13th Manfred Lachs Space Law Moot Court Competition 2004

CASE CONCERNING THE COMMERCIALISATION OF A SPACE STATION

(PALLADIA V ZIRCONIA)

PART A: INTRODUCTION

The 13th Manfred Lachs Space Law Moot Court Competition was held during the Vancouver IISL Colloquium. The Case Concerning the Commercialisation of a Space Station (Palladia v. Zirconia) was written by Mr. A. Farand with Mr. R, Lee and Dr. F. von der Dunk. Preliminaries were held at regional level in Europe (8 teams), the USA (8 teams) and in the Asia Pacific region (19 teams).

The Finals were judged by three Judges of the International Court of Justice, H.E. Judge Abdul Koroma, H.E. Judge Vladlen Vereshchetin, and H.E. Judge Francisco Rezek.

The University of British Columbia (UBC), Kaye Scholer, Farris, Dorsey & Whitney, the Canadian Space Agency, MacDonald Dettwiler, Ramírez de Arellano y Abogados, the Association of US Members of the IISL, NASA, ESA/ECSL and JAXA kindly sponsored the 2004 World Finals and IISL Dinner.

RESULTS OF THE WORLD FINALS:

- **Winner**: University of Leiden, The Netherlands (Ms. Ioana Cristoiu, Mr. Nathanael Horsley, Mr. Taras Ploshchansky);
- **Runner up**: Georgetown University Law Center, Washington DC, USA (Ms. Melissa Beiting and Mr. Matthew Getz);
- **2nd runner up**: National Law School of India University, Bangalore, India (Mr. Aditya Sudarshan, Mr. Shadan Farasat, Ms. Surabhi Ranganathan);
- **Eilene M. Galloway Award for Best Written Brief:** University of Leiden;
- **Sterns and Tennen Award for Best Oralist**: Melissa Beiting, Georgetown University.

CONTACT DETAILS REGIONAL ROUNDS:
USA: SSMITH@sah.com
Europe: Alberto.Marchini@esa.int
Asia Pacific: ricky@myoffice.net.au

PARTICIPANTS IN REGIONAL ROUNDS

In the USA:
Georgetown University
Golden Gate University
Loyola University - New Orleans
St. Thomas University
University of Baltimore
University of Cincinnati
University of North Carolina
University of Virginia

In Europe:
BBP School of Law, London, UK
IWarsaw University, Poland
University of Leiden, The Netherlands
ISU, Strasbourg, France
Moscow Institute of International Relations, MGIMO University, Moscow, Russia
University of Bremen, Germany
Università degli Studi del Sannio Facoltà di Scienze Economiche e Aziendali, Benevento, Italy
Universidad de Jaen, Spain

In the Asia Pacific:

Amity Law School, New Delhi, India
Bangalore University, Bangalore, India
Chulalongkorn University, Bangkok, Thailand
Dr Ambedkar Government Law College, Chennai, India
Dr Ambedkar Law College, Nagpur, India
Government Law College, Mumbai, India
National Law School of India University, Bangalore, India
National Law University, Jodhpur, India
National University of Juridical Sciences, Kolkata, India
National University of Singapore, Singapore
Parahyangan Catholic University, Bandung, Indonesia
Shree Dharmasthala Manjunatheshwara Law College, Mangalore, India
Tsinghua University, Beijing, China
University Law College, Bhubaneshwar, India
University of Malaya, Kuala Lumpur, Malaysia
University of New South Wales, Sydney, Australia

University of Queensland, Brisbane, Australia
University of Sydney, Australia
University of Technology, Sydney, Australia
University of Tokyo, Japan
University of Western Sydney, Australia

JUDGES FOR WRITTEN BRIEFS:
Mr Ian Awford, Ebsworth & Ebsworth, Sydney, Australia
Prof. Joanne Irene Gabrynowicz, University of MS School of Law, USA
Prof. Francis Lyall, University of Aberdeen, United Kingdom
Prof. V.S. Mani, Director, Gujarat National Law University, India
Dr. Martha Mejía-Kaiser, Independent researcher, Mexico/Germany
Prof. José Filho Monserrat, Brazilian Society of Space Law; Brazil

JUDGES FOR SEMI FINALS:
Prof. Steven Freeland, University of Western Sydney, Australia
Prof. Stephan Hobe, University of Cologne, Germany (President)
Ms. Marcia Smith, Congressional Research Service, USA

JUDGES FOR FINALS:
H.E. Judge Abdul Koroma, ICJ
H.E. Judge Vladlen Vereshchetin, ICJ
H.E. Judge Francisco Rezek, ICJ

PART B: THE PROBLEM

1. The Republic of Palladia is an industrialised State with a population of 87 million. The neighbouring Kingdom of Zirconia is a developing State with a population of 64 million. The two States had a long history of competition, rivalry and warfare but relations between them have improved considerably over the past 50 years. Since 1988, the two States entered into a customs and monetary union to promote closer economic ties between them.

2. Orbital Outpost, Inc. is a Palladian company which is 70% owned by the Palladian Space Agency, a governmental authority. The remaining 30% are held by private investors from both Palladia, Zirconia and other States. In 1998, Orbital Outpost began construction of a large space station in Earth orbit called "Outpost One" that was to provide space-based scientific research, communications services and the occasional space tourist. Outpost One was completed in orbit in December 2001 and has been staffed by a crew ranging from four to six trained scientific researchers and communications engineers, all of whom, including the commander of the orbital station, are of Palladian nationality.

3. Orbital Outpost engaged SpaceCommuter Corporation for the ferrying of crew members to and from Outpost One. SpaceCommuter is a launch operator based in Palladia that is entirely owned by Palladian private interests and conducts all its launches from a private facility located in Palladia. Its launch vehicle is a reusable launch vehicle that could carry up to three passengers to and from Outpost One. It has obtained all valid licences and permits from the Palladian Space Agency to operate the launch vehicles.

4. Ms. Lorena Basinska is a 22-year-old (in July 2002) model and comedienne of Zirconian nationality, who became popular in Zirconia as a result of her earlier participation in a reality television program. Ms. Basinska was selected in July 2002 to become one of its first tourists to engage in a 10-day stay onboard Outpost One from 2 to 11 May 2003. The flight to Outpost One was to be launched and operated by SpaceCommuter with two Orbital Outpost employees of Palladian nationality as crew members travelling with Ms. Basinska.

5. The contract for Ms. Basinska's flight was concluded on 15 July 2002 between Orbital Outpost and the Zirconian Television Corporation ("**ZTC**"). ZTC was to pay Orbital Outpost the fee of US$25,000,000.00 for Ms. Basinska's trip. The contract refers to the Space Stations Code of Conduct, as enacted by the Palladian Space Agency, which among other things include a provision that the commander is responsible for ensuring the safety and welfare of all persons onboard. It is understood that part of the contract involved the conduct of several scientific experiments by Ms. Basinska onboard Outpost One.

6. ZTC had concurrently concluded arrangements with other Zirconian commercial entities, including the television rights for the broadcast of seven hours of television programming of Ms. Basinska's preparations and operations on board Outpost One as well as dedicated sponsorship, publicity and merchandising contracts. On the basis of these arrangements, ZTC was able to secure lines of credit from Palladian banks to finance the costs of the trip.

7. Since July 2002, Ms. Basinska had been training in Palladia and she was launched to Outpost One by SpaceCommuter in accordance with the contract schedule. During the flight onboard Outpost One, Ms. Basinska complained to the commander of Outpost One that Mr. Jacques Toussaint, a 46-year-old crew member had subjected her to sexual harassment onboard Outpost One by excessive unwanted demonstrations of friendliness, such as unjustified kissing and touching. The complaint did not appear to have any effect on modifying Mr. Toussaint's behaviour.

8. Outraged by this lack of understanding on the part of the commander, Ms. Basinska anchored herself next to Mr. Toussaint during the next meal break and repeatedly punched him in the chest and face, causing substantial injuries. The injuries caused Mr. Toussaint to return to Earth with Ms. Basinska on 11 May 2003 instead of his original scheduled return in August 2003. Without a scheduled launch that would have allowed for a replacement crew member, a significant number of scientific experiments, most of which arose as a result of Orbital Outpost's commercial arrangements, had to be postponed, modified or even cancelled, causing a heavy financial loss.

9. During the conduct of one of the experiments, Ms. Basinska did not take sufficient care to reset the climatic controls at the conclusion of an experiment, resulting in significant and irreparable damage being caused to an experiment conducted in the Glovebox Facility onboard Outpost One. The experiment was conducted on behalf of the Gloveco Company, which had a lucrative contract with Orbital Outpost for the completion of this experiment. The Glovebox Facility, a microfibre experiment module, had to be rebuilt and subsequently reinstalled at substantial cost.

10. On the return flight on 11 May 2003, a cutting tool that was overlooked by the crew when preparing the vehicle for its flight fell from the vehicle's ceiling to its floor when the vehicle left microgravity conditions and entered the Earth's atmosphere. Ms. Basinska's face was slashed by the tool and, despite the best efforts of surgeons, remained disfigured. Her existing contracts for modelling and television appearances were subsequently cancelled and she has not been able to secure any new contracts.

11. Orbital Outpost subsequently prohibited all Zirconians from participating in tourist flights to Outpost One, but it continued to allow nationals of other States to participate in its space tourism program.

12. Independent investigations into the incident onboard the return flight had demonstrated that, although Mr. Toussaint was onboard that flight and was responsible for most of the pre-flight inspections, there could be no suggestion that the cutting tool was deliberately left by him in the cabin, as doing so would have posed a grave danger to himself.

13. Negotiations between Orbital Outpost and ZTC of their opposing claims were prematurely ended when ZTC filed for voluntary bankruptcy on 13 September 2003. Subsequent discussions between the Governments of Palladia and Zirconia also failed to produce any resolution. Consequently, both Governments agreed to submit their dispute to the International Court of Justice by way of this Special Agreement.

14. Palladia seeks declarations that:

    (i) Zirconia is responsible for the actions of Ms. Basinska on board Orbital Outpost in causing physical injury to Mr. Toussaint and subsequent financial loss suffered by Orbital Outpost as a result of Mr. Toussaint not being able to

conduct the scientific experiments as required;

(ii) Zirconia is responsible and liable for the damage to the Glovebox Facility and the resulting financial loss to Orbital Outpost;

(iii) The prohibition placed by Palladia on further tourist flights to Outpost One by Zirconian nationals was not contrary to international law; and

(iv) Palladia is neither responsible for nor liable to Zirconia for the injuries caused to Ms. Basinska and her subsequent financial loss; and

(v) All other relief sought by Palladia in its memorials and oral submissions should be granted and all relief sought by Zirconia should be denied.

15. Zirconia seeks declarations that:

(i) Palladia failed in its international legal obligations when the commander of Outpost One did not take effective action concerning Ms. Basinska's allegation of sexual harassment, and therefore is responsible for any loss or damage suffered to its nationals or property on Outpost One;

(ii) Palladia is responsible and liable for the injuries caused to Ms. Basinska and her subsequent financial loss;

(iii) The prohibition placed by Palladia on further tourist flights to Outpost One by Zirconian nationals was contrary to international law;

(iv) Zirconia is not liable to Palladia for any loss or damage resulting from Ms. Basinska's acts while on Outpost One; and

(v) All other relief sought by Zirconia in its memorials and oral submissions should be granted and all relief sought by Palladia should be denied.

16. Outpost One was registered by Palladia in accordance with the 1975 Registration Convention and lists Palladia as the State of registry, except that the instrument of registration lodged pursuant to the Convention did not indicate its launching States.

17. Palladia and Zirconia are both parties to the 1967 Outer Space Treaty, the 1972 Liability Convention, the 1968 Rescue Agreement and the 1975 Registration Convention. Both States were founding members of the United Nations in 1945. Zirconia has signed and ratified the 1979 Moon Agreement but Palladia has never signed it or recognised it as being part of international law.

18. Palladia and Zirconia are both International Telecommunication Union members.

19. Neither Palladian nor Zirconian tort or criminal law allow for any form of provocation to be a full or partial defence to a claim of assault.

PART C: FINALISTS BRIEFS

A. WRITTEN BRIEF FOR PALLADIA

AGENTS:

Ms. Ioana Cristoiu, Mr. Nathanael Horsley, Mr. Taras Ploshchansky (University of Leiden, The Netherlands)

ARGUMENT

I. ZIRCONIA IS RESPONSIBLE FOR THE ACTIONS OF MS. BASINSKA ON BOARD OUTPOST ONE IN CAUSING PHYSICAL INJURY TO MR. TOUSSAINT AND SUBSEQUENT FINANCIAL LOSS SUFFERED BY ORBITAL OUTPOST AS A RESULT OF MR. TOUSSAINT NOT BEING ABLE TO CONDUCT THE SCIENTIFIC EXPIREMENTS AS REQUIRED.

General principles of international law, as interpreted and applied through the *corpus iuris spatialis*, demand that Zirconia be held responsible for the assault on Mr. Toussaint. According to Article 1 of the ILC draft articles, every internationally wrongful act of a State entails the international responsibility of that State.[1] An internationally wrongful act is established when it is (a) attributable to the State under international law and (b) constituting a breach of an international obligation of the State.[2]

In Article VI of the Outer Space Treaty, States Parties have assumed direct responsibility for all actions of their nationals in outer space.[3] Thus, regardless of whether Ms. Basinska was acting as an agent of the State, Zirconia has assumed responsibility for her actions in outer space. Zirconia is responsible for several internationally wrongful acts. An unprovoked assault on a foreign citizen breaches the fundamental obligations to avoid causing harm to other States derived from the maxim *sic utere tuo ut alienum non laedas*.[4]

The assault was also in breach of the obligation to carry out national activities in conformity with the provisions of the Outer Space Treaty. Furthermore, the actions of Palladia, and of the station commander, did not breach any international obligation and were appropriate under the circumstances. Pursuant to established principles of international law governing reparations and the *corpus iuris spatialis*, all the financial loss suffered by Outpost One is recoverable from Zirconia.

A. UNDER ARTICLE VI OF THE OUTER SPACE TREATY ZIRCONIA HAS ASSUMED RESPONSIBILITY FOR THE ACTIONS OF ITS NATIONALS

The Outer Space Treaty is the starting point for all discussion of State responsibility over space activities. Article VI OST provides that a State "shall bear international responsibility for national activities in outer space [...] whether such activities are carried on by governmental agencies or by non-governmental entities, and for assuring that national activities are carried out in conformity with the provisions set forth in the present Treaty." This has been interpreted to mean that the functional link between the individual and the internationally responsible State is that of nationality.[5] The accepted practice of states and the teachings of the most highly qualified publicists in the field confirm that States acknowledge responsibility for the actions of their nationals in outer space.

While the *lex generalis* rule of international law is that a State will only be held responsible for the acts of its organs and agents, the majority of States, including both parties to this dispute, have expressly adopted a *lex specialis* regime governing State responsibility for space activities.[6] Under Article VI OST, States parties have assumed direct responsibility for acts that would normally not be attributable to them, specifically, private space activities.[7] Additional

---

[1] The International Law Commission's Draft Articles on Responsibility of States for International Wrongful Acts, U.N. Doc. No. A/56/10 (2001) (reflecting customary international law).

[2] *Id.*, ILC draft articles, art. 2.

[3] Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies, Jan. 27, 1967, 18 U.S.T. 2410, 610 U.N.T.S. 205 [hereinafter Outer Space Treaty or OST]; *See* Bin Cheng, *International Responsibility and Liability For Launch Activities*, 6 AIR & SPACE L.297, 301 (1995).

[4] "Use the property so as to do no harm to others." Sompong Sucharitkul, *State Responsibility and International Liability under International Law*, 18 LOY. L.A. INT'L & COMP.L.J. 829, 824-827 (1996).

[5] K. TATSUZAWA, LEGAL ASPECTS OF SPACE COMMERCIALIZATION 124 (1992).

[6] *See* ILC draft articles, *supra* note 1, ch. II; Cheng, *supra* note 3, at 301-2.

[7] *See also* Cheng, *supra* note 3, at 301-2; Gordon A. Christenson, *Attributing Acts of Omission to the State*, 12 MICH. J. INT'L L. 312, fns. 194,195 (1991).

evidence of this is found in Article XI OST, where State duties are triggered by the activities of the State or its nationals. Furthermore, an examination of the *travaux préparatoires* shows that the intent of the parties to the Outer Space Treaty was to allow private space activities only under the compromise whereby national governments would assume responsibility for non-governmental activity.[8]

Additionally, the practice of States is to assume responsibility for their nationals. Under the International Space Station Intergovernmental Agreement, the partner States are responsible for ensuring that their nationals abide by the Crew Code of Conduct.[9] There was a similar assumption of responsibility for nationals in the US-ESRO agreement concerning activities aboard the Spacelab.[10] These agreements are relevant both in that they show the practice of state, but they also are designed to reflect the way in which the space faring nations interpret the *corpus iuris spatialis*. The Partner States in forming the ISS IGA specifically made it subject to the existing space treaties.[11] The States also stated that nothing in the agreement other than the liability waiver regime should be interpreted as modifying their rights or duties under the existing treaties.[12] The ISS IGA thus shows what the majority of the space faring nations of the world consider to be the duties of a State under the Outer Space Treaty. The IGA is uniquely useful in this case as it is the most specific and comprehensive international agreement applying the *corpus iuris spatialis* to the area of manned space station operations.

Furthermore, the overwhelming majority of national licensing regimes demonstrate that States feel the need to authorise all space activities involving their nationals, wherever they are carried out.[13] This is particularly relevant in that licensing is the primary method by which States carry out their duty to authorise and supervise private space activities under Article VI,[14] and is thus "subsequent practice in the application of the treaty which establishes the agreement of the parties regarding its interpretation."[15]

Responsibility for Ms. Basinska's assault is thus directly attributable to Zirconia.

B. PURSUANT TO ARTICLE III OF THE OUTER SPACE TREATY AND GENERAL PRINCIPLES OF INTERNATIONAL LAW, THE UNPROVOKED ASSAULT ON MR. TOUSSAINT WAS AN INTERNATIONALLY WRONGFUL ACT

While the Outer Space Treaty's discussion of responsibility is limited, Article III OST describes one obligation for which States are responsible. States must carry on activities in outer space "in accordance with international law, including the Charter of the United Nations, in the interest of maintaining international peace and security and promoting international co-operation and understanding." The unprovoked assault of a Palladian by a Zirconian national directly violated Zirconia's obligation under Article III OST. The assault was also in direct violation of international obligations to maintain international peace and security.

Furthermore, the assault constitutes a breach of a fundamental principle of international

---

[8] *See* The Declaration of Soviet delegate Fedorenko at the 13th Sept., 1963 session for the Legal Subcommittee of the Space Commission (A/AC, 105/PV. 22); *See also* ANDREW J. YOUNG, LAW AND POLICY IN THE SPACE STATIONS ERA 148 (1989); ANDREW G. HALEY, SPACE LAW AND GOVERNMENT 232 (1963).

[9] Agreement among the Government of Canada, Governments of Member States of the European Space Agency, the Government of Japan, the Government of the Russian Federation, and the Government of the United States of America Concerning Cooperation on the Civil International Space Station, Jan. 29, 1998, Temp. St. Dep't No. 01-52, CTIA No. 10073.000 (entered into force Mar. 27, 2001), art. 11 [hereinafter ISS IGA].

[10] *See* Arrangement between the Government for the United States of America and certain Governments, Members of the European Space Research Organisation, for a Cooperative Programme Concerning Development, Procurement and Use of a Space Laboratory in Conjunction with the Space Shuttle System, BGB1. 1975 II, 1302 ff.;ESRO/C(73) 46 rev. 1. *in* SPACE STATIONS: LEGAL ASPECTS OF SCIENTIFIC AND COMMERCIAL USE IN A FRAMEWORK OF TRANSATLANTIC COOPERATION, (ed. Karl-Heinz Bö.ckstiegel) 239 (1985).

[11] ISS IGA, *supra* note 9, art. 2.

[12] *Id.*

[13] *Review of the concept of the launching State, Report of the Secretariat*, UNCOPUOS, U.N. Doc. No. A/AC.105/768 (2002); *See e.g.* Australia Space Activities Act 1998 (No. 123) part 1, div. 3; Law of the Russian Federation, About Space Activity, Decree No 104, art. 9(2); Space Affairs Act, 1993, Statutes of the Republic of South Africa - Trade and Industry No.84 of 1993, art. 1; Outer Space Act, 1986, ch. 38, § 1 (U.K.); Ordinance of the Supreme Soviet of Ukraine on Space Activity of 15 November 1996, art. 10; Commercial Space Launch Act, 49 U.S.C. 701, 70104 (U.S.A.).

[14] *See e.g.* Commercial Space Launch Act, 49 U.S.C. 701, 70101(7) (U.S.A.); *See also* Peter P.C. Haanappel, *Possible Models for Specific Space Agreements*, in SPACE STATIONS: LEGAL ASPECTS OF SCIENTIFIC AND COMMERCIAL USE IN A FRAMEWORK OF TRANSATLANTIC COOPERATION 63 (Karl-Heinz Bö.ckstiegel ed.,1985).

[15] Vienna Convention on the Law of Treaties, May 23, 1969, art. 31(3), 8 I.L.M., 1155 U.N.T.S. 331.

law; that a State should "use [its] property in such a way as not to harm others."[16] This principle derives from the Roman law and has been systematically recognized ever since.[17] Specific applications of the rule are found in the Trail Smelter Arbitration, the Corfu Channel Case, the Lake Lanoux Arbitration, and the Settlement of Gut Dam Claims.[18] While these cases include broader applications of the rule, it is clear that they all are based on the basic rule requiring States to avoid causing harm to others. The assault on Mr. Toussaint caused substantial harm to the person and property of Palladia. The assault was thus in violation of Zirconia's international obligations.

There is no indication that Ms. Basinska risked being victimised immediately prior to her assault on Mr. Toussaint, or that she feared further contact with Mr. Toussaint. To the contrary, Ms. Basinska actively sought out Mr. Toussaint in response to what she perceived as prior objectionable conduct. Neither State party to this dispute recognises provocation as a justification for assault. Furthermore, the commander acts as both the head of the station and law enforcement official.[19] The chain of command aboard a space station is critical for ensuring the safety of all persons aboard, both in times of crisis and in more mundane matters. By interfering with the rightful chain of command, Zirconia has ignored Palladia's sovereign rights, and violated its international obligations.

C. PALLADIA DID NOT BREACH ANY DUTY UNDER INTERNATIONAL LAW

Zirconia is solely responsible for the losses suffered by Outpost One in that Palladia did not breach any duty under international law. Given the broad discretion awarded to a spacecraft commander under international law, the commander's actions cannot be said to have breached any international obligation. Furthermore, the commander's actions were the most functional means of maintaining the welfare of all aboard and were carried out in good faith.

The International Space Station Code of Conduct provides useful insight regarding the authority of a station commander. Given that over half the space faring nations of the world are involved, the ISS Code of Conduct is indicative of current international practice.[20] The ISS COC shows that the general practice among space faring nations is to delegate broad discretion to the station commander in deciding how to ensure safety on board.[21]

This practice is in accordance with the role of the commander in international air law. Under Annex 2 of the Chicago Convention, the commander has "final authority as to the disposition of the aircraft while he is in command."[22] Similarly, the Tokyo Convention on Offences and Certain other Acts Committed Onboard Aircraft delegates broad discretion to the commander.[23]

The commander is under absolutely no duty to take immediate retributive action every time a passenger brings up a complaint. Regardless of Ms. Basinska's opinion of the situation, the commander had the final authority to decide what should be done. In an environment when even small mistakes can be fatal and teamwork is the difference between life and death, it is imperative for the safety of all concerned that this clear chain of command be respected.

The commander here acted appropriately and within his authority when presented with Ms. Basinska's complaint. Respecting the highly trained and methodically selected nature of all crewmembers aboard Outpost One, it would be prohibitively expensive and counterproductive to punish a crewmember merely on the basis of a passenger's unproven accusation. If it were even possible to isolate Mr. Toussaint in the cramped conditions of a space station, losing a crewmember would threaten the rest of the crew in case of an

---

[16] *See* Sucharitkul, *supra* note 4, at 829.

[17] *Id.*

[18] Trail Smelter (U.S. v. Can.), 3 R.I.A.A. 1905 (1938 & 1941); Lake Lanoux Arbitration (Fr. v. Spain), 24 I.L.R. 101 (1957); Corfu Channel Case (UK v. Alb.), 1949 I.C.J. 4 (Apr. 9); Settlement of the Gut Dam Claims (U.S. v. Can.), 8 I.L.M. 118 (1969).

[19] *See* discussion of the role of the station commander, infra § I(C).

[20] *See* ISS IGA, *supra* note 9, art. 2.

[21] Code of Conduct for the International Space Station Crew, reprinted in 14 C.F.R § 1214.403 (2000). *See also, e.g.*, Law of the Russian Federation, About Space Activity, Decree No 104, art. 20(3) ("The commander of a crew of a piloted space object of the Russian Federation shall be vested with all completeness of authority, necessary for realization of the space flight, for management of crew and other persons, participating in the flight.").

[22] Convention on International Civil Aviation, Dec. 7, 1944, Annex 2, 15 U.N.T.S. 295.
While the Annexes to the Chicago Convention are not binding in themselves, they are followed closely by the States Parties to the Convention and are strong evidence of customary international law.

[23] Tokyo Convention on Offences and Certain Other Acts Committed on Board Aircraft, Sept. 14, 1963, ch. III, 20 U.S.T. 2941, 704 U.N.T.S. 219.

emergency and would cause substantial economic damage due to lost experiments. Furthermore, taking aggressive punitive action based merely on accusations by a passenger would create an atmosphere of fear and mistrust among the crew that would threaten the safety of all aboard. The commander's good faith performance of his duties fully satisfied all relevant international obligations.

D. THE FINANCIAL LOSSES SUFFERED BY OUTPOST ONE ARE RECOVERABLE FROM ZIRCONIA

Zirconia has a duty to restore Palladia's citizens to the State they were in before the illegal assault by a Zirconian national. It is a principle of international law that the breach of an obligation involves a duty to make reparations in adequate form.[24] The general rule as stated in the Chorzow Factory case requires that reparations "re-establish the situation which would, in all probability, have existed if that act had not been committed." In cases where *restitutio in integrum* is not possible, monetary reparations are still appropriate. This includes the payment of indirect damages such as economic loss, to the extent that the amount is not speculative.[25] In the words of the United States-German Mixed Claims Commission, "it does not matter whether the loss be directly or indirectly sustained so long as there is a clear unbroken connection" between the act of the state and the loss of injured party.[26]

If a Zirconian national had not assaulted Mr. Toussaint, he would have been able to fulfill Orbital Outpost's contract obligations. This is the "clear unbroken connection" required to recover economic loss. Specifically, Orbital Outpost lost access to a critical crewmember, which naturally and foreseeably caused the loss of revenue from several experiments that it was bound by contract to perform. This very type of damage was ruled to be recoverable in the case of Montijo, where the court awarded damages resulting from the lost use of a steamer when an outstanding business contract existed.[27] Furthermore, the amount that Orbital Outpost will loose because the assault impeded its ability to meet its existing contract obligations is easily identifiable, and so cannot qualify as speculative. There can be no doubt that according to accepted international law, the loss suffered by Outpost One is fully recoverable from Zirconia.

II. ZIRCONIA IS RESPONSIBLE AND LIABLE FOR THE DAMAGE TO THE GLOVEBOX FACILITY AND THE RESULTING FINANCIAL LOSS TO ORBITAL OUTPOST

A. ZIRCONIA IS RESPONSIBLE UNDER THE ARTICLE VI OF THE OUTER SPACE TREATY.

Article VI of the OST lays down three separate obligations incumbent upon the States Parties to the Treaty. First, that States shall bear international responsibility for national activities in outer space. Second, that States must ensure national activities are carried out in conformity with the provisions set forth in the OST. Third, that States, through the appropriate State Party, must subject the activities of non-governmental entities in outer space to authorisation and continuous supervision. Authorisation and control can be done through various mechanisms. They are State obligations which apply to any kind of space activity, as long as they are performed either by natural or legal persons. Albeit, the Outer Space Treaty does not oblige States Parties to establish a specific licensing regime, it is clear that Zirconia has applied no regulatory mechanism related to space activities.

Zirconia breached its duty to authorise and supervise private Zirconian activities in outer space. This failure to authorise and supervise caused significant losses to Palladian nationals. As Zirconia has assumed responsibility for private actors under Article VI, Zirconia is bound by a duty to compensate Palladia for its losses.

1. ZIRCONIA IS RESPONSIBLE FOR MS. BASINSKA'S FLIGHT AS A NATIONAL ACTIVITY IN OUTER SPACE

a) The flight of Ms. Basinska is a space activity

As an activity "at least taking part in outer space"[28] the flight of Ms. Basinska is a space activity. Most national space laws apply to space activities or activities in outer space and typically

---

[24] Chorzow Factory (Ger. v. Pol.), 1928 P.C.I.J. (Ser. A) No. 17 (July 26).

[25] CARL CHRISTOL, MODERN INTERNATIONAL LAW OF OUTER SPACE 70 (1982).

[26] Administrative Decision No.II, 7 R.I.A.A. 23, 29-30 (United States-German Mixed Claims Comm'n 1923); *See also*, B. HURWITZ, STATE LIABILITY FOR OUTER SPACE ACTIVITIES 16-17 (1992).

[27] *See* MARJORIE M. WHITEMAN, 3 DAMAGES IN INTERNATIONAL LAW 1721-22 n. 392 (1943).

[28] B. Cheng, *The Commercial Development of Space: The Need for New Tre*aties, J. SPACE L. 22 (1991).

list a few specific type of space activities which fall under the scope of the law.

Evidence of State practice is a part of customary international law. Existing national laws adopted to reflect international obligations under the *corpus iuris spatialis* provide such definition for the purposes of national activities in outer space. The approach taken in these national laws serve as a guideline as to what the term means. Indeed, when necessary, an international tribunal will consider the provisions of municipal laws[29] and the relevant concept of domestic legal system.[30] The Brazilian Loans Case also provided that the evidence of national laws may be important in determining the conduct of a State.[31]

Activities listed within the definition of space activities include operation of a launch site or re-entry site, activities entirely within outer space, space research, design and application technology and operation of a space technology.

The Russian Federation Law on Space activities describes space activities as any "activity directly and immediately connected with operations to explore and use of outer space."[32] According to this legislation, the main areas of space activities include not only space research, launching of objects in outer space, but also the manned space missions and "all other types of activities performed with the aid of space technology." The Law of Ukraine on Space Activities characterises space activities as a "scientific space researches, constructions and applications of space engineering and use of outer space.[33] The Swedish Act on Space activities applies to all activities in outer space.[34] The UK Outer Space Act applies, not only to the launching or procuring of launching but to "any activity in outer space."[35]

Therefore, Palladia contends that the flight of Ms. Basinska is a space activity, as this flight is an activity performed with the aid of space technology and as an activity of use of the outer space.

b) The flight of Ms. Basinska is a national activity of Zirconia

Unfortunately, there is no definition of "national activities" found in either Article VI OST or other international legal documents. National activities are activities by whomsoever carried within the jurisdiction of a State, including personal jurisdiction territorial and quasi-territorial jurisdiction.[36] As an exception to the general rule of international public law, under the terms of Article VI OST, States are responsible to the same extent for private national activities as they are for public national activities.[37] Consequently, Zirconian national activities are the activities undertaken by nationals of Zirconia and the activities undertaken from the territory of Zirconia.

Both Ms. Basinska and ZTC are nationals of Zirconia. ZTC is owned entirely by Zirconian interests and is registered in Zirconia. According to the accepted rule of international law, a company is considered to be a national of the State in which it is incorporated.[38] ZTC is thus a national of Zirconia. Although ZTC is registered as a television broadcaster, selecting and sending Ms. Basinska into outer space made it subject to government responsibility. By concluding the contract for Ms. Basinska's launch and the experiments onboard Outpost One, ZTC assumed a role in space activities. Pursuant to Article VI OST, Zirconia is responsible for the activities of ZTC and Ms. Basinska in outer space.

2. ZIRCONIA IS AN "APPROPRIATE STATE" FOR THE PURPOSES OF THE OUTER SPACE TREATY

The notion of "appropriate state" is not well defined either by the provisions of international space law. The appropriate State who has to authorise and continuously supervise activities undertaken by non-governmental entities, could be, but is not necessarily, the same State as the launching State or the State of registry.[39] "The notion is sufficiently vague and flexible to allow

[29] Nottebohm, 1955 I.C.J. at 5.
[30] Barcelona Traction, Light and Power Co. (1970) I.C.J. (second phase).
[31] Brazilian Loans (France v. Brazil), 1929 P.I.C.J.
[32] Russian Federation Law on Space Activities (Federal Law No. 5663, as amended by Federal Law No. 147-F3 of 29 November 1996), article 2.
[33] Law of Ukraine on Space activities, 1996, article 1.
[34] Swedish Act on Space Activities (1982:963), section 1.
[35] UK Outer Space Act 1986, section 1.
[36] BIN CHENG, STUDIES IN INTERNATIONAL SPACE LAW 607 (1997).
[37] Frans G. von der Dunk, *Liability versus Responsibility in Space Law: Misconception or Misconstruction?*, 35 I.I.S.L. PROC. 367 (1992).
[38] Barcelona Traction (Belg. v. Spain), 1970 I.C.J. 3, 42 (Merits) (Feb. 5).
[39] PETER P.C. HAANAPPEL, THE LAW AND POLICY OF AIR SPACE AND OUTER SPACE: A COMPARATIVE APPROACH 57 (2003).

several interpretations."[40] The appropriate State is the State where the private company carrying on space activities has its principal place of business, the State under which laws the company is incorporated or the State where the production of instruments takes place.[41] But as regards to Article VI OST, only one State is the appropriate State as the term is used in its singular form.

The Declaration of Legal Principles of 1963 provides that the authorisation and continuing supervision of non-governmental activities shall be exercised by the "State concerned."[42] The term "concerned" refers to the State being internationally responsible and it confirms the close relationship between the international responsibility and the jurisdiction to be exercised by the State in the form of authorisation and continuing supervision. Consequently, the appropriate State is the State who has effective control, who can exercise its jurisdiction over the private company carrying on space activities. ZTC is a private company incorporated and having its principal of business in Zirconia. Zirconia is the only State with jurisdiction and control over ZTC and is thus the appropriate State to supervise its activities under Article VI of the OST.

3. ZIRCONIA HAS BREACHED ITS INTERNATIONAL OBLIGATION OF AUTHORISATION AND SUPERVISION

a) Zirconia is responsible for the selection of Ms. Basinska

The formulation of the duty to authorise and continuously supervise found in Article VI OST is broadly stated. It is thus necessary to look into the purposes and practices that illustrate the specific duties associated with the general duty to authorise and supervise.[43] In order to ensure the safety of all persons involved in space activities and protect their property interests, States have adopted a system of licensing to implement the duties created under Article VI OST. In particular, States have indicated that they feel required to supervise the selection of spaceflight participants, and ensure that private entities engaging in space activities are financially capable of compensating any victims of their activities. Zirconia failed in both of these obligations.

Zirconia is responsible for the negligent selection of Ms. Basinska as ZTC had exclusive control over the selection of Ms Basinska. The hazardous nature of space activities requires specific criteria for the selection and qualification of persons carrying out activities in outer space. As a spaceflight participant, Zirconia is responsible for Ms. Basinska's selection and for ensuring that all reasonable and specific criteria have been respected.[44]

Pursuant the principles regarding crew selection established by the ISS Multilateral Crew Operations Panel, a number of specific criteria should have been met for Ms. Basinska's selection in order to guarantee her behaviour onboard Outpost One and prevent any future and foreseeable damage caused by her acts:

- *Ms. Basinska's general suitability.* ZTC should have assessed Ms. Basinska past and future conduct in order to predict her probable future actions that may adversely impact the Outpost One programme;
- *Ms. Basinska's behavioural suitability.* ZTC should have ensured that Ms. Basinska had the interpersonal and communication skills necessary to function as a successful member of a flight team and had the ability to demonstrate situational awareness to conduct herself effectively in the space environment;
- *Ms. Basinska's understanding* of the provisions of the Code of Conduct. ZTC should have ensured that Ms. Basinska would "protect and conserve" all property to which she had access on board Outpost One.[45] By exercising its right to provide a crewmember, ZTC should have ensured that its crewmember should have observed the Code of Conduct of Outpost One.

The Multilateral Crew Selection Criteria is particularly relevant here in that it was developed

[40] *See* K-H. Bö.ckstiegel, *The term "Appropriate State" in International Space Law*, 37 I.I.S.L. PROC. 79 (1994); *See also* V. KAYSER, LAUNCHING SPACE OBJECTS: ISSUES OF LIABILITY AND FUTURE PROSPECTS 40 (2001).

[41] HAANAPPEL, *supra* note 39, at 60.

[42] The Declaration of Legal Principles Governing the Activities of States in the Exploration and Uses of Outer Space, G.A. Res. 1962, princ. 5, 18 U.N. GAOR Supp. No. 15, U.N. Doc. A/5515 (1963).

[43] I.C.J. STATUTES, art. 38.

[44] Principles Regarding Processes and Criteria for Selection, Assignment, Training and certification of ISS (Expedition and Visiting) Crewmembers, Multilateral Crew Operations Panel, November 2001, Revision A1, *available at* http://ravel.esrin.esa.it/docs /isscrewcriteria.pdf, at I [hereinafter Multilateral Crew Selection Criteria].

[45] Id. at pt. II (B).

in response to the issue of space tourism.[46] Most space faring nations, and all nations yet faced with the issue of space tourism, have thus declared that they feel bound by a duty to ensure the psychological and physical suitability of all persons they authorise to board a space station. The reason for this is twofold. The need to ensure the suitability of persons in space is one implication of State responsibility for their nationals. It also shows that States recognise that space is a dangerous environment where any one person can endanger everyone involved, damage billions in property and threaten international relations on a broader level. A space flight passenger is subject to stress they have never experienced before. Space travel is unlike any previous form of tourism.[47] None of the generally accepted criteria for crew selection were respected by the selection procedures of Ms. Basinska. As a result, Zirconia is directly responsible for a breach of its obligations under Article VI OST.

b) Zirconia is responsible for the voluntarily bankruptcy of ZTC

Zirconia is also responsible for the voluntarily bankruptcy of ZTC. As the "appropriate State" in regards to ZTC, Zirconia has the obligation to exercise authorisation and continuous supervision over ZTC activities involving outer space. The customary interpretation of this general duty is that it requires a State to monitor private activities in outer space through licensing legislation.[48] The regulations to authorise and supervise space activities should include requirements respective to the safety and security of an activity and the financial capability of the owner of an authorisation.[49] For example, by declaring bankruptcy a company could absolve itself from the necessity of compensating persons suffering injury or damage as a result of its activities.

This practice can be seen in the licensing regimes of those States who have enacted national rules governing space. This includes a diverse group of nations including Australia, Brazil, Russia, South Africa, the U.K., the Ukraine and the U.S.A.[50] For example, under Russian Federation law, organisations and citizens who use space technology are required to take out compulsory insurance coverage for the life and health of cosmonauts and personnel of space infrastructure facilities.[51] In the U.K., a licence for space activities is conditioned upon requiring the licensee to insure himself against liability incurred in respect of damage and loss suffered by third parties as a result of the activities authorised by the licence.[52] While the specific method of ensuring the financial solvency of private entities engaging in space activities differs from nation to nation, it is clear that States feel bound to authorise private activities only when there is some guarantee that the private company can meet its financial obligations. Consequently, a State is under a duty to require any person or corporation involved in space activities to demonstrate financial responsibility and sufficient funding to compensate the victims.

Zirconia as an appropriate State did not provide authorisation and continuing supervision on the outer space activities of ZTC. Zirconia did not guarantee the financial capability of ZTC and did not take all the reasonable measures to prevent ZTC voluntarily bankruptcy. Zirconia, in making provisions for the licensing and control of ZTC space activities, should have required the latter to take out adequate insurance and to impose upon it the duty to indemnify the victim of any probable damage. The voluntarily bankruptcy of ZTC confirms the failure of Zirconia under its obligations of authorisation, and supervising non-governmental national activities in outer space.

---

[46] After Mr. Dennis Tito's flight on board the Shuttle Soyuz to the ISS made on April 30th 2001, the Multilateral Coordination Board (MCB) stated that Partner States should commit to not suggesting further flights for non-professional subjects until the criteria for selecting crew members were definite and adopted by all partners. The final decision was made after months of negotiations and MCB agreed to a common regulation applicable to the commercial branch of space tourism.

[47] Richard Scott, *Policy/Legal Framework for Space Tourism Regulations*, J. SPACE L. 28, 3 (2000).

[48] *See e.g.* Commercial Space Launch Act, 49 U.S.C. 701, 70101(7) (U.S.A.); *See also* Haanappel, *supra* note 14, at 63.

[49] *See* M. Gerhard & K.U. Schrögl, *Working Group on National Space Legislations, in* PROJECT 2001 DRAFT REPORT: LEGAL FRAMEWORK FOR THE COMMERCIAL USE OF OUTER SPACE (2001).

[50] *See* Australia Space Activities Act 1998 (No. 123) part 3, div. 7; Ministry of Science and Technology, Brazilian Space Agency Administrative Edict N. 27 of June 20th, 2001, ch. II; Law of the Russian Federation, About Space Activity, Decree No 104, art. 25; Space Affairs Act, 1993, Statutes of the Republic of South Africa - Trade and Industry No.84 of 1993, art. 14; Outer Space Act, 1986, ch. 38, § 5(f) (U.K.); Ordinance of the Supreme Soviet of Ukraine on Space Activity of 15 November 1996, art. 24; Commercial Space Launch Act, 49 U.S.C. 701, 70112 (U.S.A.). Full texts of all these laws may be found at http://www.oosa.un.org.

[51] Law of the Russian Federation, About Space Activity, Decree No 104, art. 25.

[52] U.K. Outer Space Act, 1986, c. 38, § 5(f).

Zirconia is responsible for the consequences of its breach of international obligations and will have to provide reparations.[53]

B. ZIRCONIA IS LIABLE UNDER ARTICLE VI OF THE OUTER SPACE TREATY

The law of responsibility is concerned with the incidence and consequences of illegal acts and particularly the compensation of damages. Under international law, especially when actual harm or damage has occurred, the State is obliged to make full reparation for the consequences of its breach provided that these are not too remote or indirect.[54] According to the Chorzow Factory Case, "[i]t is a principle of international law that the breach of an engagement involves a duty to make reparation in an adequate form. Reparation therefore is the indispensable complement of a failure to apply the convention and there is no necessity for this to be stated in the convention itself."[55] All rights of an international character involve international responsibility and if the obligation is not met, responsibility entails the duty to make reparation.[56]

A breach of an international obligation can be repaired theoretically in three ways: *restitutio in integrum*, compensation, usually in monetary form and satisfaction usually by the way of official apologies. In the case of compensation, international responsibility entails liability and damages still need to be paid in the case of State activities. Not only, as a consequence of established liability, but also as a compensation for an internationally wrongful act.[57]

While the concepts of responsibility and liability seem distinct, no such distinction is established under the provisions of Articles VI and VII OST. It is, however, still possible for States to claim damages under the provisions of the international responsibility of Article VI OST in cases where they cannot do so under the provisions of the international liability provided by the Article VII OST and the LC.[58]

The failure of Zirconia to authorise and supervise by means of appropriate national regulations the activities of ZTC is a violation of Article VI OST.

Damage is an indispensable element for liability to arise. If damage is caused and a clear causal connection can be established between the damage and the absence of appropriate national regulation, the State will be liable.[59] Ms. Basinska caused damage to the Glovebox facility and substantial financial loss to Orbital Outpost who must replace the whole space module.

ZTC as the responsible entity for Ms. Basinska's selection, failed in its obligations to observe reasonable care in the selection. Moreover, the Glovebox experiment required a low level of skill, and therefore Zirconia cannot argue in any way that it was the responsibility of the Palladian commander of Outpost One. There is a clear causal link between the lack of Zirconian space regulation and the damage caused by Ms. Basinska to Outpost One. There is clear link between her selection and the damage.

Consequently, Zirconia being in breach of the international obligations provided by Article VI OST, and considering that this breach resulted in the damage caused to Outpost One and to Glovebox module, Zirconia should compensate for the damage incurred.

III. THE PROHIBITION PLACED BY PALLADIA ON FURTHER TOURIST FLIGHTS TO OUTPOST ONE BY ZIRCONIAN NATIONALS WAS NOT CONTRARY TO INTERNATIONAL LAW

The starting point for considering the duties of States is that international law presumes freedom of action, unless there is a rule constraining this freedom.[60] There is no duty

---

[53] *See* Gerhard & Schrögl, supra note 49.

[54] James Crawford & S .Olleson, *The Nature and Forms of International Responsibility, in* INTERNATIONAL LAW 466 (Malcolm D. Evans ed., 2003).

[55] Chorzow Factory (Ger. v. Pol.), 1928 P.C.I.J. (Ser. A) No. 17, 21 (July 26).

[56] *Id.*; Spanish Zone of Morocco (U.K. v. Spain), 2 R.I.A.A. 615, 641 (1925); *See also* IAN BROWNLIE, PRINCIPLES OF PUBLIC INTERNATIONAL LAW 421 (6th ed., Oxford University Press, 2003).

[57] Von der Dunk, *supra* note 37, at 365.

[58] *Id.*, at 368.

[59] Peter van Fenema, *Unidroit Space Protocol, the Concept of 'Launching State', Space Traffic Management and the Delimitation of Outer Space*, 4 AIR & SPACE L. 266, 278 (2002).

[60] *See* Draft Declaration on the Rights and Duties of States, 1 Y.B. Int'l L. Comm'n 287, U.N. Doc. No. A/CN.4/SER.A/1949; Island of Palmas Case (Neth. v. U.S.), 2 R.I.A.A. 829, 838 (Perm. Ct. Arb. 1928) (noting that independence as to territory is "the right to exercise therein to the exclusion of any other state, the functions of a state"); The S.S. "Lotus" (Fr. v. Turk.), 1927 P.C.I.J., (Ser. A) No. 10, p.18 (Sept. 7) (declaring "restrictions upon the independence of states cannot therefore be presumed"); Military and Paramilitary Activities (Nicar. V. U.S.), 1986 I.C.J. 14 (June 27) ("in international law there are no rules, other than such rules as may be accepted by the states concerned, by treaty or otherwise..."); Legality of the threat or use of nuclear

recognised by international law which constrains Palladia's freedom to decide which tourists may visit Outpost One. Restrictions on Palladia's ability to control the commercial uses of Outpost One would contravene Palladia's right to explore and use outer space.[61] Furthermore, such a duty would violate accepted notions of international law, as applied by the Outer Space Treaty, which guarantees the right to exclusive jurisdiction and control over spacecraft in outer space.[62] There is no indication that the custom and monetary union between Palladia and Zirconia includes any provision relative to space tourist access.[63] Even if there is some duty to allow uniform space tourist access, the decision to limit Zirconian nationals to Outpost One can be viewed as a justified and proportionate countermeasure under international law.[64]

A. INTERNATIONAL LAW CONTAINS NO DUTY TO ALLOW UNLIMITED TOURIST ACCESS IN SPACE

Palladia is under no duty to allow tourist access from Zirconia. While there is a duty to allow access to facilities on the Moon, no similar duty exists as to facilities in orbit.[65] Furthermore, the descriptive clauses in Article I OST cannot be read as implying an equitable duty to provide launch services or orbital habitation space.

Accounting for the plain meaning of Article I OST, the meaning attributed to it during the negotiation process, the customary interpretation demonstrated by the practice of States, and the meaning assigned by publicists, the free access and use provisions of Article I para 2 only describe the right of all States to engage in the use of space.[66] The equality and non-discrimination principles found in Article I OST were never presumed to create a duty to provide immediate access to space for all people, but rather were meant to ensure that all people exploring and using space would bear the same duties and rights.[67]

Palladia's decision does not block equal access. Zirconia still has its equal right to explore and use outer space by launching a station, purchasing the launch of a station, or even sending qualified government visitors to Outpost One. Allowing exclusive use of a space the size of Outpost One does not impose on Zirconia's right to explore and use outer space.

If the equality and non-discrimination clause of Article I OST does create independent rights, then a decision imposing a duty to transport tourists to outer space on Palladia would itself be in violation of Article I OST. Allowing States without space stations to explore and use space without being subject to a duty to provide housing for tourists while imposing such a duty on States with stations would selectively place duties on some States based on their level of economic development; precisely what Article I OST was designed to prevent.

Similarly, the clause in Article I OST indicating that the use of space should be "for the benefit and in the interests of all countries" only states a general principle without creating a specific duty.[68]

Articles 2 and 4 of the UN Declaration on International Cooperation in the Exploration and Use of Outer Space for the Benefit and in the Interest of all States, Taking into Particular Account the Needs of Developing Countries leave no doubt that States are free to choose which States they cooperate with in a particular space activity.[69] States are also free to cooperate only on the governmental level, to the exclusion of commercial cooperation.[70] While the Declaration does not have the binding force of a Treaty, it has significant value in determining customary international law in that it is a product of the consensus adoption procedure of UNCOPUOS and has been adopted

---

weapons (Advisory Opinion), 1996 I.C.J. 226 ("State practice shows that the illegality of the use of certain weapons as such does not result from an absence of authorization but, on the contrary, is formulated in terms of prohibition"); *See also* MALCOLM N. SHAW, INTERNATIONAL LAW 150 (4th ed. Cambridge University Press 1997).

[61] Art. I OST.

[62] Art. VIII OST.

[63] *See generally*, Manfred Lachs Space Law Moot Court Competition 2004 Statement of Facts.

[64] ILC draft arts., *supra* note 1, arts. 49-54.

[65] Arts. I, XII OST.

[66] CHRISTOL, *supra* note 25, at 42.

[67] *Id.*

[68] CHRISTOL, *supra* note 25, at 41-45; CHENG, *supra* note 36 at 404.

[69] The Declaration on International Cooperation in the Exploration and Use of Outer Space for the Benefit and in the Interest of All States, Taking into Particular Account the Needs of Developing Countries, G.A. Res. 51/122, art. 2, U.N. Doc. A/AC.105/572/Rev. 1 (1996) ("States are free to determine all aspects of their participation in international cooperation in the exploration and use of outer space on an equitable and mutually acceptable basis.").

[70] *Id.* at art. 4 ("International cooperation should be conducted in the modes that are considered most effective and appropriate by the countries concerned, including, *inter alia*, governmental and non-governmental; commercial and non-commercial; global, multilateral, regional or bilateral; and international cooperation among countries in all levels of development.").

by the UN General Assembly.

Furthermore, it is in the interest of all mankind that the scientific and communications activities aboard Outpost One continue undisturbed. The demonstrated risk presented by unrestricted tourist access is against the interests of all people, and therefore cannot be permitted.

B. THE PROHIBITION WAS A VALID EXERCISE OF JURISDICTION, CONTROL AND OWNERSHIP

While outer space is considered *res communis*, and is thus not subject to appropriation, registered spacecraft are subject to jurisdiction, control, and ownership under Article VIII OST.[71] This reflects the general principle that a State has a right to "full permanent sovereignty, including possession, use and disposal, over all its wealth, natural resources and economic activities."[72] Since there is no agreement creating a special duty to allow access, the presumption under international law is that a State may control access to spacecraft under its jurisdiction.[73]

The UN Principles governing the remote sensing of States confirm the presumption in international law of an exclusive right to the benefits of space activities.[74] The only instance when a State has any right to the benefit of the sensing in when a sensing State potentially impairs the sovereign right of a sensed State to its wealth and natural resources.[75] Thus, the only instance when the sovereign right to wealth produced from space activities is limited is when it will directly interfere with the sovereign rights of another State. Outpost One does not conduct remote sensing, and space tourism does not violate the terrestrial sovereignty of any State. Thus, no State has any right to claim the benefits of Palladia's labour.

The practice of the 189 State members of the ITU in relation to the Geo-stationary orbit confirms that States do not have a duty to share control over space activities with other States. Even though the GSO is officially a limited resource, States still have exclusive jurisdiction and control over their activities in the GSO, and the benefits thereof.[76] The ITU requires that orbital space be allocated taking into consideration both efficient use and equitable access.[77] However, once the space is designated, there is no right to share control over the orbital space used by other States. As both Zirconia and Palladia are members of the ITU, they have both assumed the right to exclusive control over national space activities.

Customary international law also supports the right to exclusive jurisdiction and control over spacecraft. The accepted practice of States is to allow selective access to state territory by setting up immigration control and visa requirements even for temporary tourist access.[78] While spacecraft are not territory in the traditional sense, States do have quasi-territorial jurisdiction and control over them in much the same way that they do ships and aircraft in the area of the high seas, where the rule of exclusive jurisdiction is firmly established.[79] Just as States have a right to control who boards their ships, States also have a right to control who boards their facilities in outer space.[80]

The quasi-territorial nature of jurisdiction over spacecraft has been confirmed by the practice of manned space activities, and in particular on the ISS.[81] Also, when the Russian Space Agency was deciding what to do with the Mir station, a private enterprise was created which entered into a traditional property lease agreement governing the station.[82] The fact that no party questioned the

---

[71] SHAW, *supra* note 60 at 333-35; CHENG, *supra* note 36, at 404.

[72] Charter of Economic Rights and Duties of States, G.A. Res. 3281, U.N. GAOR, 29th Sess., Supp. No. 31, U.N. Doc. No. A/9631, art. 2, para. 1.

[73] *See generally*, Island of Palmas (Neth. v. U.S.), 2 R.I.A.A. 829, 838 (Perm. Ct. Arb. 1928); The S.S. "Lotus" (Fr. v. Turk.), 1927 P.C.I.J., (Ser. A) No. 10, p.18 (Sept. 7); Military and Paramilitary Activities (Nicar. V. U.S.), 1986 I.C.J. 14 (June 27); Legality of the threat or use of nuclear weapons (Advisory Opinion), 1996 I.C.J. 226.

[74] The Principles Relating to Remote Sensing of the Earth from Outer Space, G.A. Res. 65, U.N. GAOR, 41st Sess., Supp. No. 41, U.N. Doc. A/RES/41/65 (1986).

[75] *See Id.*, at Principle XII.

[76] *See* Adrian Copiz, *Scarcity in Space: the International Regulation of Satellites*, 10 COMMLAW CONSPECTUS 207, 216-221 (2002); Susan Cahill, *Give me my Space: Implications for Permitting National Appropriation of the Geostationary Orbit*, 19 WIS. L.J. 231 (2001).

[77] *See* Constitution of the International Telecommunications Union, Oct. 14, 1994, art. 1, S. Treaty Doc. No. 104-34, 1996 WL 569887; *See also Id.*, Copiz.

[78] SHAW, supra note 60, at 354.

[79] CHENG, supra note 36 at 387, 388; Henri A. Wassenbergh, *A Launch and A Space Transportation Law, Separate from Outer Space Law?*, 21 AIR & SPACE L. 28 (1996).

[80] The S.S. "Lotus" (Fr. v. Turk.), 1927 P.C.I.J., (Ser. A) No. 10, p.25 (Sept. 7); *See also*, SHAW, supra note 60 at 422.

[81] *See* ISS IGA, *supra* note 9, arts. 5,6,9 (providing that States have jurisdiction and control over the elements that they register, which should only be subject to specifically agreed limitations).

[82] *See* Kelly M. Zullo, Note, *The Need to Clarify the Status of Property Rights in International Space Law*, 90 GEO. L.J. 2413 (2002) (citing James E. Dunstan, *Toward a Unified Theory of Space Property Rights: Sometimes the Best Way to Predict the Weather is to Look Outside*, 11, Presentation at Space: The Free-Market Frontier: A Cato Institute Conference

validity of the Mir lease demonstrates the international community's acceptance of the ownership rights defined in Article VIII OST.[83]

The decision to halt further tourist access from Zirconia was taken by virtue of Palladia's right to exercise its jurisdiction and control, and should be respected under international law.

C. INTERNATIONAL LAW ALLOWS A STATE TO TAKE JUSTIFIED AND PROPORTIONAL COUNTERMEASURES

Should this Court be of the opinion that there is some basic obligation to provide tourist services in space, the prohibition on Zirconian tourists is still justified as a validly exercised economic countermeasure under customary international law.[84]

There is no clear international obligation to allow nationals of Zirconia to participate in Palladian space flights to Outpost One. The response of Palladia to Zirconia's breach of its international duty described above is a non-forcible measure, i.e. a legitimate act of retorsion. Acts of economic retorsion are based on a State's freedom to trade or not to trade (or deal, more generally) with other States.[85] Palladia responded to Zirconia's breach of its international obligations by an unfriendly act not amounting to a violation of international law.[86]

Zirconia invoked that both States are parties to a custom and monetary union. This Union implies a Treaty based common market, freedom of movement of all factors of production and a non discrimination principle. As stated in the US-French Air Services Arbitration Case of 1978,[87] "if a situation arises, which in one State's view, results in the violation of an international violation by another State, the first State is entitled, within the limits set by general rules of international law, pertaining to the use of armed force, to affirm its rights through *countermeasures*." Moreover, the International Law Commission defined countermeasures as non-forcible measures taken by an injured State in response to a breach in international law in order to secure the end of the breach and, if necessary, reparation. The suspension or temporary non-performance of a treaty obligation or the suspension of a trade agreement are primary examples of counter-measures.[88] According to international law, the ban set by Palladia is a temporary, proportionate and reversible measure which does not violate the basic obligations under international law (prohibiting the threat or use of force, protecting fundamental rights, concerning obligations of a humanitarian character).

After Palladia made its intention to take countermeasures known to Zirconia, good faith attempts to negotiate a solution failed. The decision to cease performing tourist flights to Outpost One for Zirconian nationals is directly proportional to the injury suffered because of a Zirconian space flight participant. Furthermore, the risk of injury to Palladian interests due to undercapitalised companies such as ZTC, justifies taking measures to protect the shareholders of Orbital Outpost. Space activities carried out in a dangerous environment where any one person can endanger everyone involved. Zirconia did not fulfill its international obligations of authorisation and continuous supervision under Article VI OST. Therefore, Palladian space flight programmes cannot be carried out safely if they involve inadequately selected participants from Zirconia. Finally, there is nothing preventing a change in policy as soon as Zirconia performs its international obligations. Palladia has every right to protect its interests through justified and proportionate countermeasures such as this one.

IV) PALLADIA IS NEITHER RESPONSIBLE FOR NOR LIABLE FOR THE INJURIES CAUSED TO MS. BASINSKA AND HER SUBSTANTIAL FINANCIAL LOSS

A. PALLADIA IS NEITHER RESPONSIBLE NOR LIABLE UNDER ARTICLE VI OST

Orbital Outpost operates as a private commercial entity and is not subject to any direct control from the Palladian Space Agency. The fact that the State establishes a corporate entity is not a sufficient basis for the attribution to the State of the subsequent conduct of the entity.[89] The activities of a private company, although owned by and therefore subject to the control of the State, are considered to be separate from State own acts

(Mar. 15, 2001) (on file with author).

[83] *Id.*

[84] ILC draft articles, *supra* note 1, ch. II.

[85] N.D. White & A. Abass, *Countermeasures and sanctions*, in MALCOM D. EVANS (ed), INTERNATIONAL LAW (Oxford 2003).

[86] A. CASSESE, INTERNATIONAL LAW (Oxford 2001).

[87] Air Service Agreement (Fr. v U.S.), 1978, 18 RIAA 416.

[88] N.D. White & A. Abass, *supra* note 85.

[89] JAMES CRAWFORD, THE INTERNATIONAL LAW COMMISSION'S ARTICLES ON STATE RESPONSIBILITY. INTRODUCTION, TEXTS AND COMMENTARIES 112 (Cambridge University Press 2002).

unless they are exercising elements of governmental authority. The mere fact that Palladia owns 70% of Outpost One is not a sufficient basis to induce that Outpost One is a governmental entity. Neither the crew nor Outpost One are official organs or agents of Palladia exercising elements of governmental authority. Therefore, neither Outpost One activities nor any acts or omission of its crew can be considered as Palladia's own acts and Palladia is not responsible under international law.

Under the provisions of Article VI OST, an exception from the general law of State responsibility, States are directly responsible for non-governmental activities in outer space. While Palladia does not contest the question of attributability, Palladia contends that all its international obligations under Article VI OST were fulfilled.

Palladia's national space activities were carried out in conformity with the provisions of the OST and they did not violate in the present case any obligation under international law. Moreover Palladia had authorised and continuously supervised the activities of Outpost One. These activities are subject to the regulatory and licensing regime of the Space Activities Ordinance 1999 of Palladia. The crew of Outpost One was strictly selected, trained and composed exclusively of scientific researchers and communication engineers. Consequently, Palladia has breached none of its obligations either under general international law or under the space law provisions and, therefore Palladia has no obligation to compensate the damage caused to Ms. Basinska. Zirconia cannot claim damages for Ms. Basinska under Article VI of the Outer Space Treaty.

B. PALLADIA IS NOT LIABLE UNDER ARTICLE VII OF THE OUTER SPACE TREATY AND UNDER THE LIABILITY CONVENTION

According to Article VII of the Liability Convention, the Convention is not applicable to cases involving nationals of launching States whose space objects cause them injury or damage or to foreign nationals who "are participating in the operation of that space object from the time of its launching or any stage thereafter until its descent, or during such time as they are in the immediate vicinity of a planned launching or recovery area as the result of an invitation by that launching State."[90]

Foreign nationals, whether participating in a launch or having accepted an invitation to the launch or recovery sites, have assumed certain of the risks involved with the launch and therefore the non-applicability of the Liability Convention vis-à-vis damage inflicted upon them is justified. Therefore, a foreign national space flight participant having suffered damage may not use the LC and has to use national remedies such as the compensation agreements between the parties or the employment contract. The employment contract or any other compensation agreement for Ms. Basinska should have mentioned and established all the modalities for compensation. In this case, there is no evidence of an agreement and the contract of Ms. Basinska did not contain any provision dealing with risk, responsibility or liability issues.

Zirconia cannot claim for damage under the Liability Convention. Moreover, Zirconia is responsible for the contract of Ms. Basinska.

VII. ALL OTHER RELIEF SOUGHT BY PALLADIA IN ITS MEMORIALS AND ORAL SUBMISSIONS SHOULD BE GRANTED AND CLAIMS AND RELIEF SOUGHT BY ZIRCONIA SHOULD BE DENIED

In the view of the facts and arguments as set forth in the proceedings part of the present memorial, May it Please the Court, rejecting all submissions on the contrary, to grant the relief as presented in the following section.

[90] Convention on International Liability for Damage Caused by Space Objects, Mar. 29, 1972, 24 U.S.T. 2389, 961 U.N.T.S. 197.

IX. SUBMISSIONS TO THE COURT

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

1) Zirconia is responsible for the actions of Ms. Basinska on board Outpost One in causing physical injury to Mr. Toussaint and subsequent financial loss suffered by Orbital Outpost as a result of Mr. Toussaint not being able to conduct the scientific experiments as required.

2) Zirconia is responsible and liable for the damage to the Glovebox Facility and the resulting financial loss to Orbital Outpost.

3) The prohibition placed by Palladia on further tourist flights to Outpost One by Zirconian nationals was not contrary to international law.

4) Palladia is neither responsible nor liable for the injuries caused to Ms. Basinska and her substantial financial loss.

5) Palladia is entitled to such other and further relief as to this Court may seem appropriate.

B. WRITTEN BRIEF FOR ZIRCONIA

AGENTS:

Ms. Melissa Beiting and Mr. Matthew Getz, Georgetown University Law Center, Washington DC, USA

ARGUMENT:

I. PALLADIA IS RESPONSIBLE AND LIABLE FOR ALL THE HARM CAUSED BASINSKA ABOARD OUTPOST ONE AND SPACECOMMUTER.

Palladia is responsible and liable for all the acts done by Outpost One, SpaceCommuter, and their crews because the acts were national activities and there is substantial identity between Palladia and Orbital Outpost, the owner of Outpost One. As the launching state, Palladia is liable for all damage caused by the cutting tool, a space object. It is also responsible for damages arising from: 1) its failure, as the appropriate state party, to supervise the ships' activities and enforce adherence to its laws; and 2) its failure to prevent harassment of women and aliens, as required by international law. It must pay reparation for all damages for which it is liable and responsible because Basinska's injuries are recognized and compensable within international treaties of space law.

A. The crews' actions were national activities, and there is substantial identity between Orbital Outpost and Palladia.

Palladia is responsible for the acts done by Outpost One, SpaceCommuter, and their crews, because all the acts were national activities. The Outer Space Treaty of 1967[1] gives states responsibility for national activities in space, both on their own behalf and by non-governmental entities.[2] "National activities" has never been clearly defined in the space treaties, but state practice and *opinio juris* demonstrate that it means activities directed and carried out by a country's nationals in space, over which the state can exert direction and influence.[3] The United Kingdom sees national activities as "any activity in outer space [participated in by] United Kingdom nationals."[4] Sweden sees them as activities from within Swedish territory or carried out by Swedish natural or juridical persons.[5] The United States has not defined national activities, but its Commercial Space Launch Act, which allows for non-governmental launches, demands that licenses be acquired by any person wishing to launch from within the United States, and by any United States citizen wishing to launch anywhere in the world.[6] Citizens merely wishing to travel on others' launches do not need a license, as they are not directing any activities.[7] Therefore, national activities are either activities carried out within a state's territory, where it has territorial jurisdiction, or activities directed by its nationals, over whom it could exert personal jurisdiction.

Opinio juris concurs. The Project 2001 Working Group on Privatisation, of the Institute of Air and Space Law of the University of Cologne, stated: "[A] state is responsible for all activities as national activities, on which that state has the possibility to exercise jurisdiction and control, i.e., in case either territorial, personal or quasi-territorial jurisdiction are established."[8]

In this case, all activities were directed by Palladian citizens, and Palladia had jurisdiction over the ships' crews. Orbital[9] and SpaceCommuter[10] are both companies incorporated in Palladia, and are thus Palladian persons for the

---

[1] Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies, Jan. 27, 1967, 18 U.S.T. 2410, T.I.A.S. No. 6347, 610 U.N.T.S. 205 [hereinafter Outer Space Treaty].

[2] *Id.* at art. VI ("States Parties . . . shall bear international responsibility for national activities in outer space . . . whether such activities are carried on by governmental agencies or by non-governmental agencies . . . .").

[3] State practice and *opinio juris* are convincing evidence of international law. *See* North Sea Continental Shelf (F. R. G. v. Den.; F. R. G. v. Neth.), 1969 I.C.J. 3, 231 (Feb. 20) [hereinafter Continental Shelf] ("[T]he general practice[s] of States should be recognized as prima facie evidence that [the practices are] accepted as law"); Military and Paramilitary Activities in and Against Nicaragua (Nicar. v. U.S.), 1986 I.C.J. 14, 97 (Jun. 27) [hereinafter Military Activities in Nicaragua] ("It is of course axiomatic that the material of customary international law is to be looked for primarily in the actual practice and *opinio juris* of States . . . .").

[4] Outer Space Act, 1986, c. 38, pmbl., §§ 1-2 (Eng.).

[5] Act on Space Activities § 2 (1982:963) (Swed.).

[6] Commercial Space Launch Activities Act, 49 U.S.C.S. 701 § 70104 (1996).

[7] *Id.*

[8] Susanne U. Reif, *'Project 2001': Conclusions and Recommendations of the 'Working Group on Privatisation' with Regard to Issues of International Space Law*, *in* PROCEEDINGS OF THE FORTY-FOURTH COLLOQUIUM ON THE LAW OF OUTER SPACE 5 (2001).

[9] Compromis ¶ 2.

[10] *Id.* at ¶ 3.

purposes of international law.[11] All the crew and personnel of both ships were Palladian citizens,[12] and Palladia carried both craft on its registry,[13] which gives Palladia jurisdiction and control over both the ships and all their personnel under Article VIII of the Outer Space Treaty. [14] Therefore, because Outpost One, SpaceCommuter, and the ships' crews and commanders were Palladian persons, and because Palladia has jurisdiction and control over them, all their activities were national activities.

Palladia can also be held responsible for the activities of Orbital because there is substantial identity between Orbital and the Palladian government.[15] The Palladian Space Agency (PSA), an arm of the Palladian government, owned 70% of Orbital.[16] According to state practice, an entity that owns more than 50% of a sub-entity controls the sub-entity and can be held responsible for its actions.[17] When one body holds such a large stake, there is a common-sense presumption that what it wants from the subsidiary, it gets. In this case, as 70% owner, the PSA has the ability to direct Orbital's strategy and operations. One could infer from the high ownership stake that Orbital is not able to do anything its majority owner, a Palladian government agency, does not want it to do. The state effectively controls and directs Orbital's operations, so Orbital "must perforce engage the responsibility of the state for its activities, whether or not each of them was specifically imposed, requested or directed by the state."[18] The state is thus responsible for all of Orbital's activities.

B. Palladia is liable for the damage caused by the cutting tool.

1. Palladia was the launching state.

Palladia is liable for injuries caused by the cutting tool to Basinska, a non-Palladian, because Palladia was the launching state. According to Article VII of the Outer Space Treaty, "[E]ach State Party from whose territory or facility an object is launched, is internationally liable for damage to another State Party to the Treaty or to its natural or juridical persons by such object or its component parts on the Earth, in air space or in outer space."[19] Because SpaceCommuter and the cutting tool, a part of the SpaceCommuter craft, were launched from Palladia,[20] the state is responsible to Zirconia for any damages caused by the tool, wheresoever they happened.

2. The cutting tool was a space object.

Palladia, as launching state, is liable for the damage caused by the tool because the tool is a space object.[21] Launching states are internationally liable for any damage caused by space objects they have launched, or by the "components" of those space objects.[22] The word "component" has not been defined in treaties, but the framers intended that "space object" be as broad as possible, including any thing that could do damage in space. Alan Kreczko, a deputy legal adviser at the United States Department of State, told the United States Congress in 1989: "The reason that the phrase space object was chosen, and the reason that it was not defined was a desire to avoid any limiting to

---

[11] *See* Case Concerning the Barcelona Traction, Light and Power Co. (Bel. V. Spa.) (New Application: 1962), 1970 I.C.J. 3, 42-43 (Feb. 5).

[12] Compromis ¶¶ 2, 4.

[13] Compromis ¶ 16.

[14] Outer Space Treaty, *supra* note 1, at art. VIII.

[15] *See* Draft Articles on Responsibility of States for Internationally Wrongful Acts, Adopted by the International Law Commission at its Fifty-Third Session, U.N. GAOR., 56th Sess., Supp. No. 10, U.N. Doc. A/56/10, arts. III-V (2001) [hereinafter Articles on Internationally Wrongful Acts].

[16] Compromis ¶ 2.

[17] *See, e.g.*, Overseas Private Investment Corporation Eligibility Guidelines, *at* http://www.opic.gov. (The corporation will not lend to firms with more than 50% government ownership because they are like government firms); Broadcasting Act, 1990 (Eng.) Sched. 2 Part 1 ("[A] person controls a body corporate if he has a controlling interest in the body . . . . A person has a controlling interest . . . if he holds, or is beneficially entitled to, more than 50 per cent of the equity share capital in that body."); North American Free Trade Agreement, Dec. 17, 1992, 32 I.L.M. 289, Annex VII, Sched. of Canada (Reservations, Specific Commitments and Other Items) ("[A]n enterprise that is a body corporate is controlled by one or more persons if securities of the enterprise to which are attached more than 50 percent of the votes that may be case to elect directors . . . are beneficially owned by the person or persons.").

[18] Int'l Criminal Tribunal for the Former Yugoslavia—Appeals Chamber—Prosecutor v. Tadic, Jul. 15, 1999, 38 I.L.M. 1518 ¶¶ 116-23, 145 (holding the former Republic of Yugoslavia responsible for the actions of Bosnian Serb militias, even though Yugoslavia did not order specific activities, because Yugoslavia financed the groups and participated in planning and supervision).

[19] Outer Space Treaty, *supra* note 1, at art. VII.

[20] Additional Facts ¶ 4.

[21] *See* Convention on International Liability for Damage Caused by Space Objects, Mar. 29, 1972, 24 U.S.T. 2389, T.I.A.S. No. 7762, 961 U.N.T.S. 2389, art. I [hereinafter Liability Convention] ("The term 'space object' includes component parts of a space object . . . .").

[22] *Id.*; Outer Space Treaty, *supra* note 1, at art. VII.

the concept, and instead the most generic term possible was chosen, objects."[23]

Professor Esquivel De Cocca of the University of Buenos Aires defines a space object as "any object capable [of performing] space activities, [used] to assure human conditions of life or allowing the transit of persons through outer space."[24] According to him, such a definition would encompass even an astronaut's spacesuit.[25] The cutting tool, as a tool to perform necessary tasks on the spacecraft, allowed the transit of persons through space.

Finally, Bruce Hurwitz says space object means "any object on board [a spacecraft] which becomes detached, ejected, emitted, launched or thrown."[26] By that definition, the tool, which became detached from its place within SpaceCommuter, was a space object.

The cutting tool was therefore a space object and Palladia is thus liable for the damage caused by it.

C. Palladia failed in its duty of supervision.

1. Palladia was the appropriate state to supervise the ships.

Palladia was the appropriate party to supervise the ships under Article VI of the Outer Space Treaty[27] for four reasons.

First, Orbital and SpaceCommuter are both Palladian companies.[28] All the crafts' employees are of Palladian nationality.[29] Both companies have obtained necessary permits and licenses from the Palladian government.[30] In acquiring such permits and licenses, the companies have pledged to follow the legal requirements of the Palladian Space Regulatory Agency.[31] All their connections, personal and official, are with the Palladian government, and Palladia is the only state with close connections to the craft.

Second, Palladia was the launching state[32] because the craft were all launched from within Palladia's territory.[33] The "launching state" is an important concept fixing responsibility and liability, appearing in the Outer Space Treaty,[34] the Rescue Agreement,[35] the Liability Convention,[36] and the Registration Convention.[37] According to the Outer Space Treaty and the Liability Convention, the launching state is liable for damages caused by space objects launched from within its territory, with varying requirements for fault depending on how and where the damage occurred.[38]

Third, Palladia has recognized its responsibility and control for Outpost One by registering it[39] in accordance with the 1975 Registration Convention.[40] By registering the spacecraft, Palladia has jurisdiction and control over the craft and its personnel.[41]

Finally, in granting licenses and permits to the spacecraft, Palladia has recognized its responsibility for the crafts and warranted that they are suitable and safe for outer space travel.

Therefore, because all crew and ships were Palladians, Palladia was the launching state, Palladia registered the craft, and Palladia granted the craft licenses and permits, Palladia is the appropriate state to supervise the crafts.

---

[23] *Patents in Space: Hearing on H.R. 2946 Before the House Comm. on the Judiciary, Subcomm. on Courts, Intellectual Property, and the Administration of Justice*, 101st Cong. (1989) (statement of Alan J. Kreczko).

[24] Esquivel De Cocca, *International Liability for Damages Caused by Persons to Space Objects in Outer Space or on Celestial Bodies to Persons, Properties or Environments in Outer Space or Celestial Bodies*, *in* PROCEEDINGS OF THE FORTY-SECOND COLLOQUIUM ON THE LAW OF OUTER SPACE 50, 52 (1999).

[25] *Id.*

[26] BRUCE HURWITZ, STATE LIABILITY FOR OUTER SPACE ACTIVITIES IN ACCORDANCE WITH THE 1972 CONVENTION ON INTERNATIONAL LIABILITY FOR DAMAGES CAUSED BY SPACE OBJECTS 26 (1992).

[27] Outer Space Treaty, *supra* note 1, at art. VI ("The activities of non-governmental entities in outer space . . . shall require authorization and continuing supervision by the appropriate state party.").

[28] Compromis ¶¶ 2-3.

[29] *Id.* at ¶¶ 2, 4.

[30] Additional Facts ¶4; *id.* ¶ 3.

[31] Additional Facts ¶ 4.

[32] "The term 'launching state' means: A state which launches or procures the launching of a space object [or] a State from whose territory or facility a space object is launched." Liability Convention, *supra* note 21, at art. I.

[33] Compromis ¶¶ 2, 3; Additional Facts ¶ 1.

[34] Outer Space Treaty, *supra* note 1, at art. VII.

[35] Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space, Apr. 22, 1968, 19 U.S.T. 7570, T.I.A.S. No. 6599, 672 U.N.T.S. 119, art. VI.

[36] Liability Convention, *supra* note 21, at art. I.

[37] Convention on Registration of Objects Launched into Outer Space, Jan. 14, 1975, 28 U.S.T. 695, T.I.A.S. No. 8480, 1023 U.N.T.S. 15, art. I [hereinafter Registration Convention].

[38] *See* Outer Space Treaty, *supra* note 1, at art. VII; Liability Convention, *supra* note 21, at arts. II-VI.

[39] Compromis ¶ 16.

[40] Registration Convention, *supra* note 37, at art. II.

[41] "A State Party to the [Outer Space] Treaty on whose registry an object is launched into outer space is carried shall retain jurisdiction an control over such object, and over any personnel thereof, while in outer space or on a celestial body." Outer Space Treaty, *supra* note 1, at art. VIII.

2. Palladia failed to supervise the ships.

To supervise means to "observe and direct the execution of (a task or activity) or the work of (a person)."[42] Proper supervision thus requires making sure that the work is carried out properly, and that nothing untoward happens. Yet in the course of two flights, a woman was harassed, a man was badly injured, a facility was nearly destroyed and a woman's face was slashed.[43] Such events are not consistent with a properly supervised mission. Moreover, there was a time lag between the report of the harassment and the injury to Toussaint and damage to the Glovebox Facility.[44] In that time, proper supervision and positive action of any sort could well have prevented such reactions. Palladia, which had the onus to supervise these activities, thus manifestly failed its duty.

The state also breached its duty to control personnel on the ships. The Outer Space Treaty says, "A State party to the treaty on whose registry an object launched into outer space is carried shall retain . . . control . . . over any personnel thereof."[45] However one defines personnel, it necessarily includes a craft's commander and crew members;[46] control entails demanding appropriate behavior and punishing wrongdoing.

i. Palladia failed to enforce Orbital Outpost's adherence to Palladian laws.

Palladia should have forced Orbital to adhere to its obligations under the *Space Activities Ordinance* 1999 and the Space Stations Code of Conduct[47] because those obligations were set up by the government, and the state has a duty to ensure that those carrying out national activities in space follow state regulations. In the words of space scholar Paul Dembling, the Outer Space Treaty requires "enforced adherence to government-imposed regulation."[48] Here, the state set up rules; Orbital signed up to those rules; Orbital broke the rules; the state did nothing to ensure the company followed the rule, and has done nothing to punish the breach. Because the ship's personnel did not adhere to their legal obligations, and because the state did not attempt, either through punishment or encouragement, to make them so adhere, it failed in its duty to control the personnel.

D. Palladia abrogated international laws aimed at protecting women and aliens in allowing the harassment of Basinska.

Palladia acted against customary international law in allowing Basinska to suffer an invasion of her human rights; she was unwillingly touched and harassed because of her sex. In allowing discrimination by sex in the form of unwanted touching and kissing,[49] Palladia violated the International Covenant on Civil and Political Rights[50] and the United Nations Declaration of the Elimination of Violence against Women, which, strengthening and complementing the covenant,[51] specifically forbids "sexual harassment and intimidation at work . . . and elsewhere."[52] The United Nations declaration says harassment can be physical or psychological violence.[53] That the harassment was condoned by Palladia through its inaction means that the state has violated two sub-provisions of the declaration.[54]

---

[42] CONCISE OXFORD ENGLISH DICTIONARY 1439 (10th ed., rev. 2002).

[43] Compromis ¶¶ 7-10.

[44] Additional Facts ¶ 5.

[45] Outer Space Treaty, *supra* note 1, at art. VIII.

[46] *See* NANDASIRI JASENTULIYANA, INTERNATIONAL SPACE LAW AND THE UNITED NATIONS 190-91 (1997) ("Personnel and astronauts are generally considered to cover everybody who has been to space so far...").

[47] Additional Facts ¶ 5; Compromis ¶ 4.

[48] *See* Paul G. Dembling, *Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies*, in MANUAL OF SPACE LAW, VOL. 1, 1, 17 (Nandasiri Jasentuliyana & Roy S. K. Lee eds., 1979):

> The second sentence of Article VI [of the Outer Space Treaty] would prohibit, as a matter of treaty obligation, strictly private, unregulated activity in outer space . . . even at a time when such private activity becomes most commonplace. Although the terms 'authorization' and 'continuing supervision' are open to different interpretations, it would appear that Article VI requires a certain minimum amount of licensing and enforced adherence to government-imposed regulations.

Id.

[49] Compromis ¶ 7.

[50] International Covenant on Civil and Political Rights, Dec. 19, 1966, 999 U.N.T.S. 171, 16 I.L.M. 363, art. XXVI [hereinafter Rights Covenant] ("[T]he law shall prohibit any discrimination and guarantee to all persons equal and effective protection against discrimination on any ground such as . . . sex").

[51] Declaration on the Elimination of Violence Against Women, G.A. Res. 104, U.N. GAOR, 48th Sess., U.N. Doc. A/RES/48/104, pmbl. (1993) [hereinafter Women Declaration].

[52] *Id.* at art. II(b).

[53] *Id.*

[54] Article II of the Women Declaration presents three main, nonexclusive definitions of violence against women. Two of them apply to the present situation. "Violence against women," it says, "shall be understood to encompass, but not

The covenant itself has become a part of customary international law. It has been in force since 1976 and has been ratified by more than 150 countries, representing a substantial majority of the world's people, and all the spacefaring nations.[55]

More generally, Palladia has a duty to "protect aliens from harm and to punish offenders with due diligence. Inaction in the face of this duty is conduct attributable to the state quite independent of the actual wrongful acts."[56] This duty is a part of states' indirect responsibility to aliens.[57] As Bin Cheng says, the doctrine of indirect state responsibility creates in states the duty to use "due diligence in accordance with prevailing international standards in preventing, suppressing and repressing such injurious acts."[58] Palladia could have and should have halted the harassment, acting through the commander. He had the opportunity to halt the harassment; Palladia exerted control over him through its Article VIII duty[59] and was responsible for him through its Article VI duties. The state's failure to do so makes it responsible to Basinska under customary international law.[60]

E. Palladia's responsibility requires it to pay damages.

Palladia must compensate Zirconia for all Basinska's injuries because the "responsibility" discussed in the Outer Space Treaty carries it with a duty to make reparations for any harm wrongfully occasioned as a result of the national activities.[61] In *Spanish Zone of Morocco Claims*, the judge said, "Responsibility is the necessary corollary of a right. All rights of an international character involve international responsibility. If the obligation in question is not met, responsibility entails the duty to make reparation."[62] More recently, in construing the Outer Space Treaty, space law scholar Ruwantissa Abeyratne said:

> [It is] recognized as a principle of international law that the breach of a duty involves an obligation to make reparation appropriately and adequately. This reparation is regarded as the indispensable complement of a failure to apply a convention and is applied as an inarticulated premise that need not be stated in the convention itself.[63]

Thus Palladia must make reparations for the harm caused by wrongful activities onboard the vessels; we shall demonstrate in Parts II and III(B) *infra* that all the harm, to Basinska, Toussaint and the ship, was caused by wrongful actions.

F. Basinska's injuries are recognized and compensable within international treaties of space law.

Basinska's injuries are compensable under international law because they are personal injuries and damages to her property. The Outer Space Treaty does not itself discuss what types of damages states are liable for, but the Liability Convention, which elaborates on the Outer Space Treaty,[64] says such damages include personal injuries and damages to property.[65] The disfigurement to Basinska's face and the consequent medical expenses are a "personal injury,"[66] as is the harassment. Because the tool slashed her face, she required extensive surgery.[67] Because her face was disfigured, contracts she held for modeling and television appearances were cancelled.[68] This harm to her career is a "damage to property . . . of persons."[69] She will not be able to work again in her chosen career, a highly lucrative one in which she had already shown success and acceptance. The Zirconian Television

---

be limited to . . . [p]hysical, sexual and psychological violence occurring within the general community, including . . . sexual harassment [and] [p]hysical, sexual and psychological violence perpetrated or *condoned* by the State, wherever it occurs." (emphasis added). Women Declaration, *supra* note 51, at art. II(b), (c).

[55] DEPARTMENT OF STATE, TREATIES IN FORCE 394 (2003).

[56] Gordon A. Christenson, *Attribution Issues in State Responsibility*, 1990 PROC. AM. SOC'Y INT'L L. 51, 53.

[57] *See* Bin Cheng, *International Responsibility and Liability for Launch Activities*, *in* THE USE OF AIR AND OUTER SPACE: CO-OPERATION AND COMPETITION: PROCEEDINGS OF THE INTERNATIONAL CONFERENCE ON AIR AND OUTER SPACE AT THE SERVICE OF WORLD PEACE AND PROSPERITY 166 (Chia-Jui Cheng ed., 1995). "Direct responsibility" arises when the state or its agents act. *Id.*

[58] *Id.*

[59] *See infra* Part II(C).

[60] *See supra* Part I(A).

[61] *See* Spanish Zone of Morocco Claims (U.K. v. Spa.), 2 R.I.A.A. 615, 641 (1925).

[62] *Id.*; *see also* Case Concerning the Factory at Chorzow (Ger. V. Pol.), 1928 P.C.I.J. (ser. A) No. 17, at 29 (holding that it is a principle of international law that "any breach of an engagement involves an obligation to make reparation" to the extent of the damage caused).

[63] *See* RUWANTISSA ABEYRATNE, FRONTIERS OF AEROSPACE LAW 10 (2002).

[64] Liability Convention, *supra* note 21, at pmbl.

[65] *Id.* at art. I.

[66] *Id.*

[67] Compromis ¶ 10.

[68] *Id.*

[69] Liability Convention, *supra* note 21, at art. I.

Corporation (ZTC) had paid US$25 million to send her into space, showing their belief in her popularity and fame among Zirconians. Financial loss through reduced career prospects as a result of physical injury is an accepted and compensable form of damage in tort law.[70] The harassment was a direct dignitary harm from Toussaint to Basinska; that there was no physical harm is immaterial. As one jurist has noted, "Moral damages based on pain, suffering and humiliation are also recoverable [under the treaties]."[71] Basinska can thus recover for the harm caused her because she suffered personal injury and damages to her property.

II. THE CREWS ACTED WRONGFULLY TOWARDS BASINSKA, CAUSING HER HARM FOR WHICH ZIRCONIA CAN DEMAND COMPENSATION.

The crew of Outpost One breached their international law duty to aid Basinska, a fellow astronaut. The commander breached his contractual duty to ensure the safety and welfare of all on his ship. The crew of SpaceCommuter negligently damaged Basinska's body and career. Zirconia can demand that all these obligations be respected, and their breach compensated for.

A. Orbital Outpost and SpaceCommuter breached their international law and contractual duties, and did not meet their duty of care to Basinska.

1. Orbital Outpost's commander breached his international law duties in not aiding Basinska promptly and effectively.

The commander violated international law when he failed to aid Basinska, a fellow astronaut, in contravention of Article V of the Outer Space Treaty.[72] In fact, he did nothing though he knew she was in distress. Palladia could argue that the first sentence of Article V ("States Parties to the Treaty shall . . . render [astronauts] all possible assistance in the event of accident [or] distress") refers only to states, while we are discussing the commander, but the principles of the Outer Space Treaty—Article VI in particular[73]—lead to the conclusion that states remain responsible for the activities of non-governmental entities in outer space, even more so when the entities are largely government-owned and appear to be carrying out acts of state.[74] According to Bin Cheng, "In view of Article VI of the Outer Space Treaty, whenever reference is made to a state [in the treaties of space law], it applies also to ships, aircraft and persons, whether natural or corporate, of its nationality, inasmuch as their space activities would constitute national activities."[75] Either way, the third sentence ("In carrying on activities in outer space and on celestial bodies, the astronauts of one State Party shall render all possible assistance to astronauts of other State Parties") puts responsibility directly on the shoulders of the astronauts themselves. Therefore, the commander should have given Basinska assistance, but failed. Toussaint, too, failed his responsibility—the Treaty applies to all astronauts, not just those in positions of responsibility—in that affirmatively harming a fellow astronaut is incompatible with assisting the astronaut.

Palladia would also be wrong to argue that Basinska is not an astronaut. Though Jasentuliyana says "questions could perhaps be raised" about the status of non-professionals, such as tourists, he believes "astronauts are . . . everybody who has been to space so far."[76] What's more, Basinska was no mere tourist who sunned herself while others worked; she conducted scientific experiments and had been trained in Palladia for ten months.[77] Finally, when other spacefaring

---

[70] *See, e.g.*, DAVID K. ALLEN ET AL., DAMAGES IN TORT 224 (2000) (so long as future earnings are "shown to have been precluded by the accident," they are compensable).

[71] CARL Q. CHRISTOL, SPACE LAW: PAST, PRESENT, AND FUTURE 231 (1991).

[72] Outer Space Treaty, *supra* note 1, at art. V ("States Parties to the Treaty shall . . . render [astronauts] all possible assistance in the event of accident [or] distress . . . . In carrying on activities in outer space and on celestial bodies, the astronauts of one State Party shall render all possible assistance to astronauts of other State Parties.").

[73] "States Parties to the Treaty shall bear international responsibility for national activities . . . carried on by . . . non-governmental entities . . . ." Outer Space Treaty, *supra* note 1, at art. VI; *see* Dembling, *supra* note 44, at 17 ("Article VI requires . . . enforced adherence to government-imposed regulations.").

[74] *See* Articles on Internationally Wrongful Acts, *supra* note 15, at arts. IV-V; *see also supra* Part I(A).

[75] Bin Cheng, *supra* note 57, at 180. The commander's activities were national activities. *See supra* Part I(A).

[76] JASENTULIYANA, *supra* note 46, at 190-91.

[77] Compromis ¶¶ 5, 9. Under the terms of the contract, Basinska could only conduct the experiments at the discretion of the commander, once he had determined her skills, qualification and experience. Additional Facts ¶ 2. That he deemed her able to conduct the experiment indicates she should be viewed as a technician, and would thus be regarded as an astronaut even by the more conservative view of Roy S.K. Lee: "Only pilots, crew members, scientists, technicians and physicists accompanying the flight are covered by the Rescue Agreement [which refers throughout to 'astronauts']", Roy S.K. Lee, *Agreement on the Rescue of Astronauts and the Return of Objects Launched into Outer Space*, *in* MANUAL ON

bodies have wanted to remove tourists from the default international law regime, they have redefined liability in their contracts; [78] that the Palladian groups did not do so here indicates their willingness to continue under the established regime, where those in space must aid one another.

2. Orbital Outpost breached its contractual duty to ensure the safety and welfare of all onboard its ship.

Not only did Orbital breach its international law duties, it also violated its contract[79] with the ZTC, which required Orbital, through its commander, to ensure "the safety and welfare of all persons onboard,"[80] by failing to address the harassment allegations. The commander, whose actions can be imputed to Orbital,[81] failed to prevent or ameliorate the sexual harassment of Basinska,[82] adversely affecting her welfare. When Basinska complained, the commander intimated to her that she was wrong.[83] He did nothing further for two days, a very long time when people are in close contact with one another at all times, and the more so in the context of a 10-day flight.[84] Indeed, during that time, Basinska was subject to further harassment.[85]

In not acting promptly to resolve the situation, the commander also breached his duty to Toussaint. In such a confined area, where two people who have to work together are involved in a dispute, a responsible supervisor would act to resolve the problem, through some means such as punishing the wrongdoer, giving the victim credible assurances of safety, or separating the two. Yet the commander did absolutely nothing, a path almost certain to exacerbate the conflict. The Codes of Conduct gave him and his employers an affirmative duty to take care of those onboard the ship. Their failure to act to secure others' safety was negligent and in breach of their contract.

3. The SpaceCommuter crew were negligent towards Basinska.

The wrongful action of the crew of SpaceCommuter, for whom Palladia is responsible, caused Basinska's physical injuries. The crew acted negligently in overlooking the cutting tool when preparing the vehicle for flight, in abrogation of their duty to prepare the craft properly for a safe journey. Indeed, independent investigations have determined that the failure to secure the tool properly was negligent even in regard to the Palladian crew themselves: an investigation determined that Toussaint could not have left the tool out deliberately because "doing so would have posed a grave danger *to himself.*"[86] Their negligent preparation was the cause of the accident as the tool would not have hit Basinska if it had been properly secured. The tool disfigured Basinska's face, which is an injury in itself; the disfigurement is also harming her career, and will continue to do so.[87] Palladia was responsible for the crew of SpaceCommuter because they—Palladians all—were conducting national activities.[88] As the appropriate state party Palladia had a duty to supervise the craft's activities.[89] The accident was thus the SpaceCommuter crew's fault, and because Palladia was responsible for their actions,[90] the state is responsible and liable for the damage caused by the accident.

B. Zirconia can demand that Palladian non-governmental interests live up to their obligations.

Orbital may argue that its contract was with the now-defunct ZTC, and that Basinska, and

---

SPACE LAW, VOL. 1, 53, 54 (Nandasiri Jasentuliyana & Roy S. K. Lee eds., 1979).

[78] *See, e.g.*, Alan Boyle, *Rules Set for Space Tourism Trade*, MSNBC NEWS, Jan. 31, 2003, *at* http://www.msnbc.com/news/694231.asp.

[79] This Court, in being expressly allowed to apply "the general principles of law recognized by civilized nations [and] judicial decisions . . . of the various nations," is permitted to look at all of a party's rights and obligations in order to arrive at a fair and just result. Statute of the International Court of Justice, Jun. 26, 1945, T.S. No. 993, 3 Bevans 1179, art. 38.

[80] Compromis ¶ 5. The contract directed Orbital Outpost to follow the Space Stations Code of Conduct, which placed such responsibility on the commander's shoulders; *accord* Authority and Responsibility of the Space Shuttle Commander, 14 C.F.R. § 1214.702 (1991) (U.S.) (US Space Shuttle commander responsible for all onboard shuttle).

[81] Under generally accepted principles of *respondeat superior*, an employer is liable for the torts of its employees "committed while acting in the scope of their employment." RESTATEMENT (SECOND) AGENCY § 219 (1958). The commander was within in the scope of his employment when he heard Basinska's complaint, and when he negligently did nothing. Additional Facts ¶ 5. Indeed, the contract with ZTC, under which Orbital said the commander was responsible, evinced a recognition by the company that the commander stood in its shoes. *See* Compromis ¶ 5.

[82] Compromis ¶ 7, Additional Facts ¶ 5.

[83] Additional Facts ¶ 5.

[84] *Id.*; Compromis ¶ 4.

[85] Additional Facts ¶ 5.

[86] Compromis ¶ 12 (emphasis added).

[87] *Id.* at ¶ 10.

[88] *See supra* Part I(A).

[89] Outer Space Treaty, *supra* note 1, at art. VI; *see also supra* Parts I(A) and I(C).

[90] *See supra* Part I(A).

the state espousing her claim, should not have standing to sue. However, Basinska was an assignee of ZTC,[91] and Zirconia, which is an interested party because of the citizenship of the injured party, is entitled to require that any international obligations regarding it and its persons are respected.[92] Principles of equity require that Orbital adhere to its contract because Basinska, a foreign national, relied on the contract.[93]

III. ZIRCONIA IS NOT RESPONSIBLE OR LIABLE FOR ANY HARM CAUSED BY BASINSKA.

Zirconia is not responsible for the damage caused by Basinska because Basinska did not carry out national activities, Palladia was the appropriate state to supervise her, Zirconia was not the launching state, the commander negligently set off a damaging chain of events, and Basinska acted with willful misconduct.

A. Zirconia had no duty to the Palladians under the Outer Space Treaty and subsequent space treaties.

1. Zirconia is not responsible for Basinska because she did not carry out national activities, and Palladia alone could exert control over her.

Zirconia was not responsible for Basinska's actions because not everything done by a state's nationals in space is a national activity, especially when the state has no way to control or influence the national. States only bear responsibility for "national activities" conducted in outer space.[94] Jurists have noted that for that concept to have meaning, national activities must be those over which states can plausibly exert control.[95] Bin Cheng says a definition of national activities as anything done by a state's nationals[96] is too broad because it will reach people the state cannot control, even though they are citizens.[97] Rather, Cheng (and Project 2001[98]) says national activities are found only in instances where states can be expected to and are able to exert jurisdiction, which Zirconia was patently unable to do, as Palladia had full control over all aspects of the mission.[99] "It would seem most unlikely," states Cheng, "that States would have wished to assume responsibility over activities which they are not in a position to control."[100] Terrestrial affairs, space history and the space treaties themselves all support a limited definition of national activities that mandates exploring states' desires and abilities to exert control.

On Earth, states differ greatly in how far they assert jurisdiction and control over nationals outside their border. Some, like France, claim jurisdiction over all serious crimes committed abroad by their citizens; other, like the US, do so statute by statute, and generally only when an important national issue is at stake.[101] One principle is clear—

no state can be forced to exert such jurisdiction, as states often recognize that they cannot control their citizens everywhere.[102] What is more, it has become a principle of international law that such attempts to exercise jurisdiction must be reasonable, especially if the person or their activities has a connection to another state.[103] In this case, it is unclear what laws Zirconia has regulating its citizens' behavior abroad. However, Basinska's close connections to Palladia—she has been trained there, was supervised by Palladian nationals, and was under Palladia's jurisdiction and

---

[91] Compromis ¶¶ 4-5.

[92] *See* Nuclear Tests (Aus. V. Fra.), 1974 I.C.J. 253, 268 (Dec. 20) (holding that Australia had the right to demand that France honor its foreign minister's promise to conduct no further atmospheric nuclear tests).

[93] This Court is allowed to decide cases using principles of equity. *See* Statute of the International Court of Justice, *supra* note 79, at art. 38. For the importance and acceptance of the reliance interest in contracts, see CORBIN ON CONTRACTS, §§ 1.1, 1.15, 2.31 (1993); Lon L. Fuller & William R. Perdue, *The Reliance Interest in Contract Damages: I*, 46 YALE L.J. 52 (1936).

[94] Outer Space Treaty, *supra* note 1, at art. VI.

[95] *See* Reif, *supra* note 8, at 5; Cheng, *supra* note 57, at 171.

[96] *See, e.g.*, Outer Space Act, *supra* note 4, at § 2.

[97] Cheng, *supra* note 57, at 171-72.

[98] *See supra* text accompanying note 8.

[99] Cheng, *supra* note 57, at 171-72; Reif, *supra* note 8, at 5.

[100] Cheng, *supra* note 57, at 172.

[101] *See generally* Georges R. Delaume, *Jurisdiction over Crimes Committed Abroad: French and American Law*, 21 GEO. WASH. L. REV. 173 (1952).

[102] *See* BARRY E. CARTER, PHILLIP R. TRIMBLE & CURTIS A. BRADLEY, INTERNATIONAL LAW 653(4th Ed. 2003) ("The active nationality principle is generally conceded by international law to all states *desiring to apply it.*") (emphasis added).

[103] *Id.* at 659-60. The United States' Restatement (Third) of Foreign Relations holds that even if there is an otherwise valid basis for jurisdiction under United States law, "a state may not exercise jurisdiction to prescribe law with respect to a person or activity having connections with another state when the exercise of such jurisdiction is unreasonable." RESTATEMENT (THIRD) OF FOREIGN RELATIONS § 403(1) (1987). Carter *et al.* comment that that principle of reasonableness "has emerged as a principle of international law as well." CARTER ET AL., *supra* note 102, at 660.

control all through her flight[104]—would make it unreasonable, and extremely difficult as a practical matter, for Zirconia to take over from Palladia in exerting control and jurisdiction over Basinska's in-flight activities.

Recent space history also indicates that mere nationality is not enough to force a state's responsibility. Neither the United States nor South Africa considered they bore any responsibility or liability for their citizens (Dennis Tito and Mark Shuttleworth) who went into space with the Russian Federation, especially as the two space tourists contacted the Russians on their own initiative, without any US or South African governmental involvement, as Basinska did in this case.[105] Tito did not sign the license required by the Commercial Space Launch Act for those Americans conducting national activities, and there has never been a contention that he needed to.[106] Basinska's case is highly similar—she was also under the control of another state, and her state had nothing to with the agreement she and the Zirconian Television Corporation, a private company, signed with Orbital.

Finally, Article VIII of the Outer Space Treaty and Article II of the Registration Convention both say that only one state can register a space object, and that state must maintain jurisdiction and control over the object, unless the two states make an agreement to share or transfer the control and jurisdiction.[107] In this case, there was no agreement between Zirconia and Palladia, so Palladia has to have retained control and jurisdiction.

There was thus no way Zirconia could have gained jurisdiction or control over Basinska, making it counterproductive and against the understanding of space law to assert that Basinska's actions were "national activities."[108]

2. Zirconia had no duty to supervise Basinska because Palladia was the appropriate state.

Zirconia had no duty to supervise Basinska because Palladia had much closer connections with her space activities. The Outer Space Treaty provides for only one "appropriate State Party."[109] In this case, it should be Palladia, not Zirconia. At no stage did Zirconia or any Zirconian state organ employ her, direct her, finance her or control her, so there can be no imputation of responsibility to the state.[110] There is no evidence that there has ever been any contact between the state and either Basinska or her erstwhile employer, the ZTC, so there can be no actual consent. There can be no implied control or consent: Basinska's activities of acting, modeling and conducting experiments for television[111] are not the types of things states normally control. Tort theories of implied control or agency do not apply; there was never any actual or implied control by the state, and neither Basinska, the state, nor anyone else ever thought she was acting on behalf of the state.

Indeed, all the above considerations point to making Palladia, not Zirconia, the appropriate state, with the duty of supervising Basinska; Palladia's failure to do so makes it liable for her faults. The Palladian Space Agency and Palladian Space Regulatory Agency both authorized Basinska's space travel, explicitly or implicitly.[112] Orbital, 70% owned by the Palladian government, trained Basinska for 10 months.[113] The experiment she conducted was at the discretion of the Palladian commander,[114] and Palladia is responsible for all his actions.[115] Palladia, as the state of registry, retained control over all personnel on the craft,[116] which includes Basinska.[117] Therefore, Palladia was the appropriate state to supervise Basinska, and Zirconia had no duty to supervise her.

3. Zirconia is not liable for any damage caused by Basinska because it is not the launching state.

Zirconia is not liable for any damage because it did not launch a space object, procure the launching of a space object, or allow its territory to be used for the launching of a space object, and liability under Article VII of the Outer Space Treaty or under the Liability Convention attaches only to launching states. The Liability

---

[104] *See* Outer Space Treaty, *supra* note 1, at art. VIII.

[105] *See, e.g., Space Tourism: Hearings Before the Subcomm. on Space and Aeronautics of the House Comm. on Science*, 107th Cong 63-71 (2001) (testimony of W. Michael Hawes, Deputy Associate Administrator for Space Station, National Aeronautics and Space Administration).

[106] *See* Commercial Space Launch Activities Act, *supra* note 6, at § 70104; *see also* text accompanying note 6).

[107] Registration Convention, *supra* note 37, at art. VIII(2).

[108] *See* Cheng, *supra* note 57, at 171.

[109] Outer Space Treaty, *supra* note 1, at art. VI.

[110] *See* Military Activities in Nicaragua, *supra* note 3, *passim* (holding states responsible only for activities they direct, finance or control).

[111] Compromis ¶¶ 5, 6.

[112] Compromis ¶¶ 2, 3; Additional Facts ¶ 4.

[113] Compromis ¶ 7.

[114] Additional Facts ¶ 2.

[115] *See supra*, Part I(A).

[116] Outer Space Treaty, *supra* note 1, at art. VIII.

[117] *See supra* text accompanying notes 72-78.

Convention defines a launching state as "[a] State which launches or procures the launching of a space object [or a] State from whose territory or facility a space object is launched."[118] All the space objects involved were launched or procured by Orbital, SpaceCommuter or the Zirconian Television Corporation; they were all launched from within Palladia. Therefore, Zirconia cannot have been the launching state, and cannot be held liable.

B. Responsibility for the damage lies with those whose negligence and misconduct caused the damage–the commander and Basinska

1. The commander's negligent failure to protect Basinska from harassment foreseeably caused her distress, leading her to overreact towards Toussaint to protect herself and making the commander and the state responsible.

The commander is responsible for the harm caused by Basinska because his failure to aid her, as required by his contract[119] and international law,[120] foreseeably caused her distress and distraction, leading to the damage to Toussaint and the Glovebox. An actor can be liable to a third party for injuries arising out of a second actor's wrongful act if the first actor placed the second in a position where he or she had to avert threatened harm, and the injury caused thereby was foreseeable by the first actor.[121] In this case, the commander, breached his affirmative duty to take care of the safety and welfare of all on ship,[122] took no actions about Basinska's complaint of sexual harassment, placing her in fear of further harassment. Basinska, in a confined place with her harasser, and seeing a total lack of action, was understandably concerned that the harassment might continue and escalate into other forms of violence against her, especially as Toussaint had continued harassing her even after she complained to the commander.[123] Her attack on Toussaint was thus a desperate attempt to protect herself and would never have happened if the commander had followed his duty and kept Basinska safe.[124]

The commander should also have foreseen that doing nothing about a serious conflict in a confined space would have dangerous repercussions. He would thus be responsible to Toussaint for the injuries caused by Basinska.[125] (The commander had an affirmative duty, under the Space Stations Code of Conduct, to take care of Toussaint's safety and welfare as well.[126])

2. The commander's negligent failure to exercise his discretion led to the damage to the glovebox facility.

The commander negligently allowed Basinska to conduct the experiment. As part of the contract between Orbital and ZTC, the commander had to exercise his discretion as to whether Basinska could conduct an experiment.[127] Yet although he knew she had been concerned about harassment, had been ignored, and had been involved in a fight with Toussaint, [128] events that would make anyone unlikely to be able to conduct an experiment carefully, all the more so in the case of a young woman with no scientific training on her first space flight, he let her conduct an experiment. A prudent man in his position would have exercised his contractually mandated discretion and not let her conduct the experiment, especially as it was his failure to take hold of the situation that led directly to her anxiety. Had Basinska been at ease, as she would have been under normal circumstances, she would most likely have conducted the experiment properly.

The commander's wrongful and negligent behavior was therefore the "but-for" cause of the damage to Toussaint and the Glovebox Facility, and he is responsible for both sets of harms. Because the state is in turn responsible for the commander's activities in space,[129] Palladia is responsible for all the damage.

---

[118] Liability Convention, *supra* note 21, at art. I(c)(i)-(ii).
[119] *See supra* Part II(A).
[120] *See supra* Part II(B).
[121] *See, e.g.*, RESTATEMENT (SECOND) OF TORTS § 445 & cmt. c (1965). ("Acts of Protection from Danger Threatened by Actor's Negligence").
[122] *See* Compromis ¶ 5.
[123] *See* Compromis ¶ 7.
[124] *Cf.* LENORE E. WALKER, THE BATTERED WOMAN SYNDROME (1984).
[125] Of course, such a claim would have to be brought in a domestic court – this Court does not have jurisdiction over disputes between citizens of the same state. *See* Statute of the International Court of Justice, *supra* note 79, at art. 34(1) ("Only states may be parties in cases before the Court.").
[126] *See* Compromis ¶ 5.
[127] Additional facts ¶ 2.
[128] Compromis ¶¶ 7-8.
[129] *See supra* Part I(A).

3. Basinska's willful misconduct in hitting Toussaint could put responsibility on her own shoulders.

Even if the commander and Palladia are not responsible for the harm caused by Basinska, then Basinska herself, not Zirconia, would be liable, because her hitting Toussaint might constitute an intentional tort and could be a "superseding cause," placing at least part of the liability on her shoulders.[130] The principle of individual responsibility for intentional actions is being adopted in the most modern space law. In the International Space Station Agreement, criminal misconduct is removed from the provisions of the space treaties;[131] willful misconduct is removed from the cross-waiver of liabilities, and responsibility therefor placed on the shoulders of the perpetrator.[132] The position on Outpost One, a space station that accepts foreigners, is equivalent to that on the International Space Station.

IV. THE BAN ON ZIRCONIAN NATIONALS IS ILLEGAL.

The ban on Zirconians is illegal because it contravenes the principle of maintaining space as a resource for all, it tramples on developing nations' protected interests, it constitutes illegal discrimination based on national origin, and it shows an absolute lack of due regard for Zirconia's interests.

A. *The ban contravenes the principles of maintaining space as a resource for all and protecting developing countries' interests.*

In summarily banning Zirconians from taking advantage of space, Orbital[133] has asserted Palladian national and sovereign rights over parts of space, in direct contravention of the Outer Space Treaty,[134] spirit and letter.[135] Space, unlike most terrestrial property, is considered the province and resource of all humanity, and is to be open to all. This principle is recognized in the Preamble to the Outer Space Treaty, which discusses "the common interest of all mankind"[136] and "international co-operation in . . . the exploration and use of outer space for peaceful purposes,"[137] and in Article I, which calls space "the province of all mankind."[138] It is a "global commons" and as such must be open to all.[139]

The action is particularly egregious given Zirconia's status as a developing nation because developing nations must be given special consideration in space. Developing countries were singled out for protection in the Outer Space Treaty, which said space was for "all peoples irrespective of their economic or scientific development."[140] The principle was further enshrined in the Declaration on International Co-operation in the Exploration and Use of Outer Space for the Benefit and in the Interests of all States, Taking into Particular Account the Needs of Developing Countries, which says particular interest should be given to developing countries' benefits and interests.[141] By banning the citizens of one developing country only, Palladia is *not* taking special account of developing nations' needs. In

---

[130] RESTATEMENT (SECOND) OF TORTS, *supra* note 116, at § 448.

[131] Agreement Concerning Co-operation on the International Civil Space Station, Mar. 27, 2001, Hein's No. KAV 5899, art. 22.

[132] *Id.* at art. 16.

[133] Palladia is responsible for Orbital's actions in and regarding outer space. *See supra* Part I.

[134] All references to states in the outer space treaties bind national participants in space. *See* Dembling, *supra* note 48, at 17.

[135] *See Report of the Committee on the Peaceful Uses of Outer Space*, U.N. GAOR, 21st Sess., 1499th plenary mtg. at 138, U.N. Doc. A/PV. 1499 (1966) (Mr. Vinci, Italy, commenting on the conclusion of the Outer Space Treaty). ("For the first time in the history of mankind, all countries . . . are not searching for new territorial conquests or for the expansion of their sovereign rights . . . . [T]he new continents of outer space . . . become not the province of single powers but the province of mankind as a whole . . . . [N]ational, religious and ideological concepts are put aside, and in their place the idea of peace and unity of all men, regardless of their religion, creed or colour, are solemnly affirmed.").

[136] Outer Space Treaty, *supra* note 1, at pmbl. The preamble of an international agreement is an important tool to the understanding thereof, and should be used to help understand the treaty's object and purpose. *See* Vienna Convention on the Law of Treaties Between States and International Organizations or Between International Organizations, May 23, 1969, 115 U.N.T.S. 331, art. XXXI ("A treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose. Context for the purpose of interpretation of a treaty includes the preambles and annexes to the treaty as part of the treaty's text.")

[137] Outer Space Treaty, *supra* note 1, at pmbl.

[138] *Id.*, at art. I.

[139] JASENTULIYANA, *supra* note 46, at 33 ("The Outer Space Treaty was also one of the first multilateral instruments in which the centuries-old international law concept of sovereignty of states gave way to the modern conception of the internationalization of the global commons.").

[140] Outer Space Treaty, *supra* note 1, at pmbl.

[141] Declaration on International Co-operation in the Exploration and Use of Outer Space for the Benefit and in the Interests of all States, Taking into Particular Account the Needs of Developing Countries, G.A. Res. 122, U.N. GAOR., 51st Sess., U.N. Doc. A/RES/51/122. ¶ 3.

fact, Palladia is making it harder for a developing nation to share in the fruits of space than would otherwise be the case. By banning space tourism and the sharing of knowledge, Palladia has severely hampered Zirconia's space program development. Basinska's journey lifted awareness of space in Zirconians' minds. Without the awareness that more journeys will bring, Zirconia will lack public support for a space program, and the treaty and declaration's aims of getting the benefits of space travel to as many as possible will be badly set back.

B. The ban constitutes illegal discrimination and an impermissible lack of due regard.

The ban on Zirconians is illegal because it is unlawful discrimination and not in due regard to the interests of Zirconia, another spacefaring nation. "Outer space shall be free for exploration and use by all States without discrimination of any kind," states the Outer Space Treaty .[142] Singling out people of one state only is discrimination by nationality, making Palladia's action illegal. Further, all states must have their ability to observe the flights of space objects considered on the basis of equality;[143] if any state but Zirconia asked to observe the flight of Orbital from within the craft, such request would presumably be granted. Thus Palladia is not treating all states equally. What is more, all space stations on celestial bodies must be open to representatives of other states on the basis of reciprocity.[144] This should also apply to stations in orbit, because when the treaty was written the drafters did not envisage the technical possibility of mid-space docking. Zirconia does not yet have a space station (and Palladia's actions are delaying the day when it will), but that does not mean reciprocity does not apply; it simply means Zirconia will have to open up its station to Palladians once it is complete.

Palladia's ban of Zirconians is a clear discrimination against people on the basis of national origin and as such is in direct contravention of the International Covenant on Civil and Political Rights,[145] which has become a part of customary international law.[146] Furthermore, non-discrimination in space has become a norm of international law through years of practice—no nation has ever banned nationals of another from traveling aboard its spacecraft[147]—and, as this Court said in the *Continental Shelf* cases, "the general practices of states should be accepted as prima facie evidence that [they are] accepted as law."[148]

Palladia's ban does not show "due regard to the corresponding interests" of Zirconia.[149] Such due regard prevents states from discriminating against other states' nationals. In an analogous case, arising out of an analogous treaty, this Court ruled that the provision guaranteeing due regard in the *Convention on the Law of the Seas* stopped Iceland from banning British ships in its exclusive economic zone, although Iceland could exert preferential rights.[150] Similarly, Palladia can direct how it will conduct operations in space, but it cannot summarily ban people from a single country and deprive them of the nation-building rewards of space travel. Palladia could argue that its jurisdiction and control[151] allow it to ban Zirconians, but that exertion of sovereignty would fly in the face of the Outer Space Treaty's Article I and Preamble ("The exploration and use of outer space should be carried on for the benefits of all people irrespective of the degree of their economic or scientific development"), and treaties must be looked at in context of their intent.[152]

---

[142] Outer Space Treaty, *supra* note 1, at art. I.
[143] *Id* at art. X.
[144] *Id.*at art. XII.
[145] Rights Covenant, *supra* note 50, at art. XXVI.
[146] *See supra* text accompanying note 55.

[147] The United States has accepted Israelis onboard its spacecraft. *See, e.g.*, National Aeronautics and Space Administration, Biographical Data: Ilan Ramon, *at* http://www.jsc.nasa.gov/Bios/PS/ramon.html. Russia has welcomed Americans and South Africans. *See, e.g.*, Boyle, *supra* note 78.
[148] Continental Shelf, *supra* note 3, at 231.
[149] Outer Space Treaty, *supra* note 1, at art. IX.
[150] Fisheries Jurisdiction (U.K. v. Ice.) 1974 I.C.J. 3, 26-27 (Jul. 25).
[151] Outer Space Treaty, *supra* note 1, at art. VIII.
[152] Vienna Convention on the Law of Treaties Between States and International Organizations or Between International Organizations, *supra* note 136, at art. XXXI.

SUBMISSIONS TO THE COURT

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

1. Palladia is responsible and liable for all harm caused to Ms. Basinska by its nationals onboard Outpost One and Space Commuter.

2. Palladia abrogated international laws aimed at protecting women and aliens in allowing the harassment of Ms. Basinska and taking no action to afford her redress.

3. Palladia and the commander's failure to take action regarding the harassment of Basinska makes Palladia, or alternatively the commander, responsible and liable for the damage caused by Ms. Basinska following her distressing experience.

4. Zirconia is not responsible for any of the damage caused by Ms. Basinska.

5. Orbital Outpost's ban on Zirconians is illegally discriminatory and against the principles of space law.