# LEGAL AND ETHICAL CONTEXT FOR THE UTILIZATION OF RESOURCES IN OUTER SPACE

Presented by For All Moonkind at the 66<sup>th</sup> Session of the Committee on the Peaceful Uses of Outer Space June 2023





For All Moonkind is a non-profit organization that seeks to protect and preserve human history and heritage in outer space.

Our entirely volunteer team of space lawyers and policymakers are working to develop reasonable and practical protocols that will balance development and preservation and include systems to select, manage and study relevant sites.



www.forallmoonkind.org

## Institute on Space Law and Ethics

For All Moonkind's Institute on Space Law and Ethics promotes the articulation and development of an ethical foundation and framework for responsible space behavior. In so doing, the Institute seeks to reduce the potential for conflict and assure the sustainable exploration and use of space and its resources for the benefit of all humankind.

It is also our mission to amplify voices.





It is without question that the decisions made today with respect to the exploration and use of space and its resources will have far-reaching implications for future generations, and indeed, all humanity.



# Outer Space Treaty - Articles I and II

- 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 [hu]mankind.
- 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.
- 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.



## Outer Space Treaty – Article II

- Article I free exploration and use, free access
  - But Article IX "due regard"
- Article II non-appropriation
  - But Article XII facilities, "by any other means?"
  - But Article III international law
    - Declaration of Human Rights, Article 17
    - And, it has been suggested by some scholars that the language leaves a gap and that "an individual acting on his [or her] own behalf or on behalf of another individual or a private association or an international organization could lawfully appropriate any part of outer space, including the moon and other celestial bodies." Gorove.





#### Article II - More Questions Posed

- Does the prohibition of Article II extend to the collection of dust particles or other special elements during flight in outer space?
- Does the prohibition extend to the appropriation of cosmic rays, gases or the sun's energy, or to the collecting of mineral samples or precious metals on the Moon or other celestial bodies?
- Should the answer depend on the type of resource involved, or on its availability in unlimited (cosmic rays, meteorites, gases) or limited (minerals, metals) quantities or perhaps on its location?

~ Stephen Gorove, 1969



Ethics demand that we balance space exploration and resource utilization activities with intergenerational and interplanetary equities and respect for the natural environment even beyond our Earth.

#### Space Resource Utilization Will Benefit Humanity.

- Tools developed to implement off-Earth mining operations require technological advancement that will enhance the human experience on Earth.
- Mining will increase our scientific knowledge of the universe around us.
- Extracting and using off-Earth resources will make it more efficient for us to explore further into the reaches of the Universe
- It will relieve the pressure on our own Earth and help us protect and even heal our terrestrial environment.
- Additional benefits that we cannot even imagine (NEO, remote sensing)



#### What is the intrinsic value?

- Evolution and change are inevitable and happens throughout the natural world.
- We are not the only species to work to adapt our environment to suit our needs, but currently, we are the only species able to explore space to benefit all of Earth and its fauna and flora.











Exploration of space would not be possible happen without our ancestor in Tanzania standing upright, without an individual in the Congo using a baboon bone to add and subtract, without a culture in Mesopotamia developing a process to make glass.



#### Only with Participation of All Will We Find the Right Answers

- Every culture throughout history has contributed to where we are today. We as humans do not thrive or even survive without diversity for that is what fuels innovation. We urge this Committee to consider the protection of heritage that is found beyond our Earth as a priority to support sustainable exploration, sustainable development and the sustainable extraction and use of space resources.
- We also urge this Committee to celebrate the diversity of our cultures by amplifying voices that have been marginalized, like voices from indigenous communities.



#### For All Moonkind

Leadership Board

**Legal Council** 

**Heritage Council** 

Science, Industry and Education Council

\*New\* - council focused on indigenous voices.

We welcome your participation.





