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**Manfred Lachs Space Law Moot Court Competition 1998<sup>2</sup>**

*Case Concerning the Commercial Exploitation of the Moon*  
*-- The Rover Games Project --*

**Nation of Freedom (Applicant)**  
v.  
**Nation of Bravatia (Respondent)**

**INTRODUCTION**

The year is 2015. The International Civil Space Station has been in operation for 14 years. A fleet of single-stage-to-orbit ("SSTO") space launch vehicles and space "tugs" service the Moon on a regular basis. The Lunar Port Authority ("LPA"), an international regime established by governments pursuant to Article 11.5 of the Moon Treaty (and which now numbers as its member states a majority of the world's nations), is celebrating its tenth anniversary, its mission being to govern the exploitation of the natural resources of the Moon. It is clear that Lunar settlement is not far off.

**STATEMENT OF THE CASE**

The Applicant before the International Court of Justice ("the Court") is the Nation of Freedom ("Freedom"), a sovereign state, member of the United Nations ("UN"), and through its Ministry of Environment and Space, a founding member of LUNAVIRONMENT which is an international, non-governmental organization established pursuant to a United Nations resolution in 2001. LUNAVIRONMENT is composed of 101 environmental agencies and non-profit organizations worldwide. Its principal purpose is the preservation of the Lunar environment. LUNAVIRONMENT and its member states have authorized Freedom to represent the interests of the organization before the Court.

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The Respondent is the equatorial Nation of Bravatia ("Bravatia"), also a sovereign state and a member of the United Nations but not a member of LPA or LUNAVIRONMENT. Both Freedom and Bravatia are parties to the Outer Space Treaty of 1967, the Rescue Agreement of 1968, the Liability Convention of 1972, the Registration Convention of 1976 and the Moon Treaty of 1979 (hereinafter referred to collectively as "the Space Treaties"). Bravatia had gained considerable notoriety in the world community in 1999 by registering ten positions on the geostationary orbital arc, along with associated fixed and mobile satellite frequencies with the International Telecommunication Union ("ITU"), and reselling its acquired rights soon thereafter for large sums of money.

Bravatia's most recent commercialization endeavor in outer space is the development of a commercial amusement venture using a large (5 square kilometer) venue on the Moon. In 2011 Bravatia organized under its municipal laws a for-profit corporation, LUNABRAT, with majority ownership and control vested in the Ministry of Finance of Bravatia and minority ownership held by some fifty domestic and foreign private investors. The space activities of LUNABRAT are also supervised by the Ministry of Environment and Space of Bravatia which is represented on the board of directors of LUNABRAT.

LUNABRAT has deployed 2,000 small rover vehicles (each being roughly one meter square by 60 centimeters in height) on the 5 square kilometer Lunar venue, with an additional 8,000 vehicles planned for deployment within the next 24-months. Each rover is equipped with a SOLAR power source for mobility, a small TV camera, a transmitter and receiver, and a low-power laser "gun". Movement of the rovers over the Moon's terrain and the aiming and firing of the laser "guns" are controlled from small, easily-operated "controller" booths on Earth. When the project is fully established there will be in excess of 100,000 of these booths located worldwide in amusement parks, shopping malls and the like. Communications between the booths on Earth and the Lunar rovers is via communications earth stations located in various countries and a fixed communications base station centrally located in the Lunar venue. (In this way, communications signals, such as commands to the rovers sent from booths on Earth, are received by the Lunar base station and relayed to the appropriate Lunar rover vehicle, and *vice versa*.) A child or adult wishing to play the game of "Rover Tag" sits at a controller and for set 10-minute periods "drives" via the communications links an assigned rover on a "search and shoot" mission across the Lunar venue. The object of the game is to see how many other rovers the player can find with its rover, target with its laser, and "zap" (that is, temporarily immobilize) during the 10-minute period without, itself, being "zapped" by another player's laser or actually immobilized by some natural Lunar object. Depending on the player's score during a ten-minute session, the player may earn one or more additional free 10-minute sessions, assuming, of course, it has not been immobilized. The current price of a game is USD 10 (EURO 10) per minute. The gross revenues of this activity so far have averaged USD 3 million per week and are projected over the next ten years to average in excess of USD 12 million per day.

Being mindful of the negative publicity which resulted following its 1999 commercial exploitation of rights on the geostationary arc, Bravatia has made a concerted effort to obtain international acceptance of its Lunar amusement project. For more than five years, Bravatia sought international approval for its activities from the LPA, but to no avail. Then in 2012, Bravatia applied to the Artemis Development Organization ("ADO") for a license to operate the rovers and ancillary communications equipment at the Lunar venue. ADO is an international inter-governmental organization established pursuant to treaty in 2011 and headquartered in the State of Alpha. Its member states total nearly a majority of the member states of the United Nations, although ADO is not an agency of the United Nations. ADO was established to control and regulate space vehicles operating within 1000 kms of the surface of the Moon and to license and regulate vehicular traffic on the surface of the Moon. Both Freedom and Bravatia deposited their instruments of accession to the ADO treaty in 2011. ADO has declared its acceptance of the rights and obligations under the Rescue Agreement, the Liability Convention, the Registration Convention and the Moon Treaty.

The establishment of an organization such as ADO had initially been suggested at an international "citizens" convention held in the State of Alpha during October - November 2008. Citizens from a majority of nations, including Freedom and Bravatia, attended the convention as participants, and many international organizations, including the UN, sent observers. The persons on the Governing Council and in the Executive Body of ADO consist of a broad international mix of engineers, architects, environmentalists and scientists possessing professional credentials in disciplines relevant to the planning and conducting of activities in outer space and on the Moon. Some of these persons are nationals of either Freedom or Bravatia.

Sixteen months after submitting its application to ADO, Bravatia successfully completed the required licensing procedures involving such matters as planning, engineering standards, environmental compliances, and legal and financial qualifications in accordance with ADO procedures and regulations, and its project was approved and licensed by ADO subject to two principal conditions, which Bravatia unequivocally accepted:

1. Fifty percent of all profits derived from the rover games are to be contributed to the LPA for the "Apollo 17 Site". This site, occupying 1,000 kms<sup>2</sup> on the surface of the Moon, is to be developed and operated by the LPA using mineral-mining and oxygen-generating equipment so that free gases and minerals eventually can be produced, refined, and stored at the site for the use of future Lunar settlers and generations of mankind. This activity will be managed for all peoples, as an interplanetary free "gas station."
2. When the 5 km<sup>2</sup> Lunar rover venue has been compacted by the lunar rovers so as to render that venue unsuitable for the rover games, Bravatia's license will revert to ADO for redevelopment as a lunar spaceport settlement and "dust-free" industrial park. In return, ADO will license Bravatia the use of another, perhaps larger, venue on the Moon for the continuation of the rover games.

Freedom and LUNAVIRONMENT vigorously opposed, within the organs of ADO and elsewhere, Bravatia's rover games project. In particular, Freedom sought unsuccessfully to persuade a majority of its fellow member states represented in ADO's Governing Council to reject Bravatia's application on the basis that Bravatia's proposed Lunar rover games would be inconsistent with international law as set forth in the Space Treaties. Moreover, Freedom contends that LPA, not ADO, is the only body competent under international law to license an activity on the Moon such as the rover games project. Having failed within ADO to stop the project, Freedom resorted to electronically jamming, intermittently, all signals between Bravatia's Lunar base station and the Lunar rovers. As intended, the jamming seriously interfered with the rover games thereby causing a precipitous drop in customer interest and revenues. It has also placed the 2000 deployed rovers in physical peril since the jammed signals also include system telemetry and command signals between the rovers and the base station. Consequently, the rover on-board systems (e.g., power and thermal systems) can no longer be continuously monitored and controlled as is absolutely necessary for their maintenance in the harsh Lunar environment.

Attempts through diplomatic channels to settle this matter proved unsuccessful. However, in an attempt to deflect increasing international opposition to the jamming of Bravatia's signals, Freedom signaled that it was prepared to institute proceedings against Bravatia in the International Court of Justice. Through the good offices of the Foreign Ministry of Alpha, Freedom and Bravatia agreed to the terms of a *compromis* with four submissions (set forth, *infra*) for adjudication by the Court and agreed to be bound by the judgment of the Court.

Applicant contends that the Lunar rover games are environmentally unacceptable since they would disturb the Lunar surface, scatter manmade debris, and unnaturally disturb the lunar regolith. In addition, Applicant contends that the perception of the Moon as a peaceful, unspoiled celestial environment will be seriously diminished for mankind by pictures of rovers carrying out their "search-and-shoot" missions for the leisure of people financially able to engage in such amusement. Applicant asserts that mankind has a protected interest in preserving the peaceful environment of the Moon for future generations, as reflected in the provisions of the Outer Space Treaty and the Moon Treaty, and that LPA is the only authority competent under international law to act on an application for a proposed commercial use of the Moon. Therefore, in response to Bravatia's proceeding with its rover project without first obtaining approval of that project from LPA, Applicant contends that it has acted in a manner not inconsistent with the provisions of the Space Treaties in jamming Bravatia's Lunar signals, regardless of any damage this may cause to Bravatia.

Respondent, on the other hand, contends that under international law as reflected in the Space Treaties, the Moon is free and available for exploration and use by the parties thereto and that Bravatia is fully within its rights having fully disclosed its intentions and obtained the necessary authorizations from ADO, the international body charged with licensing and regulating vehicular traffic on the surface of the moon. Bravatia contends that LPA's scope of

legal and regulatory competence is confined, in the words of its constitutive agreement, to "governance of the exploitation of the natural resources of the Moon as such exploitation becomes feasible" and therefore does not encompass the rover games project since neither Bravatia nor LUNABRAT will be engaged in the exploitation of such resources. Furthermore, Bravatia agreed to the license conditions specified by ADO from which substantial economic benefits will inure to the benefit of mankind's future exploration and use of the Moon. Respondent further contends that it has suffered, and continues to suffer, extensive economic harm as a result of the unlawful actions of Freedom in jamming all communications between the rovers and the base station on the Moon, and seeks relief from the Court.

### ISSUES

The following four issues are reserved for briefing and argument to the Court under the agreed compromise. There are no issues of jurisdiction or standing, and briefs and arguments with regard to the issue of remedies are to be confined solely to legal principles and not speculate as to monetary amounts.

1. Which international obligations do the Space Treaties impose on states parties to such treaties to refrain from causing environmental damage to the Lunar surface?
2. To the extent the Court establishes such obligations under the first issue, what would be the legal consequence under international law of Bravatia having obtained the approval from ADO, instead of LPA, to conduct its commercial rover activities?
3. Are the actions of Freedom in jamming the Lunar communications in the manner described in violation of its international obligations as a party to the Space Treaties?
4. To the extent the Court establishes the existence of international obligations under the third issue, to what remedies (if any) is Bravatia entitled under international law?

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