# Q: HIGH SEAS (HIGH SEA) OR INTERNATIONAL WATERS?

Max Planck Encyclopedia of Public International Law → High Seas

(International Waters is not well defined in public international law)

◆Article I of the High Seas Convention:

"all parts of the sea that are not included in the territorial sea or

in the internal waters of a State"

◆Art. 86 UN Convention on the Law of the Sea

It avoids defining the high seas

→the high seas provisions

'apply to all parts of the sea that are not included in the exclusive economic zone, in the territorial sea or in the internal waters of a State, or in the archipelagic waters of an archipelagic State'.

# LIABILITY CONVENTION OF 1972 [ARTICLE I-III]

## CONVENTION ON INTERNATIONAL LIABILITY FOR DAMAGE CAUSED BY SPACE OBJECTS

# 1. BACKGROUND

◆1959 In order to consider liability issues for damage cased by space object
ad hoc committee on Peaceful Uses of Outer Space was established in UN

◆1962 UN Committee on the Peaceful Uses of Outer Space was established
(with Scientific and Technical Sub-Committee + Legal Sub-Committee)

◆1969 (July 4th) Japan's representative submitted a case
→1969 (June 5th) a piece of space object felled in the Siberia off the coast
and hit Japan's cargo that injured 5 crews
→The Outer Space Treaty of 1967 was drafted by Belgium, Hungary, India and Italy

◆1971 (June 19th) Draft was agreed at LSB with 94 states ratification

# 2. DEFINITION: DAMAGE

For the purposes of this Convention:

(a) The term "damage" means ① loss of life, ②personal injury or other impairment of health; or

③loss of or damage to property of States or of persons, natural or juridical,

or property of international intergovernmental organizations;

Q1. Is psychological damage (indirect damage) included in ②?

Q2. Is indirect damage included in ③?

(*b*) The term "launching" includes attempted launching;

Q3. Is failed launching included?

# 2. DEFINITION: LAUNCHING STATE

(*c*) The term "launching State" means:

(i) A State which launches or procures the launching of a space object;

(ii) A state from whose territory or facility a space object is launched;

※Same definition from Article VII of the Outer Space Treaty of 1967

→a victim can sue any of those launching states for full reparation.

→problem: to identify a launching state for private space business (production/assembly)

# 2. DEFINITION: SPACE OBJECT

©ESA: http://www.esa.int/spaceinimages/Images/2014/07/Galileo_SAT_5-6_Satellites_entering_free-flight

(*d*) The term "space object" includes component parts of a space object as well as its launch vehicle and parts thereof.

◆Let's see other space treaties

✓ Article I(b) of the Registration Convention of 1975

「a space object includes component part of a space object as well as its launch vehicles and parts thereof」

✓ Article VIII of the Outer Space Treaty of 1967

「an object launched into outer space 」

「objects launched into outer space, including objects landed or constructed on a celestial body, and of their component parts」

→in the context of jurisdiction and control, space object is「 object launched in outer space」

# 3. ABSOLUTE (STRICT) LIABILITY

Article II

A launching State shall be absolutely liable to pay compensation for damage caused by its space object on the surface of the Earth or to aircraft in flight.

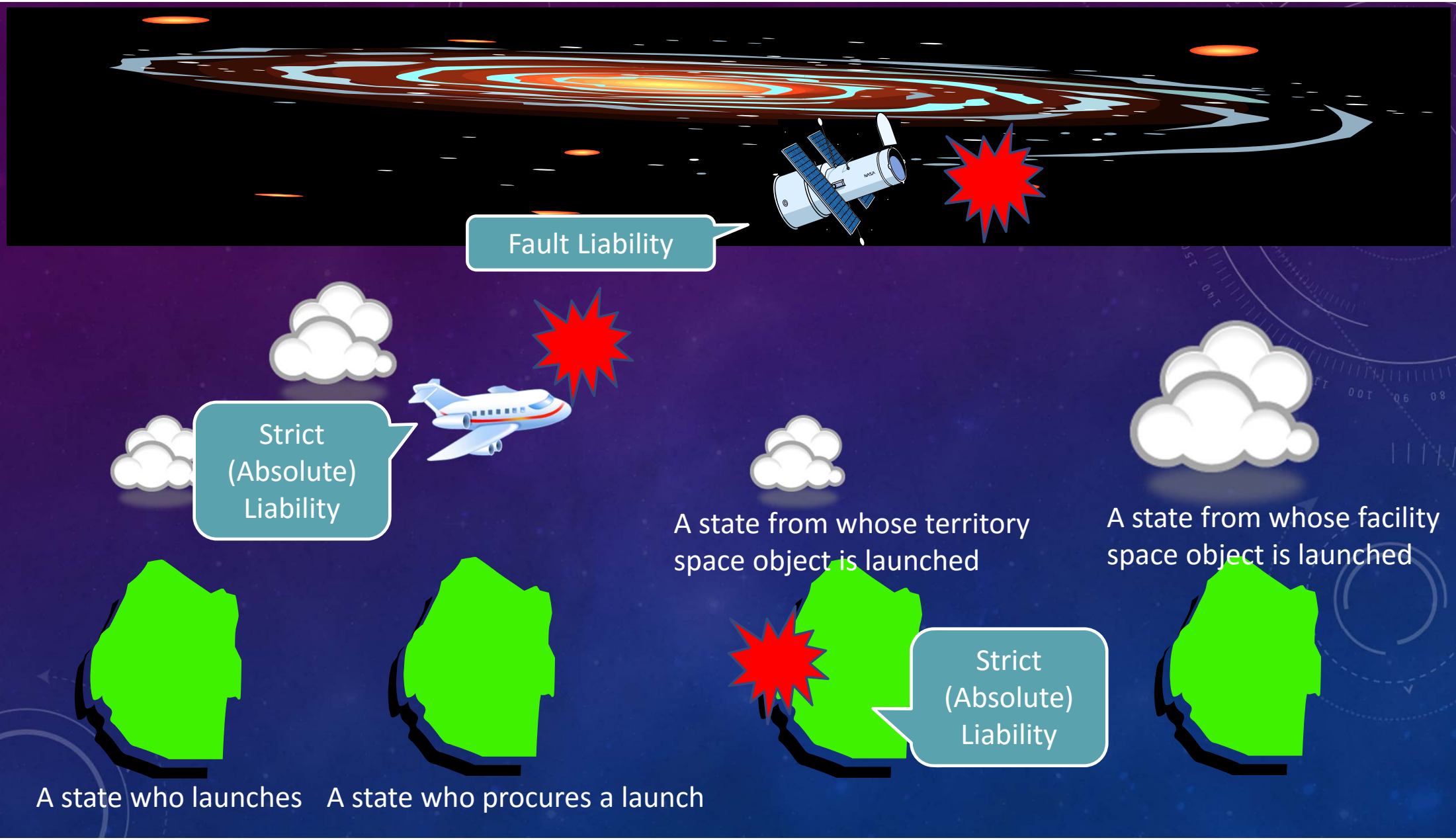
It is exceptional to the law of State Responsibility

Next week, let's study " Responsibility vs. Liability"

# 4. FAULT LIABILITY

Article III

In the event of damage being caused elsewhere than on the surface of the Earth to a space object of one launching State or to persons or property on board such a space object by a space object of another launching State, the latter shall be liable only if the damage is due to its fault or the fault of persons for whom it is responsible.


Fault Liability
Strict (Absolute) Liability
A state from whose territory space object is launched
A state from whose facility space object is launched
Strict (Absolute) Liability
A state who launches
A state who procures a launch

# 5. THE CASE OF LAUNCH SERVICES

✓ Launch activities from the Platform on the High Sea

Sea Launch

① Primary contractor: US Boeing

② Rocket: Ukraine

③ Platform (Ship): Norway Kvaerner

④ Secondary contractor: Russia Energia

27 March 1999 The first launch took place.

By moving the launch pad to the equator, sea launch enable to reduce fuel

→cost reduction →competitiveness in market

✓ Air-launch over High Sea → next slide..

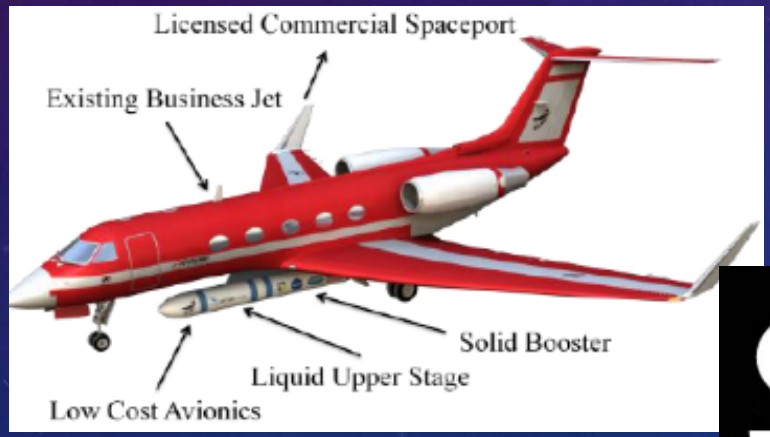
# AIR-LAUNCH ACTIVITIES

Carrier Aircraft + Small Rocket/RLV

(originally designed as aircraft)

Generation Orbit

Launch Services, Inc.




S3 SWISS SPACE SYSTEMS

# NATIONAL SPACE LAW AND POLICY: RESCHEDULED + ASSESSMENT

| | |
|---|---|
| RUSSIA | [MAY 9] MIHO/TAKAYA |
| JAPAN | [MAY 16] MARINE |
| CANADA | [MAY 23] HARUKI |
| ESA AND EU | [MAY 30] AURELIEN |
| FRANCE | [JUNE 6] LING |
| UK | [JUNE 13] YAN |
| GERMANY | [JUNE 20] THOMAS |
| CHINA | [JUNE 27] VERN |
| SOUTH KOREA | [JULY 4] ESHONKULOVA |
| US | [JULY 11] WEIXI |

1 person for 1 state [15 mins]
Please send the PPT before the day of lecture to:
takaya@rabbit.kobe-u.ac.jp

Academic Assessment
Please submit your report on your presentation
[A4, 3-4 pages, single line, font size 11]
Deadline: August 12
E-mal to:
takaya@rabbot.kobe-u.ac.jp

# SIMULATED NEGOTIATION

Time Table:

16:00 ～ 16:15　Group Discussion

16:15 ～ 16:35　Presentation

THEME

"WHAT IS IDEAL LEADERSHIP TO SURVIVE DURING LONG-TERM SPACE MISSION?"

As a staff of space agency, you are drafting the guidelines for astronauts of Mars exploration project. Please make a list of 5 skill/characteristic that you require for an ideal leader (in order).

## TEAM A: 180 days

Transporting to Mars

Place: in Spaceship

Duration: 180 days

Mission:

Physical Training

No one drop-out

## TEAM B: 2 years

Arrived on Mars

Place: on Mars

Mission:

Construct facilities for living, food, etc.

Scientific Exploration

## TEAM C: 5 years

Settled on Mars

Place: on Mars

Mission:

Solve problems with newly arrived group of astronauts from other states.

END