MANFRED LACHS SPACE LAW MOOT COURT COMPETITION 1997

OPENSKEY vs. ANTIPAPADIA

Case Concerning Commercial Very High Resolution Remote Sensing Systems

1. INTRODUCTION

The finals of the 6th Manfred Lachs Space Law Moot Court Competition were held on 9 October 1997. The competition was realized with the help of the University of Turin, the Local Organizing Committee of the IAF, KLM Royal Dutch Airlines, the European Centre for Space Law (ECSL), and the Association of US Members of the IISL (AUSMIISL). Preliminary competitions were held in Europe and the USA, and the winners of those preliminaries met in the final round in Turin. The University of Paris XI (France) and the University of North Carolina (USA) competed in the case "Openskey vs. Antipapadia", dealing with Very High Resolution (VHR) remote sensing systems (written by Harry Tuinder, Marco Ferrazzani and Frans von der Dunk.). The honourable court was composed of Judge Koroma (President) Judge Rezek and Judge Vereshchetin of the International Court of Justice. The team of the University of Paris won the competition. Its members were Jean-François Renaud, Ranjani Srinivasan, and Amine Laachani. The members of the University of North Carolina team were Christina Benson and Scott Syfert. The Law Offices of Sterns and Tennen provided two awards to Outstanding Oralists Ms Benson and Ms Srinivasan. The Journal of Space Law offered a one-year subscription for the team with the Best Memorial, the French team.

2. THE PROBLEM*

General Issues Presented:

- Whether the downgrading of spatial resolution of a remote sensing satellite image in the case of a specific country is in conformity with international law;
- Whether remote sensing satellite data may be intercepted by a state without approval of the operator state of the satellite;
- Whether remote sensing data which proves to be incorrect can result in liability under international law of the state which is responsible for the satellite operation.

Statement of Facts

The Republic of Starstripe licensed the private company Goldstar to construct and sell the commercial remote sensing satellite Golden Eye to the Kingdom of Openskey. Golden Eye is capable of delivering Very High Resolution (VHR) data with a ground resolution between 1 and 5 meters.

The instruments on board Golden Eye have an optical capacity and an active synthetic aperture radar (SAR) capability and there is limited on board processing and recording of data. Also the satellite is equipped with an optical telecommunication transponder for intersatellite

links which makes high bit data relay possible with the command station.

Golden Eye was successfully launched by the State Secondandia from the territory of the Republic Starstripe and subsequently was sold to the private company Superview Inc., which has its headquarters in Openskey, but is incorporated elsewhere.

Superview Inc. is a typical large multinational company and has shareholders all over the world. Superview Inc. is licensed by Openskey to carry out commercial VHR activities in conformity with international law including space law. Superview, Inc. pays Openskey 10% of the revenue it receives from the sale of sensed data. Openskey has a national space law which contains the provisions in the Annex. Agreements have been concluded between Superview Inc. and the governments of Papadia and Antipapadia to receive data directly from Golden Eye. In these agreements, which also were approved by the Foreign Ministry of Openskey, technical assistance is provided by Superview Inc. to Papadia and Antipapadia, and ground stations are delivered by Openskey to the respective countries. Both agreements refer to the conditions of the license of Superview Inc. as an integral part of the agreement.

Papadia and Antipapadia, which were separated from each other after a lengthy civil war, are located in the same geographic region and are both comprised of a group of small islands. The sea area in which they are situated contains many minerals, and large oil fields are supposedly located in the disputed territorial sea between Papadia and Antipapadia. Two oil companies, Drillwell Inc. and Sinkbetter, Inc., have long-standing close contacts with the governments of Papadia and Antipapadia respectively, due to the existence of these strategic oil fields. Drillwell Inc. is incorporated under the law of Papadia, and Sinkbetter Inc. is incorporated under the law of Antipapadia.

The first large client of Papadia for VHR data is Drillwell, Inc. which, based on the data delivered through the ground station of Papadia, started to search for oil in a small coastal area in the middle of the disputed territorial sea between Papadia and Antipapadia.

Antipapadia at the same time contracted with Sinkbetter Inc. and Sinkbetter, based on the data gathered through the ground station of Antipapadia, starts an oil search some 12 kilometers (8 miles) east of the area where Drillwell Inc. is searching. This area, as well, is situated in the middle of the disputed territorial sea between Papadia and Antipapadia. Both Drillwell and Sinkbetter are licensed through the respective Papadian and Antipapadian ministries to carry out exploratory drilling and subsequently to exploit any oil fields they find in the disputed areas.

The ground stations of Papadia and Antipapadia for receiving the VHR data from Golden Eye are technically different. Papadia, which still maintains close political and economical ties with its former colonial power Starstripe, purchased from Openskey the latest technology and software for processing all the data. Antipapadia, which after its separation from Papadia became part of the movement of progressive former colonial countries.

has only limited access to space technology, due to limited economic resources. Consequently it was only able to purchase much less advanced hardware and software for processing the VHR data. Moreover, in the license of Goldstar to export Golden Eye to Openskey, a provision was included which gave Starstripe the right to demand a downgrading of the data in furtherance of the national security interests of Starstripe. This provision was also included in the licence from Openskey to Superview, Inc. and was made known to Papadia and Antipapadia when they signed the agreements with Superview, Inc.

Tensions have arisen between Papadia and Antipapadia due to the plans of both oil companies to start exploratory research in the disputed sea areas by sending special ships for experimental drilling. Both countries send warships to the disputed zones. A situation of international tension is reported by the press.

The data received from Golden Eye, according to press reports, also has military significance and enables both countries to monitor the other country's military activities. Papadia requests Starstripe to intervene in the conflict and also requests the Secretary General of the United Nations to discuss the situation in the Security Council. The Security Council subsequently adopts a Resolution calling upon the two countries to refrain from any further controversial actions in the disputed area and to enter directly into negotiations concerning the disputed sea area. The Resolution does not mention space activities nor the use of satellite derived information.

Openskey, after discussions with Starstripe, orders Superview Inc. to switch-off the satellite signals intended for the ground station of Antipapadia. Superview complied with this order.

At the same time, the oil companies Drillwell Inc. and Sinkbetter Inc. published the first results of their test drilling. It appears that Drillwell found an undersea oilfield which will justify commercial exploitation. It is located entirely in the disputed area. Sinkbetter, on the contrary, did not locate any oilfield. After having made an investigation with experts from Antipapadia, the conclusion was drawn that due to the technical inferiority of the ground station and processing facilities, it could not carry out its research with the data obtained through the Antipapadian ground station. It was also discovered that the data received by Antipapadia had been deliberately and constantly downgraded by Superview Inc. on request of the Government of Openskey. In the process of downgrading, some of the data received in Antipapadia was carelessly but unintentionally transformed in such a way that with the processing software Antipapadia possessed the data was being represented incorrectly.

Antipapadia, after having received the experts' report, decided to buy a state-of-the-art mobile ground station. In order to be sure to receive the VHR data in good order, Antipapadia started secretly to operate the mobile ground station from the territorial waters of Papadia. Antipapadia delivered VHR data to Sinkbetter, which, according to press releases, will take one more month to acquire enough data to start new research. At the same time, the Government of Antipapadia published pictures of secret Papadian military bases to the international press, which

it claims clearly show the military build-up by Papadia. These pictures were derived from the satellite data obtained from Golden Eye through Antipapadia's recently acquired mobile ground station.

After these publications, Starstripe requests Openskey to switch off Golden Eye when it is in the coverage area of the ground stations in Papadia and Antipapadia until the disputed reception of data by Antipapadia ends, and until Papadia and Antipapadia resolve their territorial dispute. Based on this request, Openskey decides to suspend the license of Superview Inc. to operate Golden Eye, and its control is taken over by the army of Openskey. Neither Papadia nor Antipapadia have received any data from Golden Eye since this decision.

Openskey and Antipapadia have decided to bring their dispute before the International Court of Justice for resolution of the issues stated below. There are no issues as to the Court's jurisdiction.

Issues before the ICI

- 1) Whether Antipapadia is violating international law by intercepting and publicly distributing the signals of Golden Eye, and, if so,
 - a) whether Antipapadia is liable to Openskey for the loss of revenue suffered by Opensky due to the switching-off of the satellite while within the coverage areas of the Papadian and Antipapadian ground stations; and,
 - b) whether Antipapadia should stop making this information public and should destroy or return to Openskey all data received.
- 2) Whether Openskey violated international law by switching-off Golden Eye while it was within the coverage of the Antipapadian ground station;
- 3) Whether Openskey violated international law by delivering to Antipapadia a ground station with hardware and software technically inferior to that purchased by and used in the Papadian ground station.
- 4) Whether Openskey violated international law by the intentional downgrading and unintentional transformation of Golden Eye data transmitted to Antipapadia, and, if so,
 - a) whether Openskey is liable for the costs incurred by Antipapadia in the unsuccessful exploratory research; and,
 - b) whether Openskey should compensate Antipapadia for the loss of expected oil revenues suffered by Antipapadia.

Instructions to the students:

You should prepare one memorial for the Applicant (Openskey) and one memorial for the respondent (Antipapadia). You should assume that all of the states referred to in this case are parties to all of the relevant international treaties and conventions and have adopted the United Nations General Assembly Resolution concerning "Principles Relating to Remote Sensing of the Earth from Outer Space" (G.A. Res. 47/68). None of the

States referred to in this case are parties to the UNCLOS III Treaty.

Annex Openskey Law on Space Activities (Excerpts)

Preamble:

Having Regard the Increasing Commercial Uses of Outer Space and the Obligations for the States Party to the United Nations Space Treaties and Resolutions;

Taking Into Account the Articles of the Outer Space Treaty and especially Articles VI. VII and VIII:

Recalling the United Nations General Assembly Principles Relating to Remote Sensing of the Earth from Outer Space;

Believing that this Law will help strengthen the Leadership of Openskey;

Article 1

This Law applies to activities in outer space (space activities). In addition to activities carried out entirely in outer space, also included in space activities are the launching of objects into outer space and all measures to manoeuvre or in any other way affect objects launched into outer space.

Article 2

Space activities may not be carried out from Openskey's territory by any party other than the Openskey state, without a license. Nor may an Openskey natural or juridical person carry on space activities anywhere else without a license.

Article 3

A license to carry on space activities is granted by the Openskey government.

A license may be restricted in the way deemed appropriate with regard to the circumstances. It may also be subject to required conditions with regard to control of the activity or for other reasons. Inspection of the space activities of license holders is exercised by the authority decided by the Government.

^{*} Copyright © IISL 1997.

3. WINNING BRIEFS

A. MEMORIAL FOR OPENSKEY

AGENTS

Ranjani Srinivasan, Jean-François Renaud & Amine Laachani

ARGUMENT

The legal instruments governing the use outer space for peaceful purposes are drawn from various fields of law. Because the possibilities of outer space have yet to be fully explored and the implications of outer space research have vet to be understood, it is necessary to consider international law from a variety of angles to determine how to the apply existing law. In the case of Openskey versus Antipapadia, a case concerning very high resolution commercial remote sensing systems, we encounter issues that have yet to be dealt with from a legal perspective. One this is sure, however. Remote sensing data serve a very important purpose, increasing the extent of our management of the natural environment surrounding us. The state of Openskey is committed to directing remote sensing data towards the good they can serve the human community, and to increasing the number of users of this data.

Request for provisional measures to be taken by the Court

Before this Court makes any decisions regarding the merits of the case concerning very high resolution commercial remote sensing, the state of Openskey respectfully requests the honorable International Court of Justice to award preliminary measures of security. Because Golden Eye data intercepted by the new mobile ground station of Antipapadia are currently being publicly distributed, and these data pose a potential threat to international peace and security, the public distribution of these data must be immediately halted before the situation of regional and international security is further exacerbated. The threat to international peace and security is evident and urgent; both countries have already sent warships to the disputed zone. Continuing the public distribution of stolen data will only heighten the tensions and could disturb international or regional public order.

In an effort to protect international peace and stability during this procedure before the respected International Court of Justice, the state of Openskey respectfully requests the adoption of this provisional measure of security.

<u>Question 1:</u> Did Antipapadia violate international law by intercepting and publicly distributing the signals of Golden Eye?

The state of Antipapadia clearly violated international law by the interception and public distribution of Golden Eye signals according to several areas of binding international law. These include property law (I), legal instruments concerning communications (II) and sovereignty principles (III). Furthermore, Antipapadia posed a serious threat to international peace and security (IV).

I. Antipapadia's actions were in breach of Openskey's property rights

Article VIII of the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space Including the Moon and Other Celestial Bodies of 1967 (hereinafter referred to as OST) establishes a state's jurisdiction and control over a satellite launched into space: "(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," The facts make clear that Openskey has adopted the OST, and even highlights Article VIII of the OST in its national law on space activities.² Because Golden Eye belongs to an Openskey judicial person³, Openskey is the State party to the OST on whose registry appears Golden Eye. Therefore Openskey retains jurisdiction and control over Golden Eve. Since jurisdiction is an expression used to designate the double capacity of the state of determining the rules of law applicable and applying them,⁴ not only does Openskey determine the applicable law, but exercises jurisdiction and control over the satellite.

Maintaining jurisdiction and control over the satellite is a form of ownership over the same. Because it exercises jurisdiction and control over the satellite, any product of the satellite belongs to the State Party to the OST. For example, if a satellite or component is found, it is returned to the State Party on whose registry appears this satellite.⁵

Concerning Golden Eye, data are gathered by optical sensors and SAR capability, both of which are physically in the satellite. The data are then transmitted from the satellite to the ground station. Openskey has jurisdiction over the satellite, its instruments, and in addition has jurisdiction and control over the products of the satellite, which are data. In virtue of Article VIII of the OST, Openskey owns the data gathered and processed by the satellite. In intercepting data not intended for it, the state of Antipapadia is in complete violation of Openskey's property rights and its jurisdiction over Golden Eye data. The state of Antipapadia acted in complete violation of Article VIII of the OST, and therefore of international law.

II. Antipapadia's violation of international law is further characterized as a violation of communication law

The state of Antipapadia practiced a violation of communication law, a general term here employed to include copyright law (A) and information law (B).

A. In violation of copyright law

Two main conceptions of international copyright law can be distinguished. The first is an Anglo-Saxon notion of copyright, codified by the Universal Copyright Convention (UCC), signed in 1952 and amended in 1971. The second is a "continental" concept of "droit d'auteur", which finds its roots in the Bern Convention for the Protection of Literary and Artistic Works, signed in 1886

and amended several times thereafter (hereafter referred to as the Bern Convention). Over the past few decades and through the process of internationalization of both concepts, they have essentially merged. As Openskey exercises jurisdiction and control over Golden Eye, it determines the law applicable to the same. However, it is considered that the Bern Convention provides a higher standard of copyright protection that the UCC.⁶ The UCC provides that if a nation is a member of both conventions, the terms of the Bern Convention will govern, and if a nation is a member of a Bern Convention, it cannot withdraw and be only a member of the UCC, loosing both memberships at the same time. It is then judicious to consider the terms of the Bern Convention, which Openskey has determined to be the applicable law, to the case in point. Furthermore, the case indicates that all relevant treaties have been adopted. The Bern Convention one such highly relevant treaty.

According to copyright law, Golden Eye data are protected both intrinsically and as databases. The state of Antipapadia violated both aspects of copyright law.

1. Golden Eye primary data are protected

Primary satellite data are protected under copyright law as original works in virtue of the Bern Convention, which provides for the protection of authors' rights for their artistic and literary works, defined in Article 2.8

Primary satellite data respond to the conditions for copyright protection imposed by the Bern Convention. These conditions require the existence of a human author and the originality of the work. First, the collection of remote sensing data implies a direct human intervention through the programming of the satellite from the Earth and the selection of images.

The second condition, the originality of the work, supposes that work wears the mark of its author. Modern satellites such as Golden Eye inherently have numerous defined parameters such as the viewing angles or the spectral bands, all of which permit technicians and others to mark the data with human originality while determining what data to be collected. "Beyond any doubt, remote sensing raw data is unique and original...." The conditions of originality and authorship of Golden Eye data are therefore fulfilled, meaning that the data are protected.

The Bern Convention requires in addition that the work must be fixed in a material support. In practice, the transmission of raw data from the satellite to the ground station is accepted as a viable support, therefore protected.¹⁰

The author, s/he who exercises jurisdiction and control over the satellite, in this case Openskey, is entitled to certain protections of its work. Most importantly, the unauthorized reproduction and public communication are duly prohibited. Golden Eye data are therefore protected under the Bern Convention, and Openskey is the legitimate author of data benefitting from copyright protection. The state of Antipapadia violated Openskey's rights as an author, which are the copyright protections extended to Golden Eye data. In intercepting copyrighted data not belonging to it and proceeding with an unauthor-

ized public communication of these data, the state of Antipapadia violated the provisions of the Bern Convention and therefore of international copyright law. The state of Openskey is the legitimate author of the data. Only Openskey may authorize the reception and public distribution of data. The state of Antipapadia completely transgressed these copyright protections afforded to Golden Eye data in virtue of the Bern Convention.

2. Golden Eye data are protected as databases

Not only are Golden Eye data protected intrinsically, but also can benefit from copyright protection as constituents of databases according to Article 5 of the WIPO Copyright Treaty of 1996.¹³ Golden Eye data benefit from Article 5's definition from two perspectives.¹⁴

First, satellite data represent a potential image in a file format. This file is represented in the form of a 1, 0 grouping. The combination of digital binary data in the file constitutes a database by itself. Furthermore, to be protected, the database must demonstrate originality, meaning that it is organized, or that its elements are humanly selected. In the case of Golden Eye data, this condition is fulfilled. The order of digital binary data is chosen with due regard for the future image to be created from the data. The organization of the file is not random, rather, the voluntary action of its author.

Second, the satellite transmits a multitude of satellite photos, and therefore a multitude of satellite images expressed as files. The grouping of these files is constitutive of a database, stocked in the satellite and therefore organized with due regard for the site chosen to be observed. The condition of originality is duly fulfilled.

Golden Eye data are therefore protected as databases.

Because Golden Eye data are protected works, both intrinsically or as databases, the interception and distribution of data with the express authorization of the author, which is Openskey, are internationally illegal acts. The state of Antipapadia violated all copyright protections rendered to Golden Eye data and to Openskey as its author, thereby transgressing international law.

B. In violation of "information law"

The denomination of "information law" encompasses the liberty of information and regulations imposed by the International Telecommunications Union.

Golden Eye data are not information in the sense of human rights principles. Human rights address the freedom of expression and the liberty of information. In this case, information is a social liberty comprising political, economic, philosophical and cultural messages. Golden Eye data are not messages in this sense. Rather, they are signals which are not exploitable and non comprehensible until further treated. Because the intercepted Golden Eye are not information, they are not protected by the liberty of information.

Furthermore, the transmission of data from a satellite to a ground station is technically a telecommunications application, governed by telecommunications law. The interception of data violated the rule governing privacy of telecommunications. Principle III of the RS Principles indicates that "(R)emote sensing activities shall be conducted in accordance with (...) the relevant instruments of the ITU." The Golden Eye data intercepted by Antipapadia were intended for the Papadian ground station and not for Antipapadia's mobile ground station. The transmission of these data constitutes a private communication between Golden Eye and the Papadian ground station, in which Antipapadia interfered. Private communications is defined by the International Telecommunications Convention. Antipapadia consciously eavesdropped on and intercepted this private communications Convention. This action underlines Antipapadia's bad faith and could be characterized as piracy of a private communication.

The interception and public distribution of Golden Eye data cannot benefit from a human rights label of liberty of information. As it intercepted a telecommunications application, the state of Antipapadia stands is violation of the International Telecommunications Convention governing private communications.

III. In intercepting and distributing Golden Eye data, Antipapadia transgressed rules related to sovereignty

As initially defined by Max Huber¹⁶, the principle of sovereignty is at the base of all international relations. The UN Charter recognizes this principle which governs all relations within the organization.¹⁷ Rendering this principle *erga omnes* in international public law, sovereign equality is a general principle of international law, meaning that it is an explicit and direct source of positive law¹⁸, applicable independently of any conventional confirmation.

In intercepting and publicly distributing Golden Eye signals, the state of Antipapadia violated two corollary principles to sovereignty: territorial integrity (A) and non intervention in the affairs of another state (B).

A. In violation of territorial integrity

The principle of territorial integrity is enunciated in the UN Charter¹⁹, and repeated in several binding international instruments.²⁰ Territorial integrity prohibits a state's penetration of another state's territory without the authorization of the second state.

Though it was established in the statement of facts that none of the states mentioned have adopted UNCLOS III, the treaty itself is a codification of conventional practices. Practice demonstrates that territory includes, among others, territorial waters. Furthermore, faced with the issue maritime delimitation, the ICJ has always opted to follow the model codified in the 1982 UNCLOS III. Being a non signatory of UNCLOS III does not erase borders, clearly customary as well as conventional, of territorial seas.

The state of Antipapadia entered the acknowledged territorial waters of its neighboring state Papadia and remained in these waters to operate its mobile ground station with a goal to intercept a private communication. The Antipapadian mobile ground station entered Papadia's territorial waters without authorization and without flying its flag

to indicate its presence. This violation of territorial integrity con moreover be interpreted as an act of piracy according to customary law.

Moreover, the facts of the case illustrate that satellite signals, while "switched off" to the Antipapadian ground station, were available on the total coverage area of both Papadia and Antipapadia, but downgraded. The state of Antipapadia was in no way forced to invade the territorial waters of its neighbor, as the same downgraded signals could have been received from Antipapadian territory, in particular with its new mobile ground station. Any defence claiming that Antipapadia was forced to invade Papadia is false, as the signals were available over the total coverage zone and could be captured from any point in this zone through Antipapadia's new mobile ground station. This means that Antipapadia is unable to claim that force majeure conditions forced it to commit this internationally illegal act.

B. In violation of non intervention

The UN Charter illustrates clearly that a state is prohibited from intervening, directly or indirectly, in the internal affairs of another state.²⁴ Internal affairs are domains tied to a state's exercise of sovereignty, including public policy, choice of government and military affairs.

The state of Antipapadia intercepted and diffused information regarding the military affairs of another state. Military affairs, in particular military data, are customarily considered to be part of a state's reserved domain, intimately tied to a state's internal affairs. Clearly practicing intervention through the distribution of Golden Eye data, the state of Antipapadia violated an essential corollary to sovereignty and a fundamental base of international law.

Extraneous as it may seem to discuss the preceding points in the case of Openskey versus Antipapadia, there exists nonetheless a rule of international positive law which was violated. This violation illustrates the level of illegality and bad faith to which the state of Antipapadia was willing to proceed in order to procure data not intended for nor belonging to it.

IV. Antipapadia posed a threat to international peace and security

A situation of tension between the neighboring states of Papadia and Antipapadia was evaluated by the UN Security Council and reported by the international press. The Secretary General of the UN, following a request from Papadia, used his diplomatic functions according to Article 99 of UN Charter to avert the situation of crisis to the UN Security Council.²⁵

The UN Security Council acts on matters relating to Chapter VII of the UN Charter: "Action With Respect to Threats to the Peace, Breaches of the Peace, and Acts of Aggression." Article 24 of the UN Charter confers the responsibility for the safeguard of international peace and security to the Security Council. The Papadia - Antipapadia Resolution is clearly taken under the auspices of safeguarding international peace and security. Chapter VII is not an auspice lightly used; only grave situations threatening peace and security are considered. The fact the

Secretary General and the Security Council acted on the situation involving the states of Papadia and Antipapadia demonstrates that a clear threat to international peace and security did exist.

A. In transgression of the Security Council Resolution

The Papadia - Antipapadia Security Council Resolution requested both states to "refrain from any further controversial actions in the disputed area and enter directly into negotiations concerning the disputed sea area." The state of Antipapadia did not refrain from two very controversial actions, one of which was carried out in the disputed territorial sea. The interception of data from Papadia's territorial waters is clearly a controversial action addressed by the resolution, as it involved an invasion into Papadian territory. Antipapadia clearly undertook a "controversial action(s) in the disputed area." The second, the public distribution of data, is clearly susceptible to heighten the tensions between the two states.

Because the Resolution was taken in a situation addressed by Article 24 of the UN Charter, it can be established that the legal force of the resolution is drawn from Article 25 of the UN Charter. Based on Article 25 of the UN Charter, the Security Council is empowered to pass binding resolutions when acting within its domain of competence, which is the safeguard of international peace and security. The state of Antipapadia, in intercepting and distributing Golden Eye data, violated a binding resolution, which is a direct source of international law.

B. In transgression of maintaining peace

The conditions of Antipapadia's interception and diffusion of militarily sensitive information regarding a state with which it has tense relations constitute a provocation, susceptible to foster a military escalation which could result in an armed international conflict. A clear threat to peace, prohibited by Article 2 of the UN Charter²⁹, can be ascertained.

The preamble of the UN Charter confirms moreover that all nations should "practice tolerance and live tougher in peace with one another as good neighbors...." While the preamble of an international treaty normally has a political rather than legal value, the ICJ confirmed in the 1962 South West African Case that a preamble can have a legal value in the interpretation of a text. In this case, the UN Charter is a text which proposes peace rather than conflict, good neighborliness rather than strife. The state of Antipapadia breached this essential condition for peace through its interception and distribution of Golden Eye signals.

The state of Antipapadia carried out its actions of interception and distribution of Golden Eye data in flagrant disrespect of international peace and security and in bad faith. It in addition violated the sovereignty of another state; such an invasion of cannot and should not be tolerated. International peace and security were clearly threatened by the state of Antipapadia.

In conclusion, the clear violations of international law committed by the state of Antipapadia have previously been characterized on various levels, including property law, communication law, rules relative to sovereignty and, most serious, in flagrant disrespect of the stability that the international community collectively endeavors to safeguard. An important issue remains to be addressed, however. The state of Openskey suffered harm as a result of these irresponsible and illegal acts undertaken by the state of Antipapadia.

Question 1a: Is Antipapadia liable to Openskey for the loss of revenue suffered by Openskey due to the switching off of the satellite signal while within the coverage areas of the Papadia and Antipapadian ground stations?

The harm caused to the state of Openskey by the actions undertaken by the state of Antipapadia can be characterized as financial harm. The state of Antipapadia knowingly engaged in internationally illicit acts in the interception and distribution of remote sensing data not intended for it.

Openskey was entirely justified in switching-off Golden Eye while within the coverage zones of both the Papadian and Antipapadian ground stations (I). It is further entitled to claim lost revenues (II). Finally, due to its internationally illicit acts, Antipapadia is responsible for all financial harm suffered (III).

I. The switch-off of Golden Eye while within the coverage areas of the Papadian and Antipapadian ground stations is justified

To the state of Openskey, the threat to international peace and security was clear. The first "switch-off" of satellite signals, a "switch-off" intended solely for the Antipapadian ground station and a recourse to which Openskey was fully justified ³¹, proved insufficient to ensure that Golden Eye data would not be used in a manner detrimental to the international community. The state of Antipapadia engaged nonetheless in dangerous and risky activities, activities which could have led to military escalation, activities which threatened international peace and security. In requesting the switch-off Golden Eye's signals to both ground stations, the state of Openskey ensured that the satellite data could not be used by either state to harm the other.

Furthermore, Openskey is entitled to request a switch-off of Golden Eye. Having jurisdiction and control over the satellite in virtue of Article VIII of the OST, Openskey can determine not only applicable law but what actions to undertake. Openskey National Law on Space Activities permits it to control the activity of the satellite; the switch-off is one such action. Finally, other commercial remote sensing operators do not accept any liability for the interruption of service. COSAT, NASDA, SPOT Image, ESA and Radarsat are prime examples. An analogy to the switch off of Golden Eye to both

An analogy to the switch off of Golden Eye to both ground stations can be drawn to the actions of SPOT Image during the Persian Gulf Crisis of 1991. SPOT Image normally practices a non discriminatory "openskies" policy, which has also been adopted by other remote sensing systems. However, from August 8, 1990,

the situation changed completely as a result of the Persian Gulf Crisis. SPOT Image decided to no longer sell data to any country of the Persian Gulf area and to renounce the policy of "open skies" such that a risk of furnishing data that might compromise the situation would be avoided. In essence, service was suspended to the entire region of the Middle East. 35

Just as SPOT Image reacted on a crisis by suspending service, Openskey felt that a complete switch-off of Golden Eye was the best way to ensure the safety of the region and protect the peaceful status quo.

II. Openskey is entitled to claim all lost revenues

It is evident that the majority of lost revenue belongs to Superview Inc. Openskey receives 10% of that revenue. Two corollary principles enable the state of Openskey to claim the entirety of lost revenues, Article VI of the OST and diplomatic protection.

Article VI of the OST provides that "(s)tate parties to the Treaty shall bear international responsibility for national activities in outer space (...) whether such activities are carried on by governmental agencies or non-governmental entities (...) The activities of non-governmental entities in outer space (...) shall require authorization and supervision by the appropriate State Party to the Treaty." The state of Openskey bears international responsibility for the activities of Golden Eye. As the bearer of international responsibility, the state of Openskey must be prepared to represent Superview Inc. in international fora such as this one, where only state parties may present their disputes.³⁶ The case of Openskey versus Antipapadia implies the actions undertaken by both the state of Openskey and a judicial person of Openskey. Because a judicial person of Openskey can be represented only by the state of Openskey before the ICJ, the state of Openskey, bearing international responsibility for its space activities, is entitled to represent Superview Inc.'s interests, which are ultimately those of Openskey, before the

Furthermore, the state of Openskey is exercising its diplomatic protection over Superview Inc. The criteria for establishing diplomatic protection are flexible, as determined by the ICJ in 1970.³⁷ The Court insisted that a clear connection must be drawn between the corporate entity and the state exercising diplomatic protection over it. In the domain of space activities, actors are varied and their activities are carried out predominantly in territory not subject to appropriation. Therefore, diplomatic protection can be more difficult to establish. Superview Inc. is licensed by the state of Openskey to carry out space activities, and is a confirmed judicial person of this state according to Openskey national law.³⁹ While it is true that Superview Inc. is not incorporated in Openskey, it does have its headquarters in Openskey. Superview Inc.'s shareholders are all over the world, as is the case with many multinational companies. This said, the satellite Golden Eye was exported to the state of Openskey through the intermediary of Superview Inc. All space activities of Golden Eye, carried out by Superview Inc., must be approved by the state of Openskey. ⁴⁰ Article VIII of the OST sheds further light on the connection between the private entity and the State, as it established Openskey's jurisdiction and control over Golden Eye. These lost revenues incurred due to the switch off of the satellite affect both an Openskey judicial person, Superview Inc., and the state of Openskey. Based on these strong connections, in particular the fact that Openskey exercises control and jurisdiction over the satellite itself indicates that the state of Openskey is entitled to exercise diplomatic protection over Superview Inc., and claim all revenues lost by both the state and its judicial person.

III. Antipapadia is responsible for all financial harm suffered

Both the ICJ and the PCIJ have had experience with this type of question. A state's international responsibility is implied if an internationally illegal action has been committed and is attributable to a state. A harm must then have been suffered. Finally, there must be a link between the illicit act and the harm suffered.

The loss of revenue for which Antipapadia is responsible is the revenue gained by Superview Inc. from the sale of sensed data to both Papadia and Antipapadia. Antipapadia is responsible for the total switch-off of Golden Eye while over coverage zone of both states, in light of its gross violations of international law in the interception and distribution of Golden Eye signals not intended for it. The illegal actions of the state of Antipapadia engendered this switch-off, which was undertaken in the interest of international peace and security, but created a loss of important revenues.

The international illicit acts committed by Antipapadia were the interception and public distribution of Golden Eye data not intended for it. This act included invasion of another state's territorial waters. Illegality, of course, proposes two qualifying factors which would exonerate the state from its responsibility: *force majeure* and legitimate counter measure. As neither qualification is applicable to Antipapadia's action, it can therefore be established that an international illegal act was committed by Antipapadia.

The interception and distribution of data is directly attributed to the Government of Antipapadia. It purchased the mobile ground station and undertook to intercept signals from Papadia's territorial waters. The Government of Antipapadia also distributed the data to the international press for publication. 42

As a result of the international illegal acts committed by the state of Antipapadia, Openskey was obliged to switch off the Golden Eye while over the coverage area of both states, such that Antipapadia would not reproduce such an action. The clear link between the illegal act and the harm suffered can be determined.

From the moment Superview Inc. complied with the order to switch off Golden Eye, Superview Inc. and the state of Openskey, lost revenue. It is undeniable that the link between Antipapadia's illicit act and the loss of revenue exists. Financial harm was and continues to be suffered by Superview Inc. and Openskey as long as Golden Eye remains switched off, meaning until the time

the two states resolve their territorial dispute.

The state of Antipapadia is responsible for the all loss of revenue suffered by Openskey. The obligation of reparation of violations is automatic in character and confirmed in international law by the PCIJ in its decision of September 13, 1928 regarding the Chorzow Factory. "Reparation must, as far as possible, wipe out all consequences of the illegal act and re-establish the situation which would in all probability have existed if that act had not been committed." The principle of *restituo in integrum* must be applied to this situation, and the state of Antipapadia is responsible for all loss of revenue suffered by Openskey as a result of the switch-off.

<u>Question 1b:</u> Should Antipapadia stop making this information public and destroy or return to Openskey all data received?

The data should no longer be exploited

Continuing with the idea of restituo in integrum, the situation will not be entirely restored by the sole reimbursement of lost revenue due to the switch-off of the satellite signals. Antipapadia's illicit acts imply further harm caused and therefore reparations to be made. What is important in this case is that the data are no longer exploited, and can therefore cause no more harm. The best guarantee of this is to destroy these data. As this can be an expensive undertaking, Openskey proposes two options. In the first, Openskey offers its services to help Antipapadia destroy these data. If this is not acceptable, Openskey will accept the return of the data and the good faith of Antipapadia that no copies have been made. Openskey will then undertake to destroy the data with its own means.

<u>Question 2:</u> Did Openskey violate international law by "switching-off" Golden Eye while it was within the coverage of the Antipapadian ground station?

The state of Openskey acted within its legal rights and responsibilities in requesting Superview Inc. to "switch-off" satellite signals intended for the state of Antipapadia. The action is entirely justified by the scope of the Openskey National Law on Space Activities and international law. It was taken in the interests of national and international security.

While a satellite such as Golden Eye can be "switched-off" to one country and continue to deliver signals to another even when the two countries are in as close proximity as Antipapadia and Papadia, this is not the case in the present situation. The Golden Eye coverage area or satellite footprint covers both countries, which is why satellite signals were available over the entire coverage area, even after the "switch-off". The "switch-off" of satellite signals intended for the Antiapapadian ground station was actually a severe downgrading of data rather than a complete "black out" as the term may suggest. The data were downgraded enough such that Antipapadia, with its technically infer ground station, could no longer receive them. However, the more advanced the ground station, the higher the likelihood of reception. Therefore,

the term "switch-off" is here employed to mean a severe downgrading such that Antipapadia did not receive signals with its ground station. Once Antipapadia did buy a state of the art mobile ground station, it should have able to receive these severely downgraded data from any point in the coverage area, and did from Papadia's territory. Whether in Papadian or Antipapadian territory, the signals were equally downgraded.

Openskey did not violate international law in the "switch-off" of satellite signals intended for the Antipapadian ground station. First, agreements passed authorized the present this severe downgrading resulting in what seemed to be a "switch-off". (I). Second, Openskey declines all liability regarding the quality and continuity of data (II). Finally, the principles of access to data must be balanced by security imperatives (III). Openskey did, however, practice equal treatment to both countries by downgrading the entirety of data available on the whole coverage area to the same extent.

I. Openskey had the right to "switch-off" the satellite signals

Openskey was entitled to downgrade data in virtue of agreements passed. Downgrading in virtue of national security is a common practice. Further, the application of such clauses were necessitated by the situation.

Concerning the practice of downgrading, it is common one among commercial remote sensing systems, and downgrading is not a practice contrary to international law. Rather it protects all of the actors involved in commercial remote sensing, in particular the observed state. For example, the Draft Agreement Between the United States National Oceanic and Atmospheric Administration and the European Organization for the Exploitation of Meteorological Satellites on An Initial Joint Polar-Orbiting Operational Satellite Systems, updated on September 26, 1995 includes a provision permitting the downgrading of data in the interest of international security. In addition, in the GPS system, downgrading is a common and accepted practice.

The provision regarding the downgrading of data on the request of Openskey, in full conformity with common and accepted industry practices, is a part of the agreement between Superview Inc. and Antipapadia. Furthermore, this action was undertaken after discussions with Starstripe. Starstripe also had the right to request a downgrading of data in furtherance of its national security interests. This provision was included the the licence to Goldstar to export Golden Eye to Openskey. It in addition was included in the licence between Openskey and Superview Inc., and was in turn integrated into the agreement between Antipapadia and Superview Inc. Therefore, Antipapadia was fully aware of the possibility of downgrading and who could request it.

Furthermore, Article VIII of the OST gives the state of Openskey jurisdiction and control over the satellite. Openskey determines the law and actions applicable to the satellite. Downgrading was an action undertaken by Openskey falling within its entire jurisdiction.

Concerning the application of these clauses, implications related to national security cannot be avoided in a transac-

tion involving the sale of remote sensing data of between 1 and 5 meter resolution. Compared to existing remote sensing systems, this VHR data is very precise and could reveal much more than is intended. All countries have the right to define and protect their national security according to the current geopolitical situation. National security imperatives are defined by a state and do not necessitate justification, confirmed by the spirit of the UN Charter, Article 2, paragraph 7. The elaboration of a state's national security imperatives falls within the competence of that state and only that state.

Furthermore, Openskey acted in the interest of international security. An international situation of crisis was established by the UN Security Council Resolution, and the international community obviously had an interest in the peaceful resolution of the conflict. As a recognized state of international crisis, the state of Openskey had an interest in "switching-off" the satellite signals intended for the Antipapadian ground station in response to the situation and for the benefit of peace.

The state of Openskey, after discussions with Starstripe, decided to downgrade data severely enough such that the technically inferior ground station would not receive data, while the advanced station would continue to do so. The data were equally downgraded for both Antipapadia and Papadia. In doing this, Openskey was able to play an active role in maintaining international peace and security while also providing non discriminatory service to both countries. Therefore, Openskey practiced equal treatment of its clients.

If Starstripe requested the downgrading, which it had the right to do, Openskey acted in good faith towards its obligations to Starstripe. Because Openskey respected international law, acted in good faith and within its clear rights regarding all of its agreements, it is not in any violation of international law.

II. Openskey declines all liability regarding continuity and quality of the data

Most commercial and experimental remote sensing systems accept no responsibility for a temporary interruption of services, nor for the quality of data upon reaching the ground station. EOSAT, ESA, SPOT and NASDA contracts do not provide warranties of continuity of the satellite service or quality of data. The practice of these four prominent operators, originating in various parts of the world, emphasizes a regular practice in development in the field of remote sensing. The practice underlines an evolving custom in the field. It emanates from the practices of states or actors most interested. Remote sensing is a rapidly evolving field, and legal practices develop quickly as temporal aspect is sped up. The four remote sensing systems cited above use the same provisions regarding the exclusion of their liability concerning the quality and continuity of data.

Based on the developing contractual practice in the field of remote sensing, the state of Openskey is not responsible for ensuring the continuity of service to the Antipapadian ground station.

III. Access to data must be balanced by secu-

rity imperatives

The 1986 RS Principles enunciate in Principle XII the concept of access to data. "As soon as the primary data and the processed data concerning the territory under its jurisdiction are produced, the sensed State shall have access to them on a non-discriminatory basis and on reasonable cost terms." The state of Openskey fully believes in the goals of the RS Principles.

The RS Principles are a code of standard behavior in the remote sensing industry. The General Assembly resolution 47/68, after years of work within the UN Subcommittee on the Peaceful Uses of Outer Space, was taken in the spirit of promoting a global remote sensing community between observers and the observed. From a legal perspective, the resolution was taken in virtue of article 10 of the UN Charter, which authorizes the General Assembly to pass simple recommendations without any binding legal value. The fact that the resolution was adopted by consensus does not render to them the required opino juris necessary to create customary law. Moreover, the Resolution was subject to unilateral declarations of states particularly interested⁵⁰. These declarations certainly subtract from any possible opinio juris. While many of the Principles annexed to the resolution are repeated in binding international legal instruments such as the OST, making them obligatory in virtue of their conventional confirmation, Principle XII regarding access to data has not yet been subject to conventional or other confirmation, which would bring it into the scope of applicable law. In addition, no customary practice has confirmed the principle of access to data in a commercial situation such as the one in the case of Openskey v. Antipapadia. Therefore, Openskey is not bound by Principle XII of the RS Principles, providing for immediate access to data regarding territory under Antipapadia's jurisdiction. The Principle in question does not have a conventional or customary confirmation which would transform it to an source of binding international law. While it is true that in the domain of meteorology, a strong emphasis is placed on the immediate access to data in virtue of the involvement of the WMO. However, the present case deals with a purely commercial situation excluding the involvement of the WMO.

Furthermore, until the situation of peace and security was aggravated, the state of Openskey through Superview Inc. practiced complete access to data. While the RS Principles undertake to protect the rights of the sensed state by providing immediate access to data, the spirit of the resolution is to promote peace, management of natural resources, the protection of the Earth's natural environment and the protection of mankind from natural disasters. This recalls in addition the spirit guiding the 1967 OST.

Based on the foregoing, the state of Openskey did not violate international law in requesting the "switch-off" of satellite signals intended for the Antipapadian ground station. Rather, Openskey acted in conformity with its own national legislation, developing contractual practices, and attempted to safeguard international peace and security. Most importantly, Openskey acted in good faith, offering non discriminatory treatment to both cli-

ents and respecting its international obligations. Rather than violating international law, Openskey opted to take an active role in safeguarding international peace and security.

<u>Question 3:</u> Did Openskey violate international law by delivering to Antipapadia a ground station with hardware and software technically inferior to that purchased by and used in the Papadian ground station?

In the facts of the case it is very clear that Antipapadia, "...was only able to *purchase* much less advanced hardware and software for processing the VHR data." This is as a result of Antipapadia's limited economic resources and therefore limited access to space technology. Papadia "purchased from Openskey the latest technology and software for processing the data." (Emphasis added) Both countries clearly purchased the equipment they received. Furthermore, Antipapadia was fully aware that the ground station purchased by it was technically inferior to that of Papadia. 51

Incidentally, when Antipapadia purchased a ground station from the state of Openskey, it did not have the financial resources to afford a technologically advanced ground station. However, when it seemed to Antipapadia that a new state of the art mobile ground station was necessary, it procured the resources, which could be construed as an action undertaken in bad faith.

Openskey clearly did not violate international law in delivering to Antipapadia a technologically inferior ground station. It respected the inherent laws of commercial freedoms (I) and acted in conformity with the law governing the international sale of goods (II). Finally, any claimed right to development does not create any legal obligations for the state of Openskey (III).

I. Openskey respected the inherent laws of commercial freedom

"Thus the basic law of the open market may prevail: those who cannot pay cannot buy." Though it is true that developing countries are at a disadvantage regarding international commerce, the basic rules of commercial freedoms cannot be ignored.

Considering the thesis of commercial freedom, all states have the right to engage in international commerce on a non-discriminatory basis. This means that all states engage in international commerce based on the same rules, without favoritism or bias. For example, the recent WTO Agreement contains a provision addressing the most favored nation status. All states must accord a most favored nation status to any state with which it engages commerce if the same status is given to another state for the same product, meaning that non-discriminatory treatment must be practiced universally. The state of Openskey delivered to Antipapadia a ground station within its economic means and corresponding to its needs. The goods were according to the needs it was meant to serve, were delivered as agreed and followed the law of commercial freedom.

Openskey offered both Papadia and Antipapadia equal treatment. Both obtained that which they could afford,

without favoritism or bias shown to either. Moreover, the ground station seemed to function properly. Sinkbetter Inc., based on data gathered through the Antipapadian ground station, was able to begin an oil search in the same general area as that of Drillwell. Inc.⁵⁴

It is further important to understand that data directly from Golden Eye is raw data. They must be processed to produce usable information. As Sinkbetter Inc. based their search on raw data gathered through the Antipapadian ground station, it had to further process the data to locate oil resources. The data could have been further processed through Sinkbetter Inc.'s materials to render maps indicating where oil resources may be located. Therefore, Sinkbetter Inc.'s data processing materials play a role in the outcome of the final information used to locate oil resources.

The state of Openskey was and continues to be very interested in including a growing number of countries, regardless of their economic development, into the remote sensing community, of its own volition and in virtue of Article 1 of the OST. It is for this reason that Openskey initially contracted with Antipapadia through its intermediary of Superview Inc. However, the state of Openskey follows both the rules governing international contracts and those covering commercial freedom. The fact that Papadia was able to purchase more advanced materials does not engender a breach of law on Openskey's part. The fact that it had the financial means, regardless of its source, does not oblige Openskey to make financial or pricing concessions for Antipapadia because it is unable to purchase the same materials as its neighbor.

II. Openskey acted in conformity with law governing the international sale of goods

Almost all nations of the world have signed the UN Convention on Contracts for the International Sale of Goods of April 11, 1980. Because the parties to this case have adopted all relevant international treaties except UNCLOS III, it can be assumed that both are party to this treaty. Chapter II of the Treaty details the obligations of the seller, with which the state of Openskey acted in complete conformity, including fitness for a particular purpose. Article 35 indicates that the seller "must deliver the goods which are of the quantity, quality and description required by the contract..." Antipapadia was aware that, due to its limited financial resources, it was purchasing a ground station of lower technological standards than that purchased by Papadia. The quality of the ground station was expressly made known to the state of Antipapadia when purchasing it.55 The goods, the hardware and software to process the data, were conform to that which was agreed.

Furthermore, regarding fitness for a particular purpose, the ground station delivered to Antipapadia is capable of receiving the majority of Golden Eye data. The goods were then conform to the contract because they were fit for the purpose of collection and processing of remote sensing data, in accordance with Article 35, paragraph 2 (b) of the UN Convention on Contracts for the International Sale of Goods. Antipapadia, fully aware of its economic situation, should have recognized that the

ground station it purchased with limited economic means would not have extended capabilities.

III. The right to development does not create obligations for Openskey

Principles II, V, VI, VII and VII of the RS principles mention the idea of cooperation and consideration of the limitations, both economic and technical, of developing countries. These principles, important to the development of a global remote sensing community, are goals rather than binding legal principles. The RS Principles, by themselves, dictate no more than a code of good practice. The state of Openskey is dedicated to realizing the goals enunciated in the RS Principles. However, these ends do not justify the creation of obligations on the part of Openskey regarding the ground station.

The New International Economic Order tried to integrate the right to development into positive international law. However, the principle of the right to development has been resigned to simple UN General Assembly recommendations, which posses no binding legal value in virtue of Article 10 of the UN Charter.⁵⁷

Most importantly, the right to development, to which all states are entitled, exists in itself, and Openskey concluded agreements with Antipapadia and Papadia to foster their development in the remote sensing industry. However, this right does not create any legal ramifications such as obligations to provide discriminatory service or favorable pricing structures. The right to development does not oblige Openskey to sell materials at an advantageous price. Both Papadia and Antipapadia purchased ground stations which they could afford, neither benefitting from special treatment from the state of Openskey. Openskey once again acted in good faith by providing non discriminatory access to space technology.

Therefore, any claim of a right to development which creates obligations towards Openskey is not founded. Moreover, Antipapadia was well able to afford a state of the art mobile ground station during the course of events. Any plea that Openskey did not respect supposed obligations derived from the right to development would only underline Antipapadia's bad faith, as it did purchase an advanced ground station soon after.

In conclusion, Openskey supports all efforts of all countries to enter the remote sensing community and reap the benefits thereof. However, the state of Openskey practices non discriminatory treatment, whether in the sale of goods or data. It respected the inherent laws of commercial freedom and obeyed the law governing the international sale of goods. Finally, it is clear that the right to development does not create any obligations towards Openskey. A technically inferior ground station is the result of Antipapadia's lack of economic means, and in no way a sign of Openskey's violation of international law.

<u>Question 4:</u> Did Openskey violate international law by the intentional downgrading and unintentional transformation of Golden Eye data transmitted to Antipapadia? The state of Openskey in no way violated international law in the downgrading and unintentional transformation of Golden Eye data transmitted to Antipapadia. Openskey had the right to request the downgrading of data, as clauses relative to national security are applicable (I). Furthermore, current remote sensing practices demonstrate that a satellite operator is not responsible for the quality of data (II). Openskey's good faith, reflected in its actions throughout, is clear in its claim that the data were unintentionally transformed (III).

I. Clauses relative to national security are applicable

According to the facts of the case, "(A)greements were concluded between Superview and the governments of Papadia and Antipapadia. (...) Both agreements refer to the conditions of the license of Superview Inc. as an integral part of the agreement. (...) (I)n the license of Goldstar to export Golden Eye to Openskey, a provision was included which gave Starstripe the right to demand a downgrading of the data in furtherance of the national security interests of Starstripe. This provision was also included in the license from Openskey to Superview, Inc."58 (Emphasis added) Both agreements, between Superview Inc. and Papadia and that between Superview Inc. and Antipapadia integrated Superview Inc.'s conditions of license. These conditions of license include a provision permitting Starstripe to request the downgrading of data in furtherance of its national security. Antipapadia's acceptation of such a provision is reflected in its approval of the agreements to receive remote sensing data directly from Golden Eye. Both Papadia and Antipapadia were aware and agreed that Starstripe could request a downgrading of data in furtherance of its own national security interests.

Furthermore, Openskey also had the right to demand a downgrading of data in furtherance of its national security concerns.⁵⁹ This provision was included in the license between Openskey and Superview Inc., and therefore integrated in the agreement between Superview Inc. and Antipapadia.

Whether the downgrading was requested by Openskey or by Starstripe, both had the right to request it. Furthermore, Antipapadia was aware that both states could request the downgrading of data.

The Government of Openskey, on its own or on the prompting of Starstripe, obviously felt that data intended for the Antipapadian ground station should be downgraded. One reason is the security issues which may have arisen. All states have the right to determine their security imperatives, and the state of Openskey determined that remote sensing data intended for the Antipapadian ground station should be downgraded. National security interests do not need to be justified by disclosing them. Rather, national security imperatives are the competence of a state's reserved domain. Suffice it to say that Openskey and Starstripe felt their national security threatened by the situation brewing in the region. The issues in contention are whether Openskey first had the right to request the downgrading of data, and if the request was justified. The answer to both is yes. The agreement passed between Superview Inc. and Antipapadia permits the states of Openskey and Starstripe to downgrade data in furtherance of their national security interests. Antipapadia, in signing the agreement, agreed to and was aware of this provision.

II. Remote sensing data are not guaranteed to be accurate

Downgrading is a common practice in the remote sensing industry, just as well in the case of a specific country as to all ground stations served by the remote sensing system. Major remote sensing operators internationally engage in the practice, as was detailed above in question 2.60 Moreover, the practice has been confirmed by legal practioners in the field.61

Due to its evolutionary state, remote sensing data are generally not guaranteed to be accurate. Moreover, EOSAT, SPOT Image, NASDA, ESA and Radarsat do not provide warranties of data accuracy or of suitability of imagery or data for any use. Further, they do not guarantee the quality of the data. ⁶² Because the contract between Superview Inc. and Antipapadia is one of commercial exploitation of remote sensing data, an analogous situation can be discerned in the current practice of SPOT Image, a private French commercial remote sensing system. SPOT Image sells remote sensing data obtained by SPOT satellites and processed through their ground stations. In the delivery of remote sensing data to a ground station, certain risks are present. SPOT Image denies any obligation of result. SPOT Image adopts a policy of "best efforts," meaning that it engages to make the best effort to ensure the intended product. However, it assumes no responsibility for the end product or accuracy of data arriving in the hands of a client.

In the case of Openskey versus Antipapadia, Superview Inc. sells remote sensing data to Antipapadia who processes the data through a ground station purchased from Openskey for the technical assistance is carried out by Superview Inc. Adopting this current practice, the state of Openskey made its "best efforts" to deliver accurate data to Antipapadia. The transformation of data, unintentional as it was, is a natural risk of the industry, and a risk for which Openskey declines all responsibility. Therefore, the state of Openskey in no way violated international law in the unintentional transformation of data, rather it followed the general practice of commercial remote sensing organizations.

III. Remote sensing activities were carried out in good faith

Good faith is a general principle of international public law. According to Article 26 of the 1969 Vienna Convention, "(E)very treaty in force is binding upon the parties to it and must be performed by them in good faith." In including this article in the Vienna Convention, the Commission for International Law underlined that this article emphasizes the fundamental principle of the law of treaties. In addition to the Vienna Convention, the UN Charter further establishes the principle of good faith⁶⁴, and Article 7 of the UN Convention on Contracts for the International Sale of Goods of April 11 1980 addresses

good faith.⁶⁵ The execution in good faith and the respect of *pacta sunt servanda* are linked and constitute two complementary aspects of the same principle.

In commercial relations, good faith means that engagements are undertaken and carried out without ruse, fraud, infringement on law and loyalty to the engagements taken. Regarding the transformation of some remote sensing data, the state of Openskey was unaware that the downgrading of data would cause such a transformation. Had it been aware, this state would have remedied the situation immediately. The downgrading of data, as with all actions carried out by Openskey, was undertaken in good faith.

Because the state of Openskey did carry out its remote sensing activities in good faith, it cannot be held responsible for the unintentional transformation of data. Remote sensing, in particular with a satellite with Golden Eye's capabilities, is a very new field, and it is often difficult to predict the nature of problems which may occur in the collection and transmission of data.

Because the remote sensing activities, including the downgrading of data, were carried out in good faith and with no intention to deliver misrepresented data, the state of Openskey is not responsible for the unintentional transformation of some data.

Based on the foregoing arguments, the state of Openskey did not violate international law in the intentional downgrading unintentional transformation of Golden Eye data transmitted to Antipapadia. Openskey had the full right to downgrade data and was justified in doing so. Openskey further follows accepted commercial practices in the industry in not guaranteeing the quality, continuity or fitness of the data for any particular purpose. Finally, the downgrading, just as all of Openskey's actions, was undertaken in good faith.

Question 4a: Is Openskey liable for costs incurred by Antipapadia in the unsuccessful oil research?

No claim implicating Openskey's responsibility is valid

When determining an issue of liability, it is necessary to juxtapose the conditions for reparations of damage with the facts. The PCIJ, in its decision of September 13, 1928 regarding the Chorzow Factory Case, and the ICJ, in its decision of February 5, 1970 regarding Barcelona Traction, confirmed the three conditions necessary for the reparation of damages. First an international illegal act must be ascertained. Second, the illegal act must be attributable to a state. Third, a clear link between the illicit acts and harm suffered must be discerned.

In this situation, the unification of these three conditions cannot be established. The state of Openskey was fully within its rights to request the downgrading of the data intended for the Antipapadian ground station. As for the unintentional transformation of some data, remote sensing data is not guaranteed accuracy according to current commercial remote sensing practices; it is not responsible for an unintentional transformation of data.. In addition, Openskey acted in good faith. It is clear that no

internationally illegal act was committed. The most important condition for the reparation of damages is not fulfilled. Without the unification of the three conditions, revenues lost in virtue of Openskey's actions cannot be claimed.

Moreover, returning to the analogy previously drawn between SPOT Image and Superview Inc., SPOT contracts, as well as those of EOSAT, NASDA, ESA and Radarsat, explicitly deny the data's fitness for any particular purpose or type of research. Furthermore, SPOT contracts absolve it of any liability as a result of losses or damages based the utilization of data. Finally, the receiver of the data waives its right to any recourse against the data provider in the case of losses or damages.66 Similarly, Superview Inc. does not guaranty the data's fitness for any purpose, in this case, the identification of Antipapadian oil resources. It therefore cannot be held liable for any losses or damages based on the exploitation of remote sensing data. Moreover, the state of Antipapadia is not justified in claiming any losses or damages, as it waived its right to do so in signing an agreement with Superview Inc.

Moreover, it is important to keep in mind that remote sensing raw data are not exploitable until processed. In order to locate oil resources, Sinkbetter Inc. may have processed some of the data with their cartographic materials. Some processing may have been carried out by it in order to cater the Golden Eye data to their specific goal. Sinkbetter Inc.'s materials may have played a role in the transformation of data, and should be looked into further. The state of Openskey is not liable for any costs incurred by the state of Antipapadia in the unsuccessful exploratory research. Furthermore, the state of Antipapadia is not entitled to claim these damages suffered due to Golden Eye data.

Question 4b: Should Openskey compensate Antipapadia for the loss of expected oil revenues suffered by Antipapadia?

Hypothetical revenues are not the responsibility of Openskey

Antipapadia's future oil revenues are purely hypothetical revenues. The only oil field found thus far is located entirely in the disputed territorial sea between Papadia and Antipapadia. This oil field may not belong to the state of Antipapadia; this question can be answered only after negotiations are undertaken by both states to resolve their territorial disputes.

Given that the state of Openskey is absolved of any responsibility regarding the downgrading and unintentional transformation of some data, it does not accept any responsibility for any hypothetical future revenues which may or may not be attributed to the state of Antipapadia. Furthermore, Superview Inc. cannot be held responsible for these hypothetical future losses suffered due to remote sensing data, according to current commercial remote sensing practice. Finally, before considering future revenues and damages that may be claimed thereof, the state of Antipapadia must resolve its territorial dispute with Papadia, as was requested in the UN Security Council

Resolution.

The state of Openskey is in no way responsible or liable for any loss or hypothetical loss, either from unsuccessful exploratory drilling nor from expected oil revenues.

SUBMISSIONS TO THE COURT

For the foregoing reasons, the Government of Openskey, Applicant, respectfully requests the Court to adjudge and declare that:

- 1. The state of Antipapadia violated international law in intercepting and publicly distributing Golden Eye data:
- a. the state of Openskey exercises jurisdiction and control over Golden Eve:
- b. copyright provisions are applicable to Golden Eye data:
- c. the state of Antipapadia transgressed principles of sovereignty;
- d. the state of Antipapadia posed a threat to international peace and security.

In consequence, Antipapadia is responsible to Openskey for all lost revenues due to the switch-off of Golden Eye while over the coverage area of the Papadian and Antipapadian ground station:

- a. the switch-off of Golden Eye is justified;
- b. the state of Openskey is entitled to claim lost revenues;
- c. the state of Antipapadia is responsible for all financial harm suffered.

The intercepted Golden Eye data should no longer be exploitable.

- 2. The state of Openskey did not violate international law by "switching-off" Golden Eye signals intended for the Antipapadian ground station:
- a. the state of Openskey had the right to "switch-off" Golden Eye signals intended for the Antipapadian ground station:
- b. the state of Openskey declines all liability for the continuity and quality of data;
- c. access to data must be balanced by international peace and security imperatives.
- 3. The state of Openskey did not violate international law by the delivering a ground station with hardware and software technically inferior to that purchased by and used in the Papadian ground station:
- a. the state of Openskey respected the inherent laws of commercial freedom;
- b. the state of Openskey acted in conformity with the law governing the international sale of goods;
- c. the right to development does not create obligations for the state of Openskey.
- 4. The state of Openskey did not violate international law by the intentional downgrading and unintentional transformation of Golden Eye data transmitted to Antipapadia:
- a. clauses relative to national security are applicable;
- b. remote sensing data are not guaranteed to be accurate;
- c. remote sensing activities were carried out in good faith.

Therefore, no claims implicating the state of Openskey's

responsibility are valid, and any hypothetical future oil revenues are not the responsibility of the state of Openskey.

- 1 ICJ Statute art. 41, para. 1: "1. The Court shall have the power to indicate, if it considers that circumstances so require, any provisional measures which ought to be taken to preserve the respective rights of their party."
- 2 Manfred Lachs Moot Court Space Law Contest 1997 Case; Preamble, Openskey National Law on Space Activities
- 3 "Superview Inc. is licensed by Openskey to carry out commercial VHR activities in conformity with international law including space law." It is clear that, regardless of the location of Superview Inc.'s headquarters and its shareholders, Superview Inc. is a judicial person and licensee of the state of Openskey. See also page 35, Question 1a for further discussion of Superview Inc.'s connection to Openskey
- 4 Couston, M., <u>Droit Spatial Economique</u> (1994) at 11.
- 5 Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space Including the Moon and Other Celestial Bodies, January 27, 1967, U.K.T.S. 10 (1968) Cmnd. 3519 (hereafter referred to as OST), art. 8 "... Such objects or component parts found beyond the limits of the State Party to the Treaty on whose registry they are carried shall be returned to that State Party,"
- 6 Salin, P., <u>Selected Legal Aspects of Commercial</u> Remote Sensing (1991) at 86
- 7 UCC art. XII, para. 2
- 8 Bern Convention, art. 2, "Literary and artistic works shall include every production in the literary, scientific and artistic domain, whatever may be the mode or form of this expression such as (...) photographic works to which ar assimilated works expressed by a process analogous to photography (...), maps and three dimensional works relative to geography"
- 9 Salin, P., <u>Selected Legal Aspects of Commercial</u> Remote Sensing (1991) at 92.
- 10 Salin, P., <u>Selected Legal Aspects of Commercial Remote Sensing</u> (1991) at 92.
- 11 Bern Convention art 9, , "gives the author the exclusive right to authorize the reproduction of these works in any manner or form."
- Bern Convention art 11bis, para. 1.iii, , "Authors of literary and artistic works shall enjoy the exclusive right of authorizing (...) the public communication by (...) images (...) of the work."
- 13 WIPO Copyright Treaty art. 5 "(the protection of) compilations of data (databases)or other materials in any form by reason of the selection or arrangement of their contents constitute intellectual creations."
- 14 For further information, see Gaudrat, P., Commercialisation des données publiques-Rapport pour l'Observatoire Juridique des technologies de l'Information, (1994).
- 15 International Telecommunications Convention, 1982 Nairobi, art. 37.

- 16 Island of Palmas (Netherlands v. United States), 1928 Permanent Court of Arbitration (April 4) "The sovereignty in relations between states signifies independence." (award of sole arbitrator Max Huber)
- 17 UN Charter art 2, para. 2, " The organization is based on the sovereign equality of all its Members."
- 18 UN Charter (Statute of the ICJ) art 38, "The Court, whose function is to decide in accordance with international law such disputes as are submitted to it shall apply: a. international conventions ...; b. international custom ...; c. the general principles of law ...; d. (...) judicial decisions and the teachings of the most qualified publicists...."
- 19 UN Charter art. 2, para. 4, "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."
- 20 Military and Paramilitary Activities in and against Nicaragua (Nicaragua v. U.S.), 1986 ICJ (June 27).
- 21 UN Convention on the Law of the Sea, Montego Bay, December 10, 1982, 21 I.L.M. 1261 (1982). Military and Paramilitary Activities in and against Nicaragua (Nicaragua v. U.S.), 1986 ICJ (June 27). The Court affirmed that territorial waters are a part of a State's territory.
- 22 See Continental Shelf (Tunisia v. Libya), 1982 (February 24); Continental Shelf (Libya v. Malta), 1985 (June 3).
- 23 Manfred Lachs Moot Court Space Law Competition 1997, Questions to the Court, question # 8
- 24 UN Charter art.2 para. 7, "Nothing contained in the present Charter shall authorize the United Nations to intervene in matters which are essentially within the domestic jurisdiction of any state or shall require the Members to submit such matters to settlement under the present charter;"
- 25 UN Charter art.99 "The Secretary General may bring to the attention of the Security Council any matter which in his opinion may threaten the maintenance of international peace and security."
- 26 UN Charter, art. 24 para. 1, "In order to ensure prompt and effective action by the United Nations, its Members confer on the Security Council primary responsibility for the maintenance of international peace and security, and agree that in carrying out its duty under this responsibility, the Security Council acts on their behalf."
- 27 Manfred Lachs Moot Court Space Law Competition 1997 Case, page 3
- 28 UN Charter art.Art. 25: "The Members of the United Nations agree to accept and carry out the decisions of the Security Council in accordance with the present Charter."
- 29 UN Charter art. 2 para 4, "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."
- 30 South West African Case (Ethiopia and Liberia v. South Africa), 1962 I.C.J. (December 21).
- 31 For further discussion see below page 40, Question

- 2
- 32 Openskey National Law on Space Activities, art. 3 "A License (...) (m)ay be subject to required conditions with regard to control of the activity or for other reasons."
- 33 Salin, P., <u>Legal Aspects of Commercial Remote Sensing</u> (1991) at 55.
- 34 Salin, P., <u>Legal Aspects of Commercial Remote</u> Sensing (1991) at 55.
- 35 Martin, P.M., <u>Droit des Activités Spatiales</u> (1992) at 186-187.
- 36 UN Charter (ICJ Statute) art. 34 para.1 "Only states may be parties in cases before the Court."
- 37 Barcelona Traction Power and Light Company (Belgium v. Spain), 1970 ICJ (February 5) "However, in the particular field of diplomatic protection of corporate entities, no absolute test of the "genuine connection" (between the corporate entity and the State) has found general acceptance." paragraph 70 of the decision.
- 38 OST art. 2 "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."
- 39 Manfred Lachs Moot Court Space Law Competition 1997 Case, Openskey National Law on Space Activities art. 2, "Nor may any Openskey natural or judicial person carry on space activities anywhere else (than Openskey's territory) without a license."
- 40 For example, the sale of sensed data to Papadia and Antipapadia was approved by the Openskey Foreign Ministry.
- 41 Cape Horn Pigeon Arbitration (U.S.v. Russia), 1902 (November 29); Chorzow Factory (Germany v. Poland), 1928 P.C.I.J. (ser. A) No. 17 (September 13); Barcelona Traction Light and Power Company (Belgium v. Spain) 1970, I.C.J. (February 5).
- 42 Manfred Lachs Moot Court Space Law Competition 1997, Case, page 3.
- 43 Chorzow Factory (Germany v. Poland), 1928 P.C.I.J. (ser. A) No. 17 (September 13).
- 44 Manfred Lachs Moot Court Space Law Competition 1997, questions to the Court, question 4
- 45 Annex 1 to EUMETSAT / NOAA Cooperation Agreement
- 46 Manfred Lachs Moot Court Space Law Competition 1997, questions to the Court, question 17
- 47 For further discussion of the right to downgrade, see below page 48-50, Question 4
- 48 EOSAT- Earth Observation Satellite System (U.S.), ESA- European Space Agency (Europe), SPOT Image (France), NASDA National (Japan).
- 49 North Sea Continental Shelf (Federal Republic of Germany v. Denmark; Federal Republic of Germany v. the Netherlands) 1969 I.C.J., (February 20). The Court insisted that a custom develops from the practice of states most interested.
- 50 For example, the United Soviet Socialist Republic and the United States of America.
- 51 Manfred Lachs Space Law Moot Court Competition,

- 1997, Questions to the Court, question 9
- 52 Krepon, Michael et al., <u>Commercial Observation</u> <u>Satellites and International Security</u> (1990) at 37.
- General Agreement on Trade and Tariffs, art. II (most favored nation status) April 21, 1994.
- 54 Manfred Lachs Moot Court Space Law Competition, 1997 Case page 2.
- 55 Manfred Lachs Moot Court Space Law Competition, 1997, Ouestions to the Court, question 11.
- 56 UN Convention on Contracts for the International Sale of Goods, art. 35, para. 2(b), "Except where the parties have agreed otherwise, the goods do not conform with the contract unless they: (...) (b) are fit for any particular purpose expressly or impliedly made known to the seller"
- 57 For example, the Charter of Economic Rights and Duties of States 1974, the Declaration on the Establishment of a New International Economic Order 1974, the Declaration on the Right to Development 1986.
- 58 Manfred Lachs Moot Court Space Law Competition, 1997 Case page 2.
- 59 Manfred Lachs Moot Court Space Law Competition, 1997 Questions to the Court, question 15.
- 60 For further discussion, see above p. 39, Question 2.
- 61 Interview with Professor Ram Jakhu, Director, MSS Program, International Space University, Strasbourg, February 7, 1997; interview with Professor Nicolai Tolyarenko, Senior Faculty, MSS Program, International Space University, Strasbourg, February 7, 1997; interview with M.Y.S. Prasad, Counsellor (Space), Indian Space Research Organization, Embassy of India, Paris, January 28, 1997.
- 62 Salin, P., <u>Legal Aspects of Commercial Remote Sensing</u> (1991) at 58 and 83.
- 63 Couston, <u>Droit Spatial Economique</u> at 233-235 (1994)
- 64 UN Charter art. 2, para. 2, "All Members, in order to ensure to all of them the rights and benefits resulting from membership, shall fulfill in good faith the obligations as assumed by them in accordance with the present Charter."
- 65 UN Convention on the International Sale of Goods, April 11, 1980, art. 7 "In the interpretation of this Convention, regard is to be had to its international character and to the need to promote uniformity in its application and the observance of general good faith in international trade."
- 66 Couston, <u>Droit Spatial Economique</u> (1994) at 233-235.

B. MEMORIAL FOR ANTIPAPADIA

AGENTS

Christina Benson & Scott Syfert

ARGUMENT

I. Antipapadia did not violate international law either by intercepting or publicly distributing the signals of Golden Eye.

In the case before the Court, Antipapadia is accused of two separate wrongful acts. First, Openskey asks this Court to find that Antipapadia violated international law by intercepting the satellite transmissions of Golden Eye. Secondly, Openskey asks this Court to hold that "publicly distributing the signals of Golden Eye" violated international law. We will discuss each claim in wturn.

A. Antipapadia's Violation of Papadia's Territorial Sovereignty Was Justified.

1. Openskey lacks standing to assert the breach of Papadia's territorial sovereignty.

As a threshold issue, Openskey has no standing to independently assert the violation of Papadia's sovereignty. Generally, states are liable for breaches of an international obligation that directly injure another state.³ But further, as this Court discussed in Barcelona Traction⁴ and the East Timor Case,⁵ there is a subclass of obligations towards the international commu nity as a whole. These erga omnes obligations include acts of aggression, genocide, slavery, and certain other basic human rights, and confer standing upon any nation asserting they have been violated. Territorial jurisdiction has never been held by this Court to be such an obligation, nor is such standing conferred by any of the treaties Antipapadia has signed. Ergo, Openskey has no standing to raise the issue of breach of Papadia's territorial sovereignty.

2. Antipapadia's incursion into Papadia's territory is excusable as a proportional action taken in self-defense.

Antipapadia concedes that she did enter the territorial waters of Papadia in order to obtain the satellite photographs that provide proof of Papadia's military buildup. However, these actions were justified under international law. Antipapadia's actions were a proportional response for the purpose of self-defense. The right of self-defense is one of the oldest principles of customary international law. The right existed prior to the U.N. Charter,6 but was reaffirmed under Article 51, which states that "nothing in the present Charter shall impair the inherent right of individual or collective self-defense."7 publicists agree that the Charter did not eliminate the right of anticipatory self-defense, in spite of the reference to "armed attack" in Article 51.8 Ian Brownlie, for example, points out that Article 51 does not "impair" the existing customary right of self-defense.9 Indeed, maintaining peace and security in an age of weapons of mass

destruction requires nations to anticipate threats and to act accordingly. 10

Any action taken in self-defense must meet the following requirements: (1) it may be used only in vindication of a denied right against States that have breached international law; ¹¹ (2) there must be a serious and imminent danger to the essential rights of the state taking action in self-defense; ¹² and (3) the action taken must be proportional to the danger at hand. ¹³ These requirements, elucidated in the *Caroline Case*, ¹⁴ are generally referred to as the principles of *necessity* and *proportionality*. ¹⁵ Thus, the concept of self-defense rests on the notion of protection, rather than punishment or revenge. ¹⁶

3. Antipapadia's actions were both necessary & proportional.

Antipapadia's actions were justified under international law. First, Antipapadia reasonably believed her actions were necessary to protect herself from aggression. Recall that Papadia and Antipapadia had fought a "lengthy civil war" against one another. 17 Tempers were again high, and warships had been called into the disputed area. 18 Indeed, the scale of the crisis was such that the U.N. Security Council felt compelled to intervene. It was at this moment of heightened international tension that the satellite signal from Golden Eye, which allowed Antipapadia to monitor Papadia's troop movements, were cut off, leaving Antipapadia blind. 19 It was reasonable of Antipapadia to believe such an action was the prelude to aggressive action against her; and indeed, pictures subsequently acquired show there was such a buildup.²⁰ In such circumstances, Antipapadia believed regaining access to the satellite signals from Golden Eye was necessary to protect herself from armed attack.

Her interception of the satellite signal was also proportional. First, Antipapadia's incursion into Papadian territorial waters only occurred after the collective breaches of the Outer Space Treaty by Papadia, Openskey and Starstripe. Second, at no time did Antipapadia resort to the threat or use of force. No one was harmed by her actions; no property was damaged; no shots were fired. Throughout the period at issue, no violent or aggressive action of any kind was taken to obtain the data. Antipapadia merely intercepted the data in an effort to verify the level of threat posed by Papadia, and to preempt an armed conflict by bringing the crisis to the attention of the international community for a peaceful resolution. Seen thus, her actions were both necessary and proportional, and as such, justified under international law.

4. Territorial incursions to gain verification and obtain evidence are permitted under international law as promoting peaceful conflict resolution.

Customary international law results from a general and consistent practice of states followed by them from a sense of legal obligation.²¹ State practice supports the view that surveillance actions taken in anticipatory self-defense are legal and even commendable. The international community condoned the use of communications satellites and military overflights to monitor Iraq's mili-

tary readiness, both before the onset of the Gulf War and after the war ended.²² Such forms of reconnaissance reduced the danger of armed aggression, and thus legitimized the U.S. claim of anticipatory self-defense.²³ The United States used similar reconnaissance techniques to identify the construction of Soviet ballistic missile sites in Cuba in 1962, and used this information to justify a naval quarantine of the island as an action in self-defense.²⁴

State practice also reflects a high degree of tolerance for actions taken in self-defense when the purpose is to verify or gain evidence of a breach of international law by the party against whom such action is taken. In the Corfu Channel case, the British Royal Navy entered Albanian territorial waters to obtain evidence that Albania was responsible for the explosion of mines that had caused damage to its ships several weeks earlier.²⁵ Although this Court acknowledged that Albania's territorial sovereignty had been violated, it admitted the evidence of mines and used it to hold Albania liable for the damage to British ships.²⁶ Similarly, in the case of *United* States v. Iran, the U.S. violated Iranian borders in a failed attempt to rescue the hostages being held in the U.S. Embassy in Teheran. This Court declined to find the rescue attempt impermissible, and awarded reparations to the United States without any deductions to compensate Iran for the incursion into its territory.²⁷

B. Antipapadia Did Not Violate International Law by Intercepting the Signals of Golden Eye.

1. Collection of remote sensing data is permitted under the principle of free and equal access to outer space.

The principle of free and equal use of outer space is established under the 1967 Outer Space Treaty and in customary international law. ²⁸ Principle IV of the Principles of Remote Sensing ("PRS") incorporates and further clarifies this principle with regard to remote sensing activities. ²⁹ State acceptance of this principle is evidenced by more than 800 agreements reached within the U.S. Landsat program for the collection and distribution of remote sensing data among various countries. ³⁰ The French Spot-Image program had signed more than 40 protocol programs with various countries as of 1980, which embraced the principle of equal access. ³¹ Foreign reconnaissance satellites have been widely used by numerous international scientific agencies for more than 20 years, and not one has ever been destroyed by any State. ³²

2. Espionage and foreign intelligence gathering is legal in international law.

Antipapadia's incursion into Papadian territory could also be characterized as "espionage" or "foreign intelligence gathering." As such, it would be protected as a "general practice accepted as law" under Article 38(1)(b).³³ International law permits sending spies across borders to conduct surveillance activities,³⁴ and leaves it to the domestic law of each nation to punish spies who are caught.³⁵ Every nation in the world engages in espionage and has organizations devoted to that end. Every codification of the laws of war, including the

1874 Declaration of Brussels,³⁶ the 1899 Hague Rules,³⁷ the 1907 Hague Rules,³⁸ and the Geneva Conventions of 1949³⁹ and 1977,⁴⁰ has recognized the legitimacy of espionage.

Under Article 38(1)(d) of the ICJ Statute, this Court is permitted to look to the works of "the teachings of the most highly qualified publicists" as a subsidiary means of determining the rule of law. The legality of espionage was documented as early as the seventeenth century, when Grotius wrote, "[S]pies, whose sending is beyond doubt permitted by the law of nations—such as the spies Moses sent out . . . if caught are usually treated most severely. Another more recent publicist noted, "the law of nations permits the sending of spies . . . intelligence activities are now accepted as a common, even inherent, attribute of the modern state."

Furthermore, under Article 38(1)(d) of its Statute, this Court may consider the judicial decisions of various nations as a means of determining the rule of law.⁴⁴ In the cases of *U.S. v. Brown*⁴⁵ and *U.S. v. Abbie Hoffman*, ⁴⁶ U.S. federal courts held that foreign intelligence activities are in accord with international law. In the *Hoffman* case, the court recognized a "thirty year history of authorizations by Presidents recognizing the necessity for such surveillance where national defense is involved."⁴⁷

In the absence of a duty not to engage in some conduct, it is presumed that sovereign states have the right to act in accordance with their perceived self-interest.⁴⁸ The Lotus case provides that restrictions on the actions of states are not to be lightly presumed, and acts not expressly forbidden, are presumed legal.⁴⁹ Thus, although clandestine intelligence gathering may be considered an unfriendly act, it does not violate international law.⁵⁰

C. Antipapadia Did Not Violate International Law by Publicly Distributing the Data.

Antipapadia did not violate her obligations under the Outer Space Treaty or the PRS by publicly distributing the data. Distribution of remote sensing data is allowed under the principle of equal and nondiscriminatory access. Antipapadia did not interfere with the ability of other States participating in the remote sensing program to receive and process data from Golden Eye. The data relating to Papadian territory was released publicly and thereby made available to all states, including the sensed state. Thus, Antipapadia in no way violated Papadia's rights as a sensed State under the PRS.

1. The "Open Skies" principle permits free data distribution.

There is no duty in international law to return remote sensing data, as Openskey requests. Customary international law, as codified in the PRS, allows no restrictions on data distribution. The 1986 PRS were arrived at through a lengthy process of negotiation and consensus building to erect a legal framework for remote sensing. The main issue of contention concerned the legality of free data distribution. Eventually, the "open skies" principle was agreed upon. The PRS ended the "prior consent" regime of remote sensing, by deliberately

omitting any reference to the right of a sensed state to either veto remote sensing activities by sensing states, "or to restrict the dissemination of such data to third parties." 52

The "open skies" principle can also be found in the general and consistent practice of states, which requires unrestricted data distribution. For example, the U.S. Land Remote Sensing Policy Act of 1992 requires equal access for all customers with no restrictions to third parties.⁵³ The GLOBE Program, a series of bilateral treaties between the U.S. and Costa Rica,⁵⁴ Moldova,⁵⁵ Kazakhstan,⁵⁶ Korea,⁵⁷ Sweden,⁵⁸ and Ecuador,⁵⁹ respectively, allows data to be distributed, "worldwide without restriction as to [its] use or redistribution." A similar treaty between the U.S. and India explicitly provides for "unrestricted public availability of all Landsat data," in conformance with general Landsat dissemination practices. 60 Similar agreements exists with China, 61 Brazil, 62 and Zaire. 63 Therefore, it was entirely legal for Antipapadia to distribute the data under customary international law. In effect, Openskey asks this Court to ignore the PRS and reinstate the "prior consent" regime that existed prior to 1986, in defiance of both international law and the COPUOS negotiations.

2. Openskey has no intellectual property rights in the remote sensing data.

Openskey has no right to have the data returned for a second reason. As a corollary of the "open skies" principles, no intellectual property rights attach to remote sensing data. In 1984, for example, NASA refused to allow the Messerschmitt-Beelkow-Blohm/ENRO consortium to fly its remote sensing pallet, because they intended to retain proprietary rights in the data in violation of the "open skies" policy.⁶⁴ Similarly, a standard feature of NASA contracts is the absence of copyright clauses,⁶⁵ illustrating that state practice does not recognize proprietary rights in remote sensing data.

Similarly, none of the relevant treaties or conventions governing copyright or intellectual property protects remote sensing data. Both the Brussels Convention of 1974⁶⁶ and the Rome Convention of 1960⁶⁷ apply to literary or artistic works, and imply a public reception and distribution of sounds or images fixed on some medium. Remote sensing data, either processed or unprocessed, does not fit within this definition. In 1986 the Austrian Supreme Court ruled as a matter of law in Sky Channel, that the fact that data transmissions are encrypted proves they are not intended for public reception, ⁶⁸ and therefore neither Convention would apply to remote sensing data. By their own terms, therefore, neither Convention is applicable.

For similar reasons the Berne Convention⁶⁹ does not apply. The unenhanced data from Golden Eye is raw material containing no originality or uniqueness of expression, and does not fall within the purview of Berne's Article 2.⁷⁰ For this reason, one publicists notes, "remote sensing imagery cannot be protected on the basis of the provisions of [the Berne] Convention." Nor is raw data copyrightable, making the Universal Copyright Convention equally inapplicable. Only the Draft Di-

rective of the European Commission on the Legal Protection of Databases⁷³ is arguably relevant in this case, but it is neither in force nor binding. (Moreover, any protection in the data under any of these treaties would accrue not to Openskey, but to Antipapadia as the party that enhanced and processed the data. Antipapadia does not need to rely on this protection, however, as the data was not illegally taken.)⁷⁴ States recognize that data obtained through espionage or surveillance is not protectable as intellectual property. For this reason they invest millions of dollars in encryption technology to protect the integrity of their systems and their data. They know that information lost, fairly or unfairly, is simply not recoverable as intellectual property.

D. Antipapadia Owes No Damages to Openskey for Lost Revenues.

Antipapadia's actions in intercepting and obtaining the data were in accordance with international law and thus Antipapadia cannot incur any responsibility for damages.

1. Openskey's damages are remote and indirect.

Even if Antipapadia's acts had been wrongful, damages could not be awarded because her acts were not the proximate cause of Openskey's losses. Indirect damages are not recoverable under international legal principles. For example, in the Alabama Arbitration, American claims regarding the cost of pursuing a Confederate ship built in Britain were non-recoverable for two reasons. First, they were indistinguishable from general war expenses. Second, prospective earnings were speculative. Similar results were reached in The Newshwang case, as well as the Naulilaa Claims, twee non-recoverable.

In the Naulilaa Arbitration, the tribunal rejected any causal link between German actions and a native uprising in a Portuguese colonial territory as too remote.82 Similarly, in this case there is no showing that Antipapadia's acts of intercepting and distributing the data resulted in switching off the satellite transmissions to Antipapadia and Papadia. Indeed, the evidence contradicts this conclusion. Openskey had already switched off the signals to Antipapadia before the signals from Golden Eye were intercepted and distributed. If Openskey had fulfilled her treaty obligation by continuing to transmit data to both countries equally, Antipapadia would never have had to resort to intercepting the data. Furthermore, it was Starstripe who insisted that the data transmissions be switched off. Any damages arising from this action would be a contractual issue between Openskey and Starstripe and not attributable to Antipapadia. When ruling on the issue of remoteness of damages, international courts must consider such parallel or subsequent causes (or novus actus interveniens) as negating responsibility for damages.83 Such is the case here.

2. Openskey suffered no compensable harm.

In order for liability to obtain a state must suffer some sort of direct injury to the state interest. Generally, this involves property damage, injury to nationals, or, as in the Cosmos 954, harm to a state interest (e.g., violation of airspace) coupled with a straightforward threat to the population's health and safety.⁸⁴ The list of potential injury is by no means exclusive, but in this case it is difficult to see what compensable injury Openskey has suffered at all. Openskey's territory was not violated; Openskey set the terms of the contract; Openskey made the decision to shut off Golden Eye. Further, the data Antipapadia released to the press concerned Papadia, not Openskey. In sum, the only harm Openskey has suffered has been the loss of information which she was contractually obligated to deliver to Antipapadia in any event. Neither embarrassment or aggravation alone is compensable under international liability principles.

II. Openskey violated international law by switching off Golden Eye in the coverage area of the Antipapadian ground station.

A. Openskey Breached Her Duty to Ensure that Outer Space is Used Exclusively for Peaceful Purposes by Using Golden Eye to Aid Aggression.

1. Outer Space must be used solely for peaceful purposes.

The peaceful use of space has been the cornerstone of international space law since its inception, and is a fundamental tenet of customary law. Indeed, the U.N. committee to oversee space issues is aptly named the Committee on *Peaceful* Uses of Outer Space ("COPUOS"). The term "peaceful" can be found in virtually every U.N. document devoted to outer space. The Outer Space Treaty recognizes "the common interest of all mankind in the progress of the exploration and use of outer space for *peaceful purposes*."87

Nor is this language merely hortatory. Article 31 of the Vienna Convention on the Law of Treaties ("Vienna Convention") provides that ambiguous treaty language should be interpreted in the context of, and consistently with, other treaty provisions, including the preamble, annexes and other documents referenced in the treaty.88 Thus, this Court may consider these items in determining what uses of space are consistent with this "peaceful purposes" requirement. Article IV of the Outer Space Treaty requires the demilitarization of space and the use of space to maintain "international peace and security."89 Article III incorporates the Charter of the United Nations, which prohibits the "threat or use of force" under Article 2(4).90 The Charter also requires States to settle international disputes "by peaceful means," without endangering "international peace and security."91

Prominent scholars of international space law have interpreted Articles III and IV of the Outer Space Treaty as not only prohibiting the militarization of space, but also as prohibiting any use of space for aggressive purposes. Professor Dembling, former General Counsel of NASA states, "[a]ny military use of outer space must be restricted to non-aggressive purposes in view of Article III, which makes applicable . . . the [U.N.] Char-

ter."⁹³ One publicist notes that the "peaceful purposes" language of Article IV, "brings in the notions of both *intent* and of *consequences*; the activity must not be designed to terminate in some use of force contrary to international law."⁹⁴ The use of remote sensing systems to aid aggression runs contrary to these principles.

2. Openskey allowed Golden Eye to be used for aggressive purposes.

Of course, not all military uses of outer space are prohibited. Remote sensing satellites have been extensively used for military reconnaissance, communications, and command-and-control purposes. Nevertheless, it is equally clear that any use of such satellites for the purpose of inciting, facilitating or encouraging armed conflict, or to intervene in the affairs or interests of another state, is expressly prohibited. In other words, the use of remote sensing systems to usurp natural resources from another nation, to launch a secret attack, or to bully a weaker nation would all violate these proscriptions. That is what has occurred here.

Openskey manipulated Golden Eye for the wrongful purpose of providing a military and strategic advantage to Papadia. Whether Papadia's ultimate purpose was to seize the disputed oil fields or to attack Antipapadia is irrelevant. In either event, Openskey connived with Papadia to use outer space aggressively to the detriment of a developing nation.

B. <u>Switching Off Golden Eye Constituted an Impermissible Threat of Force</u>.

The requirement that space must be used exclusively for "peaceful purposes" incorporates the concept of nonintervention and the prohibition on the "threat or use of force" as established in the U.N. Charter and under customary international law.95 In the Nicaragua case, this Court held that the principle of nonintervention has risen to the level of *jus cogens*, and thus no derogation from this duty is permitted. 96 The Court concluded that there is no right "for States to intervene, directly or indirectly, with or without armed force ... in another State.97 The Court focused on the underlying intent of the United States, finding that the U.S. would have illegally intervened merely by supplying funds to the Nicaraguan Contras, because its intent in doing so was to destabilize the Nicaraguan government.⁹⁸ This ruling reflects that the use of armed military force is not a necessary prerequisite for finding an intervention illegal under international law. Antipapdia concedes that switching off Golden Eye likely does not rise to the level of impermissible intervention. However, such an action, particularly in the circumstances in this case, in which war appeared imminent, would constitute a "threat of force," actionable under international law. Such a threat of force is not only illegal in and of itself, but justified Antipapadia's incursion into Papadia's territory as an act of self-defense, discussed supra.

C. <u>Customary International Law Regards Switching</u> off Reconnaissance Satellites As Aggressive.

1. Switching off Golden Eye was a veiled act of aggression.

Under Article 38 of its Statute this Court may apply international custom, or "a general practice accepted as law."99 The use of remote sensing satellites to monitor potential opponents is a general practice and is regarded in the international community as necessary to prevent war, by making surprise attacks impracticable. The London Session of the David Davies Memorial Institute Draft Code of the Rules of Outer Space noted that military surveillance or reconnaissance satellites, "contribute to an open world and so increase rather than diminish security. "100 The General Assembly has adopted numerous resolutions condoning the use of "confidence and security building" measures of verification. 101 To this end, the U.S.-Soviet Anti-Ballistic Missile Treaty of 1972 ("ABM Treaty") recognized the mutual existence of remote sensing satellites and considered them a safeguard in the balance of power and arms control. 102 For this reasons. Article 12(2) of the ABM Treaty prohibited both parties from interfering with the others' remote sensing Such interference, which would include switching off a satellite signal, would have been regarded as an aggressive act.

Terminating a military reconnaissance signal is a "threat of force" impermissible under customary international law. It this case it was particularly provocative, as the U.N. Security Council resolution calling upon both nations to refrain from "controversial actions". ¹⁰³ Because of this illegal act, Antipapadia was forced to acquire verification of the military buildup in Papadia in order to comply with U.N. Charter requirements regarding the pacific settlement of disputes under Chapter VI, and responses to breaches of the peace under Chapter VII. ¹⁰⁴

2. Openskey behaved provocatively & in bad faith.

The only motive served by switching off signals to Antipapadia, while continuing full service to Papadia, was to give Papadia a strategic and military advantage in the conflict with Antipapadia. Starstripe is a close economic and political ally of Papadia, and it is stipulated that Papadia asked Starstripe to "intervene" in the conflict against Antipapadia on her behalf. Thus, the purpose underlying the decision to switch off Antipapadia's access to Golden Eye was to illegally intervene in the conflict between Papadia and Antipapadia.

Further, Openskey exploited Antipapadia by preventing her access to natural resources in which has a legitimate right. Openskey acted in bad faith by leading Antipapadia to believe that she was receiving valuable data, when the data had actually been downgraded and transformed by Openskey without Antipapadia's knowledge. While Starstripe reserved the right under its export license to demand a "downgrading" of data in furtherance of its own "national security interests," this cannot explain Openskey's actions. The license makes no reference to any right to completely switch off satellite transmissions. The right of "downgrading" does not include switching off, but rather refers to reducing the technical level or quality of the data being transmitted. Further-

more, neither Openskey nor Starstripe can claim any legitimate "national security interest" in this matter, as the conflict was between Papadia and Antipapadia.

III. Openskey breached her duty to provide equal and nondiscriminatory access to data from Golden Eye by delivering to Antipapadia a ground station with hardware and software technically inferior to that delivered to Papadia.

A. Openskey Breached Her Duty To Provide Equal and Nondiscriminatory Access to Data From Golden Eye.

Antipapadia and Openskey are both parties "to all the relevant international treaties," which would include the Outer Space Treaty. Under the principle of pacta sunt servanda set forth in Article 26 of the Vienna Convention on the Law of Treaties, treaty provisions are legally binding on Openskey and must be performed in good faith. 108

1. The Outer Space Treaty establishes a duty of equal and nondiscriminatory access that specifically applies to remote sensing activities.

Article I of the Outer Space Treaty provides that outer space shall be used by States on a free and equal basis "without discrimination of any kind." This Article gives special consideration to ensuring equality for developing countries. 110 Remote sensing of the earth by satellite constitutes a "use of outer space" within the meaning of the Outer Space Treaty. The specific nature of the treaty duty to provide equal and nondiscriminatory access is further codified in Principles II and IV of the Principles of Remote Sensing. 111 Principle IV reflects that the PRS were intended to further define and codify existing obligations contained in Article I of the Outer Space Treaty. 112 Principle II strengthens the applicability of the nondiscrimination obligation when the interests of developing countries are at stake, expressly adding the clause, "taking into particular consideration the needs of developing countries."113 Principle XII sets forth the specific actions States must take to comply with this duty. States conducting remote sensing activities must meet five explicit requirements under Principle XII to fulfill their duty: they must (1) provide the satellite data to the sensed state without delay; 114 (2) provide the sensed state with both primary and processed data; 115 (3) provide such data on a nondiscriminatory basis; (4) provide access to the data on "reasonable cost terms"; and (5) provide any additional analyzed information in the possession of another State to the sensed state on the same basis and terms. 116 The State conducting remote sensing activities must fulfill these five requirements with "particular regard being given to the needs and interests of the developing countries."117

2. The duty to provide equal and nondiscriminatory access is also recognized under customary international law.

The duties set forth under the Outer Space Treaty and defined under the PRS are merely a codification of customary international law. Under Article 38 of the Statute of the International Court of Justice, an international custom is defined as, "evidence of a general practice accepted as law" 118 A rule becomes international custom when states conform to it out of a sense of legal obligation, or *opinio juris*. 119 In the *North Sea Continental Shelf Cases*, this Court found that the acceptance of a practice by a representative majority of states over a period of time was sufficient to create a rule of customary law. 120 In that case, a custom recognizing exclusive economic zones had emerged in a period of only ten vears. 121

States with active space programs consistently recognize and enforce the rule of nondiscriminatory access to data gained from remote sensing satellites. For example, U.S. domestic law requires private entities operating remote sensing systems to make data available to other countries, "as soon as such data are available and under reasonable cost terms." This Act expressly prohibits any private contractual arrangements, "regarding delivery, format, pricing or technical considerations which would favor one customer or class of customers over another." The U.S. policy also requires equal access for "all users," and not merely for a State whose territory is being sensed. 124

3. Openskey breached this duty of non-discrimination.

Superview Inc. is a private commercial satellite operator licensed by the government of Openskey to carry out commercial VHR activities using the Golden Eye satellite. Openskey reviewed and approved the agreements between Superview, Inc. and the governments of Papadia and Antipapadia, and delivered the ground station hardware and software to each country. Therefore, Openskey knowingly and intentionally delivered a ground station to Antipapadia that was technically inferior to the "latest technology" being delivered to Papadia. 125 There is no indication in the Compromis that Openskey informed Antipapadia that her ground station was inferior to the one delivered to Papadia, or that Openskey offered Antipapadia a more advanced ground station. Openskey may have assumed Antipapadia could not afford more advanced technology because she is a developing country with "limited economic resources." 126 However, the fact that Antipapadia was able to "buy a state-of-the-art mobile ground station" from another source on the open market soon after reflects that Openskey charged Antipapadia an unreasonable price for this equipment and software. 127 Thus, Openskey failed to make the system available "on a nondiscriminatory basis and on reasonable cost terms" as required under PRS Principle XII. 128

The duty to provide nondiscriminatory access to remote sensing data applies to primary data, processed data, and any other additional analyzed information gained via satellite. By delivering an inferior system and then downgrading the data transmitted to Antipapadia, Openskey prevented Antipapadia from receiving the same primary, processed and analyzed data as Papadia to identify

natural resources in which both states have rights and interests.

B. Openskey Engaged In An "Abuse of Rights" Which Denied Antipapadia the Opportunity to Locate Natural Resources.

1. International law recognizes Antipapadia's rights in the maritime area in which Openskey is conducting remote sensing activities.

Papadia and Antipapadia are island nations located in the same geographic region and separated by a disputed territorial sea. 130 Although neither state is a party to the UNCLOS III Treaty, it is generally recognized under customary norms of the international law of the sea 131 that States composed of inhabited islands are entitled to claim up to a 12-nautical-mile territorial sea, a continental shelf, and a 200-nautical-mile exclusive economic zone. 132 International tribunals have recognized such maritime boundaries under customary international law. 133 For example, in the case of *Libva v. Malta*. concerning the delimitation of disputed seas between a small island state and a large continental state, this Court determined that the exclusive economic zone had emerged as part of customary international law. 134 These maritime boundaries are subject to bilateral delimitation. however, where the claims overlap with claims made by other islands or states, as in the present case.

Under customary law, coastal states have sovereignty over internal and territorial waters, including natural resources contained therein. The principle of full and permanent sovereignty over natural resources is firmly established in customary law, as exemplified by state practice and by landmark U.N. resolutions such as the Charter of Economic Rights and Duties of States. In addition to sovereignty over its internal and territorial waters, a State has exclusive rights to the natural resources contained within its exclusive economic zone. As this Court ruled in the *North Sea Cases*, where boundaries are disputed, natural resources should be equitably

divided.¹³⁸ Judge Philip Jessup stated in his separate opinion that the maritime boundary in that case should be delimited by focusing on the real basis of the dispute - access to hydrocarbons in the seabed of the North Sea.¹³⁹

Similarly, the principle of "autonomous equity" has been universally applied in international adjudications to decide maritime boundary disputes. Under this principle, the Court must take into consideration all factors relevant to fairness and equity in deciding each particular case. 140 In Tunisia v. Libya, Judge Jiminez de Arechaga explained the importance of equity in such disputes, stating, "the iudicial application of equitable principles means that a court should render justice in the concrete case, by means of a decision shaped by and adjusted to the relevant factual matrix of the case."141 Similarly, in the North Sea Cases, this Court held that the interests of all nations must be taken into consideration. 142 In the Jan-Mayen case, 143 this Court considered the division of natural resources to be an important equitable factor in delimiting the maritime boundary between a small Norwegian island

and Greenland. 144 In that case, the Court identified the prime commercial fishing area and divided it in half, giving both states equal access to the fishery. 145

Therefore, based on the holdings in Jan-Mayen and the North Sea Cases, it is probable that both Papadia and Antipapadia should receive an equitable share of the natural resources contained in the disputed territory. While the facts contained in the compromis are limited, what facts we do have indicate that Antipapadia has as great a right to these natural resources as any other claimant, and at least as much right as Papadia. We know, for example, that Drillwell and Sinkbetter searched for oil near a "small coastal area" only eight miles from one another in the disputed territorial sea. ¹⁴⁶ These facts suggest that the disputed territory is small enough for each State to have a legitimate, yet overlapping, claim to the oil fields. Ergo, both states likely have legitimate and legally enforceable rights to an equitable share of the oil contained within the disputed territory. Even if this turns out not to be the case, the equitable principles elucidated in Jan Mayen and North Sea would prevent a richer, more technologically advanced nation from misusing these advantages to hobble a developing nation in its search for its rightful share of natural resources. Such an action must constitute an abuse of rights, as discussed infra.

2. The disputed territorial sea is part of Antipapadia's "territory" within the meaning of the PRS and the Outer Space Treaty.

In setting forth obligations of the State conducting remote sensing activities, Principles XII and XIII of the PRS make reference to the "territory" and "jurisdiction" of the sensed state. While the terms "territory" and "jurisdiction" are not explained within the text of either the PRS or the Outer Space Treaty, it is clear that these terms were used to protect the natural resources of developing nations. Article 32 of the Vienna Convention permits the use of supplementary means of interpreting a treaty, where the language is ambiguous or would lead to an unreasonable result. The travaux préparatoires are useful in this regard.

During the negotiation of the PRS, many countries sought to add language to expressly include the sensing of marine areas within the remote sensing regime. The joint articles submitted by Brazil and Argentina made specific reference to sensing of "resources located in maritime areas under [the] jurisdiction of the sensed state,"149 while draft principles submitted by Mexico¹⁵⁰ and Chile¹⁵¹ contained almost identical language. Drafts by Argentina and Brazil¹⁵² further provided for all States to receive data regarding natural resources of "maritime areas outside national sovereignty or jurisdiction," while drafts submitted by the Soviet Union¹⁵³ and France¹⁵⁴ included data access for "areas outside the national jurisdiction of any state."155 Similarly, the domestic policy of the United States has always been to ensure equal access to data for all States, and not merely for States whose territory is sensed. 156 Therefore, in the final draft of Principle XII, "territory" was changed to read, "territory under . . . the jurisdiction" of the sensed state. 157 The drafters intended this change to reflect a broader, more flexible view of the notion of "territory" with regard to which sensed States are owed the specific duties enumerated under Principle XII. The word "territory" should be interpreted as being consistent with two key points emphasized throughout both the Outer Space Treaty and the PRS: (1) the principle of equal access and use of space by all States; and (2) the special needs of developing countries to have equal access and control over their natural resources. ¹⁵⁸

Antipapadia is a developing country with legitimate rights in the natural resources located in the disputed territorial sea. The intent of the Outer Space Treaty and PRS is to protect developing nations and their natural resources from being exploited by more economically developed nations such as Openskey and Papadia. That is exactly what has occurred in the present case. Antipapadia, a lesser developed nation, was denied a fair chance to find and exploit these natural resources because of the connivance of Openskey and Papadia. For this, Openskey should be held responsible. As space law publicist and ICJ Justice V. S. Vereshchetin wisely put it, "[f]reedom of outer space should not be used as a pretext for violating sovereign rights of states on the earth." 159

3. Openskey engaged in an "abuse of rights" by interfering with Antipapadia's opportunity to locate and exploit these natural resources

Article IX of the Outer Space Treaty provides that states must pay "due regard to the corresponding interests" of other parties. 160 This otherwise vague provision is given specific legal content in the context of remote sensing through Principle IV of the PRS, 161 which Openskey signed. This principle requires that remote sensing activities, "shall be conducted on the basis of respect for the principle of full and permanent sovereignty of all States and peoples over their own wealth and natural resources." While arguably some of the provisions of the PRS lack the required legal specificity to be regarded as customary international law, Principle IV (the longest and most detailed provision) was meant to embody a binding principle of international law by the drafters - the "abuse of rights" doctrine. Thus, read in conjunction with the specific treaty requirements of Article IX of the Outer Space Treaty, Principle IV of the PRS establishes liability for those nations which abuse their remote sensing rights.

Principle IV does not create a new right in international law, but rather makes the customary "abuse of rights" doctrine applicable to remote sensing activities. This principle was explicitly recognized in Article 3 of the Montevideo Convention, ¹⁶³ Article 28 of the Geneva Convention on the High Seas, ¹⁶⁴ and has been applied in the Trail Smelter Arbitration, ¹⁶⁵ the German Interests in Polish Upper Silesia Case (Merits), ¹⁶⁶ and the Anglo-Norwegian Fisheries Case. ¹⁶⁷ Likewise, in the Free Zones Case, the Permanent Court found that while the French could legitimately enact fiscal legislation in the free zones (which were French territory), a reservation protected abuse of this right to the harm of others. ¹⁶⁸ Publicists Ian Brownlie, Sir Hersch Lauterpacht, and Dr. F.A. Mann have noted that abuse of rights is a general principle of international law. ¹⁶⁹

The abuse of rights doctrine is particularly relevant in this case. First, as Brownlie notes, the abuse of rights doctrine is the alter ego of the principle of nondiscrimination, ¹⁷⁰ and Openskey's discrimination in favor of Papadia is at the heart of this case. Second, the totality of Openskey's conduct was inequitable, discriminatory, and unjust. Openskey knew that Antipapadia's purpose for purchasing the equipment was to locate the oil fields, yet she delivered equipment and software that was unfit for this purpose. This action interfered with Antipapadia's legitimate rights and interests in the natural resources contained in the disputed territorial sea. The low quality of the data received and the inferior technology made it impossible for Antipapadia to locate the oil fields. Through this abuse of rights, Openskey violated Antipapadia's opportunity to find and use these nonrenewable natural resources.

IV. Openskey owes damages to Antipapadia for the intentional downgrading and unintentional transformation of data transmitted to Antipapadia

A. Openskey is Liable for Damages under the Liability Convention

1. The Liability Convention imposes absolute liability on Openskey for damages caused by Golden Eye.

As the State party who "launched or procured the launching of an object into outer space," Openskey fits the definition of a "launching party" contained both in Article VII of the Outer Space Treaty¹⁷¹ and in Article I(c)(i) of the Convention on International Liability for Damage Caused by Space Objects ("Liability Convention").¹⁷² In the present case, Openskey "procured the launching" of Golden Eye by purchasing it from Goldstar. Golden Eye, including the component parts, is a "space object" within the meaning of Article I(d).¹⁷³ Thus, under Article II of this Treaty, Openskey is absolutely liable to Antipapadia for the damages caused by Golden Eye.¹⁷⁴

Article I includes within the definition of damages any "loss of or damage to property of States." ¹⁷⁵ Such damage includes not only the outright taking of property, but also any "unreasonable interference . . . [such] that the owner thereof will not be able to use, enjoy or dispose of the property within a reasonable time after the inception of such interference." ¹⁷⁶ The malfunctioning of Golden Eye caused such damage to the property of Antipapadia, and to the property of Sinkbetter as a juridical entity in Antipapadia.

2. The damages suffered by Antipapadia and Sinkbetter are compensable under the Liability Convention.

On first reading, the Liability Convention does not seem to be the proper vehicle for Antipapadia's claims. However, a look at the preparatory work of the Convention reveals otherwise. The General Assembly resolution calling for the drafting of such a convention expressed concern that, "the remedies for damage caused by space

objects are inadequate for the needs of the nations and peoples of the world." The travaux préparatoires of the Liability Convention reflect that it was intended to include damages caused not only by the space object itself, but also "by the functioning of scientific instruments on board."178 At the suggestion of the United States, the measure of damages adopted under Article XII was based on Chorzow Factory, which provided that reparation should restore the claimant to the condition ex ante. 179 This formula was approved by negotiators. 180 Article XII specifically provides that damages shall be determined, "in accordance with international law and the principles of law and equity." 181 The term "equity" is used in its popular sense to signify the right of States to receive compensation for moral injury, 182 as well as actual physical harm. Moral injury includes injuries to the dignity or sovereignty of a State, such as that caused by the breach of a treaty obligation, regardless of the presence of material damages, 183 Thus, as Carl Christol points out, the Convention not only allows recovery for direct damages, "caused" by space objects, but "moral injury" as well. 184

B. Openskey is Liable for Both the Costs of Exploratory Research and for Lost Oil Revenues.

The proper measure of damages under *Chorzow Factory* is to restore Antipapadia *ex ante*. Similarly, under Article 35(2) of the U.N. Convention on Contracts for the International Sale of Goods, the seller must provide goods fit for the purpose made known to the seller at the time of purchase. Here, had Golden Eye functioned correctly, Sinkbetter would have located and extracted the oil. The distortion of data from Golden Eye interfered with Antipapadia's use of the ground station, software, and data processing equipment. This distortion rendered the equipment utterly useless. It required Antipapadia to purchase a new mobile ground station in order to receive clear and usable satellite signals for the exploratory research. Because of false reliance on distorted data from Golden Eye, Sinkbetter undertook unnecessary and fruitless exploration.

Moreover, it is almost certain that Sinkbetter's efforts to locate the oil would have been successful had she received clear and undistorted satellite data. When transmitting correctly, Golden Eye has a VHR capability with resolutions as high as 1.5 meters. This exceptional accuracy easily enables a user to locate petroleum deposits; and indeed, using clear and undistorted data permitted the Drillwell to find such deposits. These facts establish a direct causal link between the malfunctioning of Golden Eye and the damages incurred by Antipapadia and Sinkbetter. Thus, these damages are neither remote nor indirect under international standards, and should be awarded.

¹ Compromis at 3.

^{2 14}

³ East Timor (Australia v. Portugal), 1995 I.C.J. 90, 214 (June 30, 1995).

⁴ Barcelona Traction, Light and Power Company (Belgium v. Spain) 1970 I.C.J. 3 (1962).

- 5 East Timor, supra note 3, at 214.
- 6 Robert L. Bridge, International Law and Military Activities in Outer Space, 13 AKRON L. REV. 649 (1979); See also IAN BROWNLIE, INT'L L. & THE USE OF FORCE BY STATES 362 n. 16 (1963); Fitzmaurice, The General Principles of Int'l L. Considered from the Standpoint of the Rule of Law, 92 RECUEIL DES COURS 1, 171 (1957).
- ⁷ Charter of the United Nations, art. 51, 1. U.N.T.S. (1945).
- 8 *Id.*
- 9 BROWNLIE, supra NOTE 6, at 362 n.16.
- 10 Bridge, supra note 6, at 649.
- 11 D.W. BOWETT, SELF-DEFENSE IN INT'L L. 9 (1958).
- ¹² Letter from Secretary of State Daniel Webster to British Ambassador Fox (April 24, 1841), reprinted in INTERNATIONAL LAW 1219-22 (Carter & Trimble eds. 1991).
- BOWETT, supra note 11, at 269.
- ¹⁴ Caroline Incident, 29 B.F.S.P. 1129, 1138.
- ¹⁵ JAMES MORENOFF, WORLD PEACE THROUGH SPACE LAW 220 (1973).
- 16 *Id*
- 17 Compromis at 2.
- ¹⁸ *Id.*
- ¹⁹ *Id.* at 3.
- ²⁰ *Id.*
- ²¹ RESTATEMENT (THIRD) OF THE FOR. RELATIONS LAW OF THE UNITED STATES § 102(2) (1987).
- Morenoff, supra note 15, at 233.
- ²³ *Id*.
- ²⁴ M. DONELAN & M. GRIEVE, INTERNATIONAL DISPUTES: CASE HISTORIES 1945-1970, at 234 (1973).
- 25 Corfu Channel (U.K. v. Albania), 1949 I.C.J. 27 (1949).
- ²⁶ Id. See also Reisman & Freedman, The Plaintiff's Dilemma: Illegally Obtained Evidence and Admissibility in International Adjudication 76 A.J.I.L. 737, 746-48 (1982).
- ²⁷ United States v. Iran, 1980 I.C.J. Rep. 3, 43-44 (1980).
- Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies, art. 1, Jan. 27, 1967, 18 U.S.T. 2410, 610 U.N.T.S. 205 [hereinafter "Outer Space Treaty"].
- ²⁹ Principles Relating to Remote Sensing of the Earth From Outer Space, G.A. Res. 41/65, U.N. GAOR, 95th Plenary Meeting, prin. IV (Dec. 3, 1986) [hereinafter "PRS"].
- ³⁰ CARL Q. CHRISTOL, REMOTE SENSING AND INTERNATIONAL LAW 380 (A.A.S.L. 1980).
- ³¹ *Id.*

- ³² Leopold Peyrefitte, *The Legal Regime of Remote Sensing of the Earth from Space*, *in PROC. FROM THE THIRTY-FOURTH COLLOQUIUM ON THE L. OF OUTER SPACE*, AMERICAN INSTITUTE OF AERONAUTICS AND ASTRONAUTICS 286, 290 (Oct. 5-11, 1991).
- Statute of the International Court of Justice, art. 38 (1)(b), 59 Stat. 1031 (1945) [hereinafter "ICJ Statute"].
- Nathaniel Ward, Espionage and the Forfeiture of Diplomatic Immunity, 11 INT'L 657 (1977).
- ³⁵ U.S. DEPT. OF THE ARMY, THE LAW OF LAND AND WARFARE 33 (1956).
- Dec. of Brussels Concerning the Laws and Customs of War, *adopted by* Conference of Brussels, art. 36, Aug. 27, 1874.
- Final Act of the Int'l Peace Conference, signed at the Hague, July 29, 1899.
- ³⁸ Regulations Respecting the Laws and Customs of War on Land, art. 24, *annexed to* the Convention of 1899, *supra* note 37.
- Onvention Relative to the Protection of Civilian Persons in Time of War, Part I (General Provisions), art. 5, Aug. 12, 1949 (4th Geneva Convention).
- ⁴⁰ Protocols Additional of 8 June 1977 to the Geneva Conventions of 12 Aug. 1949, Protocol I Relating to the Protection of Victims of Non-International Armed Conflicts, June 8, 1977, reprinted in 16 I.L.M. 1391 (1977).
- 41 Statute of the ICJ, supra note 33, art. 38(1)(d).
- ⁴² HUGO GROTIUS, LAW OF WAR & PEACE, Book III, ch. IV xviii 655 (F. Kelsey translation, 1925).
- Geoffrey B. Demarest, Espionage in Int'l L., 24 DENV. J. INT'L L. & POL'Y 321, 331 (1996).
- Statute of the ICJ, supra note 33, art. 38(1)(d).
- ⁴⁵ U.S. v. Brown, 484 F.2d 418 (5th Cir., 1973).
- 46 U.S. v. Abbie Hoffman, 334 F. Supp 504 (D.C. 1971).
- ⁴⁷ *Id.* at 506.
- 48 IAN BROWNLIE, 1 STATE RESPONSIBILITY 30 (1983).
- ⁴⁹ S.S. Lotus (France v. Turk), 1927 P.C.I.J., Ser. A., no. 10 (1927).
- Demarest, supra note 43, at 347.
- ⁵¹ CARL Q. CHRISTOL, THE MODERN INTERNA-TIONAL LAW OF OUTER SPACE (1982).
- 52 JEFFERSON HANE WEAVER, LESSONS IN MULTILATERAL NEGOTIATIONS: CREATING A REMOTE SENSING REGIME, 7 TEMP. INT'L & COMP. L. J. 29, 53 (1993).
- ⁵³ 15 U.S.C. § 5651-5672 (West Supp. 1995) (Land Remote Sensing Policy Act of 1992).
- Agreement Between the U.S. and Costa Rica for the Cooperation of the GLOBE Program, U.S.-Costa Rica, Apr. 22, 1996, art. 5, KAV No. 4587, St. Dept. No. 96-80, 1996 WL 294841.
- Agreement Between the U.S. and Moldova for the Cooperation of the GLOBE Program, U.S.-Moldova,

- Jan. 30, 1995, art. 5, KAV No. 4178, St. Dept. No. 95-99, 1996 WL 149241.
- Agreement Between the U.S. and Kazakhstan for the Cooperation of the GLOBE Program, U.S.-Kazakhstan, Mar. 27, 1995, art. 5, KAV No. 4217, St. Dept. No. 95-92 1996 WL 323714.
- Agreement Between the Nat. Oceanic & Atmospheric Admin. of the U.S. and the Min. of Education of the Rep. of Korea for the Cooperation of the GLOBE Program, U.S.-Korea, Apr. 21, 1995, art. 4, KAV No. 4223, St. Dept. No. 95-108 1996 WL 370388.
- Agreement Between the Nat. Oceanic & Atmospheric Admin. of the U.S. and the Nat. Agency for the Education of Sweden for the Cooperation of the GLOBE Program, U.S.-Sweden, Aug. 23, 1995, art. 4, KAV No. 4420, St. Dept. No. 95-210, 1996 WL 596169.
- 59 Agreement Between the Nat. Oceanic & Atmospheric Admin. of the U.S. and the Education Min. of Ecuador for the Cooperation of the GLOBE Program, U.S.-Ecuador, Apr. 21, 1995, art. 4, KAV No. 4618 St. Dept. No. 96-108 1996 WL 424938.
- Remote Sensing: Acquisition of Data, U.S.-India, Jan. 3, 1978, T.I.A.S. No. 9074, at 4690.
- Memorandum of Understanding Between the U.S. NASA & Chinese Academy of Sciences, U.S.-China, Jan. 12, 1981, T.I.A.S. No. 11054, at 2.
- 62 Memorandum of Understanding Between the U.S. Govt. & Govt. Fed. Rep. of Brazil Concerning the Landsat System, U.S.-Brazil, May 8, 1984, T.I.A.S. N. 11252, at 2.
- 63 ERTS-Zaire-U.S. NASA on Ground Station & Satellite Data, U.S.-Zaire, Jan. 12, 1981, art. 6, *in* 14 I.L.M. 1474, 1476 (1975).
- 64 NATHAN C. GOLDMAN, AMERICAN SPACE LAW 104 (1st ed. 1988).
- 65 Id
- Convention Relating to the Distribution of Program Carrying Signals Transmitted by Satellite, *entered into force*, Aug. 25, 1979, 1144 U.N.T.S. 3.
- 67 Int'l Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations, Oct. 26, 1961, 496 U.N.T.S. 43.
- Re Sky Channel (No. 2), Oberster Gerichtshof,
 [1987] EEC 449, Feb. 4, 1986.
- ⁶⁹ Berne Convention for the Protection of Literary and Artistic Works, *done* Sept. 9, 1886, *last revised* July 24, 1971, 828 U.N.T.S. 221.
- ⁷⁰ *Id.* art. 2.
- ⁷¹ Patrick Salin, Proprietary Aspects of Commercial Remote-Sensing Imagery, 13 J. INT'L L. BUS. 349, 358 (1992).
- NATHAN GOLDMAN, AMERICAN SPACE LAW 102 (2d ed. 1996) (noting "[t]he Universal Copyright Convention does not apply" to remote sensing imagery).

- 73 Comm. of the European Communities, Initial Proposal, COM (92), Brussels, at 4, May 1992.
- See notes 1-50, *supra* and accompanying text.
- ⁷⁵ 10 ENCYCLOPEDIA OF PUBLIC INTERNATIONAL LAW 931 (1987).
- ⁷⁶ WHITEMAN, 3 DAMAGES IN INT'L LAW 1801 (1943).
- ⁷⁷ Alabama Arbitration (U.S. v. U.K.) (1872), in 1 MOORE, INT'L ARBITRATIONS 653.
- ⁷⁸ CLIVE PARRY & JOHN P. GRANT, ENCYCLO-PAEDIC DICTIONARY OF INT'L LAW 15 (1986).
- 79 Ia
- ⁸⁰ The Newshwang (U.S. v. U.K.), 6 R.I.A.A 64 (1921).
- Naulilaa Claims (Portugal v. Germany), 2 R.I.A.A.1013, 1037 (1928).
- 82 *Id*
- 83 ENCYCLOPEDIA OF PUBLIC INTERNATIONAL LAW, supra note 75, at 932.
- 84 BROWNLIE, *supra* note 48, at 237, 239.
- Non-Peaceful Uses of Outer Space, in Peaceful and Non-Peaceful Uses of Outer Space, in Peaceful and Non-Peaceful Uses of Space, Problems of Definition for the Prevention of an Arms Race 45 (Bhupendra Jasani ed. 1991).
- 86 See e.g., Declaration of Legal Principles Governing the Activities in the Exploration and Use of Outer Space, U.N. Res. 1962, (Dec. 13, 1963); U.N. GAOR, 33rd Sess., U.N. Doc. A/33/162 (1978); Legal Implications of the Remote Sensing of the Earth by Satellites, U.N. Doc. A/AC.105/118 (1973); Principles Governing the use of States of Artificial Earth Satellites for Direct Television broadcasting, U.N. Doc. A/RES/37/92 (Feb. 4, 1983); PRS, supra note 29.
- Outer Space Treaty, *supra* note 28, pmbl, art. III [emphasis added].
- Vienna Convention on the Law of Treaties, U.N. Doc. A/CONF.129/15, art. 31 (March 20, 1986) [hereinafter "Vienna Convention"].
- Outer Space Treaty, *supra* note 28, art. 3.
- Id.; U.N. Charter, supra note 7, art. 2.
- U.N. Charter, supra note 7, art. 2.
- 92 S. HOUSTON LAY & HOWARD J. TUBENFELD, THE LAW RELATING TO THE ACTIVITIES OF MAN IN OUTER SPACE 97 n.3 (1970).
- Dembling, *The Evolution of the Outer Space Treaty*, 33 J. OF AIR L. & COM. 419, 433-434 (1967) [emphasis added].
- ⁹⁴ J.E.S. FAWCETT, OUTER SPACE NEW CHALLENGES TO LAW AND POLICY 109 (1984).
- ⁹⁵ Dec. on Enhancement of the Effectiveness of the Prin. of Refraining from the Threat or Use of Force in Int'l Rel., U.N. Doc. A/RES/42/22, March 17, 1988, reprinted in 27 I.L.M. 1674 (1988).
- ⁹⁶ Nicaragua v. United States, 1986 I.C.J. 14 (1986).

- 97 *Id.*
- 98 *Id*.
- 99 ICJ Statute, *supra* note 33, art. 38(1)(b).
- 100 Commentary, London Session of the David Davies Memorial Institute of Int'l Studies Draft Code of the Rules of Outer Space, art. 2(5).
- 101 Resolution on the Prevention of an Arms Race in Outer Space, U.N. Doc. A/RES/51/44 (Jan. 7, 1997); See also, U.N. Doc. A/RES/50/69 (Jan. 9, 1996); U.N. Doc. A/RES/45/55 B (Dec. 4, 1990); U.N. Doc. A/RES/47/51 (Dec. 9, 1992); U.N. Doc. A/RES/448/74 A (Dec. 16, 1993).
- 102 Hubert Thierry, *IDS et Droit de L' Espace*, in DROIT DE L'ESPACE 361 (ed. Pedone 1988).
- 103 Compromis at 3.
- 104 U.N. Charter, *supra* note 7, art 33-51.
- 105 Compromis at 3.
- 106 *Id.* at 4.
- 107 Outer Space Treaty, supra note 28, art. 1.
- ¹⁰⁸ Vienna Convention, *supra* note 88, art. 26.
- 109 Outer Space Treaty, supra note 28, art. 1.
- 110 *Id*.
- 111 PRS, supra note 29, prin. IV.
- 112 *Id.* at prin. IV. ("Remote sensing activities shall be conducted in accordance with the principles contained in Article I of the [Outer Space] Treaty . . . which . . . stipulates the principle of freedom of exploration and use of outer space on the basis of equality").
- 113 Id. at prin. II.
- 114 Id. at prin. XII.
- 115 *Id.* (also referred to as "raw" and "enhanced" data).
- 116 *Id*.
- ¹¹⁷ *Id*.
- 118 ICJ Statute, supra note 33, art. 28.
- 119 RESTATEMENT, supra note 21, § 102 cmt. c.
- ¹²⁰ North Sea Continental Shelf (Denmark v. FRG Holland v. FRG), 1969 I.C.J. 63 (1969).
- ¹²¹ *Id*.
- ¹²² 15 U.S.C.S. § 5622.
- ¹²³ *Id.* § 5651.
- ¹²⁴ *Id*.
- 125 Compromis at 2.
- ¹²⁶ *Id*.
- ¹²⁷ *Id.* at 3.
- 128 PRS, supra note 29, prin. XII.
- ¹²⁹ *Id*.
- 130 Compromis at 2.
- ¹³¹ C. SYMMONS, THE MARITIME ZONES OF ISLANDS IN INTERNATIONAL LAW 1-151 (1979).
- 132 United Nations Convention on the Law of the Sea, Dec. 10, 1982, arts. 2-4, U.N. Doc. A/CONF.62/122 (1982), reprinted in 21 I.L.M. 1261, 1272 (1982) [hereinafter "UNCLOS III"].
- ¹³³ Conciliation Commission on the Continental Shelf Area between Iceland and Jan Mayen, Report and Rec-

- ommendations to the Governments of Iceland and Norway, reprinted in 20 I.L.M. 797 (1981); Agreement on the Continental Shelf between Iceland and Jan Mayen, done Oct. 22, 1982, Iceland-Norway, reprinted in 21 I.L.M. 1222 (1982); Richardson, Jan Mayen in Perspective, 82 A.J.I.L. 443 (1988).
- 134 Libya v. Malta, 1985 ICJ 38, para. 44 (1985).
- 135 UNCLOS III, supra note 132, art. 2.
- 136 Charter of Economic Rights and Duties of States, GA Res. 3281 (1974), U.N. Doc. A/9631.
- See, UNCLOS III, supra note 132, art. 121; Libya
 v. Malta, 1985 ICJ 38 (1985).
- 138 North Sea Continental Shelf Cases, *supra* note 120.
- ¹³⁹ *Id.* at 66-84 (Jessup, J., Separate Op.).
- ¹⁴⁰ INT'L MARITIME BOUNDARIES xix (Jonathan I. Charney & Lewis M. Alexander eds. 1993).
- Tunisia v. Libya, 1982 I.C.J. Rep. At 106, para. 24(Jiminez de Arechaga, J., Separate Op.).
- 142 North Sea Cases, supra note 120.
- 143 Jan Mayen (Denmark v. Norway), 1993 ICJ Rep.48-52 (1993).
- 144 *Id.* at 72, 79-81, paras. 76, 92.
- 145 *Id*.
- 146 *Id.*
- 147 PRS, supra note 29, at prin. XII-XIII.
- ¹⁴⁸ Vienna Convention, *supra* note 88, art. 32.
- 149 Gennady M. Danilenko, Principles Relating to Remote Sensing of the Earth from Space: Territorial Sphere of Application, in PROCEEDINGS FROM THE THIRTIETH COLLOQUIUM ON THE L. OF OUTER SPACE, INT'L INSTITUTE OF SPACE LAW 289 (Oct. 10-17, 1987).
- 150 Draft Proposal of Mexico on the Prin. of Remote Sensing, U.N. Doc. WC/RS (1981)/WP 2 U.N. Doc. A/AC. 105/288 Annex I (1981).
- 151 Draft Proposal of Chile on the Prin. of Remote Sensing, U.N. Doc. WG/RS/WP I. U.N. Doc. A/AC.105/133, Annex I, at 19-20 (1984).
- 152 Joint Draft Proposal of Argentina and Brazil on the Prin. of Remote Sensing, U.N. Doc. A/C.I/1047 (1974).
 153 Draft Proposal of USSR on the Prin. of Remote Sensing, U.N. Doc. A/C.I/1047 (1974).
- 154 Draft Proposal of France on the Prin. of Remote Sensing, U.N. Doc. A/AC. 105/C.2/L.99 U.N. Doc. A/AC.105/133, Annex IV, (1974).
- ¹⁵⁵ *Id.*
- ¹⁵⁶ 15 U.S.C.S. § 5622, 5651-5672.
- 157 PRS, supra note 29, prin. XII.
- 158 Id. prin II, IX, XII, and XIII.
- 159 V. S. Vereshchetin, On the Prin. of State Sovereignty in Int'l Space L., 11 ANNALS AIR & SPACE L. 429, 436 (1977).
- 160 Outer Space Treaty, supra note 28, art. IX.
- 161 PRS, supra note 29, prin. IV.
- 162 *Id*.

- 163 Convention on the Rights and Duties of States (Montevideo Convention), adopted by Seventh Int'l Conf. of American States, Dec. 26, 1933, 165 L.N.T.S. 19, art. 3.
- 164 Geneva Convention on the High Seas, 450U.N.T.S. 82, art. 28 (1958).
- 165 Trail Smelter Arbitration (Canada v. U.S.A.), 3 R.I.A.A. 1905 (1941).
- ¹⁶⁶ German Interests in Polish Upper Silesia (Merits) (Poland v. Germany), 1926 P.C.I.J. Ser. A, No. 7 (May 25, 1926).
- ¹⁶⁷ Fisheries Case (U.K. v. Norway), 1951 I.C.J. 116 (1951).
- ¹⁶⁸ Free Zones Case (France v. Switzerland), P.C.I.J. Ser. A., no. 7 (1926).
- 169 BROWNLIE, supra note 48, at 51.
- 170 *Id.* at 70.
- 171 Outer Space Treaty, supra note 29, art. VII.
- 172 Convention on Int'l Liability for Damages Caused by Space Objects, *adopted by* COUPOS June 29 1971 [hereinafter "Liability Convention"].
- 173 *Id.* art. I(d).
- 174 *Id.* at art. II.
- 175 *Id.* at art. I(a).
- ¹⁷⁶ Harvard Draft Conv. on Responsibilities of States, Art. 10, para. 3, Draft No. 12, April 1961.
- ¹⁷⁷ G.A. Res. 2733B (XXV), Dec. 16, 1970.
- ¹⁷⁸ N. MATTE, AEROSPACE LAW 157 (1977); citing U.N. Docs. A/AC.105/C.2/SR.94-97 (1968).
- ¹⁷⁹ Chorzow Factory (Germany v. Poland), 1928 P.C.I.J. Ser. A, No. 17 at 47 (Sept. 13, 1928).
- 180 Matte, supra note 178.
- ¹⁸¹ Liability Convention, *supra* note 172, art. XII.
- ¹⁸² Alexander, Measuring Damages Under the Convention on Int'l Liability for Damage Caused by Space Objects, 6 J. SPACE L. 151, 153 (1978).
- ¹⁸³ L. OPPENHEIM, 1 INTERNATIONAL LAW 352 (8th ed. Lauterpacht 1955).
- ¹⁸⁴ Carl Q. Christol, *Int'l Liab. for Dmg. Caused by Space Objects*, 74 A.J.I.L. 346, 363 (1980).
- ¹⁸⁵ U.N. Convention on Contracts for the Int'l Sale of Goods, Apr. 10, 1980, U.N. Doc. A/CONF.97/18 (1980), reprinted in 19 I.L.M. 668 (1980).
- 186 Compromis at 1.