#### THE 2010 MANFRED LACHS SPACE LAW MOOT COURT COMPETITION

### THE CASE CONCERNING SUBORBITAL TOURISM, DEFINITION OF OUTER SPACE AND LIABILITY

### ASPIRANTIA V REPUBLICA

### **PART A: INTRODUCTION**

The Cities of Prague and Pilsen in the Czech Republic hosted the 19<sup>th</sup> World Finals, which took place during the IISL Colloquium on Space Law in October 2010. The students that participated in this competition were challenged with *The Case Concerning Suborbital Tourism, Definition of Outer Space and Liability (Aspirantia v Republica)*. The author of the case was Dr. Peter van Fenema (The Netherlands).

The three winning teams of the regional competitions held in the Asia Pacific, Europe and North America met for the World Finals.

As last year, Judges Koroma, Tomka and Skotnikov of the International Court of Justice honoured the IISL by judging the finals, which were held at the Regional Court (of West Bohemia) in the City of Pilsen.

The final was organized by IISL Vice President Prof Dr. Vladimir Kopal and IISL member Prof. Dr. Mahulena Hofmann and her colleague Mr. Martin Faix, along with representatives of the Local Organizing Committee.

#### Sponsors

The following organizations kindly sponsored the World Finals and IISL Dinner:

- IAF and IISL
- IAC Local Organizing Committee
- Univerzita Karlova v Praze
- City Hall of Prague
- Czech Airlines
- Law Firm Kocián/Šolc/Balaštík
- North American Finalist sponsor: Secure World Foundation
- Asia Pacific Finalist sponsor: Japan Aerospace Exploration Agency (JAXA)

- European Finalist sponsor: European Centre for Space Law, ECSL
- Book awards: Martinus Nijhoff Publishers.

The IISL is most grateful to all these generous sponsors and individuals.

#### Results of the World Finals

#### Winner of World Finals / Lee Love Award:

George Washington University (USA)

Ms. Liana W. Yung, Ms. Christa J. Laser and Mr. Michael Saretsky.

Faculty Advisor: Prof. Henry Hertzfeld

### Runner up:

National University of Singapore (Singapore) Ms. Ying Li Zanetta Joan Sit, Mr. Dominic Wei'an Tan and Mr. Muhammad Aidil bin Zulkifli,

Faculty Advisor: Prof. Lim Lei Theng/Ms. Joan Lim.

### 2nd runner-up:

University of Cologne (Germany)

Ms. Lisa Küpers, Mr. Martin Reynders and Mr. Erik Pellander.

Faculty Advisor: Mr. Jan Helge Mey.

#### Best oralist / Sterns and Tennen Award:

Ms. Ying Li Zanetta Joan Sit, National University of Singapore.

#### Best memorial / Eilene M. Galloway Award:

National University of Singapore.

### **Judges for Finals**

- H.E. Judge Abdul Koroma, International Court of Justice
- H.E. Judge Peter Tomka, International Court of Justice
- H.E. Judge Leonid Skotnikov, International Court of Justice

#### **Judges for Semi-finals**

- Dr. Peter van Fenema (The Netherlands).
- Prof. Dr. Jonathan Galloway (United States).
- Prof. Steven Freeland (Australia).

### **Judges for Memorials**

- Dr. Sylvia Ospina (Colombia).
- Ms. Marcia Smith (USA).
- Dr. Gérardine Goh Escolar (Singapore).
- Dr. Olivier Ribbelink (The Netherlands).
- Prof. José Monserrat Filho (Brazil).
- Dr. Yun Zhao (China).

### Participants in the regional rounds

### In Asia Pacific

- 1. Amity Law School, New Delhi, India.
- 2. Amity University Law School, Noida, India.
- 3. Army Institute of Law, Mohali, India.
- 4. Atma Jaya Catholic University, Jakarta, Indonesia.
- 5. Bangalore University Law College, Bangalore, India.
- 6. Beijing Institute of Technology, Beijing, China.
- 7. China University of Political Science and Law, Beijing, China.
- 8. City University of Hong Kong, Hong Kong, China.
- 9. Dr. Ram Manohar Lohiya National Law University, Lucknow, India.
- 10. Government Law College, Mumbai, India.
- 11. Gujarat National Law University, Gandhinagar, India.
- 12. Hidayatullah National Law University, Raipur, India.
- 13. Indian Law Society Law College, Pune, India.
- 14. Murdoch University, Perth, Australia.
- 15. NALSAR University of Law, Hyderabad, India.
- 16. National Law Institute University, Bhopal, India.
- 17. National Law School of India University, Bangalore, India.
- 18. National Law University, Jodhpur, India.
- 19. National University of Singapore, Singapore.
- 20. Padjadjaran University, Bandung, Indonesia.
- 21. Rajiv Gandhi National University of Law, Patala, India.
- 22. SNDT Women's University, Mumbai, India.

- 23. Tamil Nadu Dr. Ambedkar Law University, Chennai, India.
- 24. University Institute of Legal Studies, Chandigarh, India.
- 25. University of New South Wales, Sydney, Australia.
- 26. University of Petroleum and Energy Studies, Dehradun, India.
- 27. University of Tokyo, Tokyo, Japan.
- 28. University of Western Sydney, Sydney, Australia.
- 29. West Bengal National University of Juridical Sciences, Kolkata, India.

### In Europe

- 1. JP II, Catholic University of Lublin, Poland.
- Law Faculty of the People's Friendship, Russia.
- 3. Leiden University, The Netherlands.
- The Honourable Society of Inner Temple, UK.
- 5. University of Aberdeen Law School, UK.
- 6. University of Cologne, Germany.
- 7. University of Genoa, Italy.
- 8. University of Lueneburg, Germany.
- 9. University of Silesia, Poland.

### In North America

- 1. Drexel University Earle Mack School of Law, USA.
- 2. Florida State University College of Law, USA.
- 3. Georgetown University Law Center, USA.
- 4. George Washington University, USA.
- 5. Howard University School of Law, USA.
- 6. Institute of Air and Space Law, McGill University, Canada.
- 7. Rutgers School of Law, Newark, USA.
- 8. The University of Mississippi, USA.
- 9. University of Dayton School of Law, USA.
- 10. University of Nebraska College of Law, USA.

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#### REMEMBERING DR. CELINA CHUA

This year, Dr. Celina Chua, one of the members of the winning team of the Manfred Lachs Space Law Moot Competition in 2001, tragically passed away.

Below follows the eulogy that her co-agent Dr. Gérardine Goh wrote to remember this talented young woman and that was read by the IISL President during the IISL Awards Dinner in Pilsen.

### Eulogy

Celina was a gifted orator whose words could move a mountain, an intellectual giant to those who dared to challenge and be challenged, and the greatest lover of German Shepherds in history. She was luminous, brilliant and breathtaking. She walked into every room with attitude, won every battle with integrity and aplomb, slew every monster with nonchalance. Three judges of the International Court of Justice saw and awarded her peerless talent with the Lachs trophy nine years ago.

Her talent for the law was over-shadowed only by her passion for animals. With her inimitable courage and can-do attitude, she left security and Singapore to fulfill her dream of becoming a veterinary surgeon. An honours law graduate from the National University of Singapore and five weeks from her veterinary degree at Murdoch University, she was but thirty when she was taken from us on September 3, 2010, in a traffic accident in Perth, Australia.

Those of us who had the privilege of her friendship mourn her. We celebrate the precious time that we had with her, the life that she dared to live, and the wonderful person that she was.

Dr. Gérardine Goh Member, Winning Team World Championships of the Manfred Lachs Space Moot Competition 2001, Toulouse, France

#### PART B: THE PROBLEM

### STATEMENT OF FACTS

- 1. The Republic of Aspirantia is a rich and powerful islanded State. It is one of the world's largest economies but does not have a significant history or technical expertise in space exploration.
- 2. The neighbouring Kingdom of Republica is a continental State and has one of the largest domestic economies in the world with significant technological capabilities in space activities.
- 3. The space tourism company Startours, Inc. is incorporated in Aspirantia. The founders of Startours did so for two reasons: the favourable tax climate for start-up companies in that country and the fact that it has no national space licensing laws or regulations governing private or commercial space flights.
- 4. Startours has developed an experimental passenger spacecraft *Starflight-1*, a reusable space vehicle that is designed to take off from a specially-adapted and refurbished carrier-aircraft flying high above the high seas. The private charter airline whose aircraft is being adapted and used for this purpose is owned and controlled by private citizens of neighbouring Zerbica.
- 5. Startours offers suborbital flights on *Starflight-1* to an altitude of 112 km for three passengers per flight. Startours charges 100,000 Aspirantian pesetas per person and promises an "Astronaut Certificate" to all passengers upon completion of their flight.
- 6. The maiden flight of Starflight-1 took place on 12 January 2009. After separation from the carrier aircraft, Starflight-1 successfully blasted off and, after having reached an altitude of 93 km, returned to Earth using its wings for stabilisation, support and flight. However, on its descent from high altitude during this maiden flight, Starflight-1 was struck by a piece of metal, resulting in a gaping hole in the fuselage, loss of cabin pressure and the immediate death of the two of the three passengers and the copilot onboard Starflight-1. All of the victims wore the pressurised suits provided by Startours as required by the contract for carriage, but the co-pilot had taken off his cumbersome protective headgear to have a better look at the

Earth underneath and the two passengers had done likewise. The captain had insufficient authority to compel the co-pilot and those two passengers to put their helmets back on, but he and the remaining female passenger did not remove their headgear. Consequently, the captain and the remaining passenger survived, though seriously injured, and landed by parachute in Aspirantia, together with the scattered remnants of *Starflight-1*.

- 8. After consultation with the International Institute of Space Law, Startours awarded an Astronaut Certificate to the surviving passenger and found the Minister of Science and Education of Aspirantia more than willing to hand her the certificate in person at the hospital before the assembled international media. During that bedside ceremony, the Minister praised the passenger as a "true astronautical hero" and a role model and announced his plans to draft national space legislation to regulate space activities in Aspirantia, with particular attention to the problem of space debris that, he claimed, caused the accident on *Starflight-1*.
- 9. In the meantime, Startours began an investigation into the cause of the accident, after a lengthy search among the wreckage of Starflight-1, found a small, badly-damaged metal capsule with the inscription "father" and a serial number. By analysing data obtained from a foreign private space object tracking service "SpaceTrack", the experts at Startours concluded that the capsule came from a separate launch that took place on the same day by Stationride Corporation, a private company licensed by Republica under its Space Activities Act 2000 to operate flights to a permanent national space station orbiting the Earth at 350 km above mean sea level, crewed permanently by astronauts trained by the Republican Space Agency.
- 10. The Space Activities Act of Republica defines "space object" as:

space object means a thing consisting of:

- (a) a launch vehicle;
- (b) a payload (if any) that the launch vehicle is to carry into or back from an area beyond the altitude of 100 km above mean sea level; or any part of such a thing, even if:

- (c) the part is to go only some of the way towards or back from an area beyond the altitude of 100 km above mean sea level; or
- (d) the part results from the separation of a payload or payloads from a launch vehicle after the launch.
- 11. Stationride, which uses the very reliable Stationferry to carry scientists and supplies to the Republican space station, recently obtained permission from the Government of Republica to offer unique but expensive rides to wealthy private individuals. In return for extra fees, even an extra vehicular space walk can be arranged. Of course, before the flight, the individual is required to undergo extensive astronaut training and has to sign a number of contracts, statements and declarations concerning his or her behaviour onboard. In particular, any activity that may endanger or interfere with the integrity and success of a Stationferry mission is strictly forbidden and the flight participant is required to indemnify Stationride for any loss, damage or liability sustained as a result of the participant's acts or omissions while in space.
- 12. Stationride recently contracted with Ashes Corporation, a funeral services company incorporated in Republica, to carry a small container containing lipstick-sized capsules each filled with 5 grams of human ashes (the "cremains"), to be placed into low earth orbit. Although environmentalists, astronomers and space scientists in Republica and elsewhere have protested against this way of using and polluting orbital space, the Republican Space Agency saw no reason to forbid this one-off launch and, further, did not inform other nations about this particular payload and its destination. Its reasoning was that the low "graveyard orbit" used for this purpose guaranteed that the container with the capsules would not interfere with any active space objects in orbit and would, through atmospheric drag, fall back to earth within 15 years and disintegrate in the atmosphere, causing no harm to the Earth or pose a risk to orbital space activities. Timothy L. Ash, the wealthy owner of Ashes, was onboard Stationferry on the day Starflight-1 launched, along with the cremains. He had also made extra payments for an extra-vehicular spacewalk for himself. With permission from Captain Alfons Linke, the captain of the

Stationferry to whom Mr Ash paid a handsome amount of money, Mr Ash hid one of the cremain capsules in his spacesuit that contained the ashes of his father-in-law that, as a token of his and his wife's love for him, he intended to personally release into space. This capsule that was discreetly released during is spacewalk shot away at high speed and impacted on the descending *Starflight-1*, with the dramatic consequences as discussed above.

- 14. Startours, on behalf of itself, the crew of *Starflight-1* and the flight participants, including those who died in the accident, began a lawsuit against Stationride under the Space Activities Act and against the Republican Space Agency under administrative law in the Federal Court of Republica, claiming full compensation from both, jointly and severally, for the destruction of *Starflight-1* and the death and injuries to the crew and flight participants onboard.
- 15. While the proceedings were in the Federal Court of Republica, a return flight of the Stationferry from the Republican space station to the Earth suffered a malfunction during its descent through the atmosphere. With no engine thrust, navigation or guidance systems onboard available after the malfunction, the spacecraft was forced to declare an emergency and land the spacecraft at the nearest aerodrome with a long enough runway, which turned out to be an air force base in Aspirantia. As a safety precaution, the Stationferry released the fuel into a large lake that Captain Linke mistook for the ocean and then the Stationferry landed safely with only minor injuries sustained by the crew and the passengers onboard. The fuel that was spilled into the lake caused serious environmental damage to some protected natural habitats of rare animals, with cleanup costs in the millions of Aspirantian pesetas.
- 16. When the Aspirantian authorities reviewed the identity documents of those onboard the Stationferry, it was revealed that Captain Linke was piloting the spacecraft and Dr François Vienet, the Director-General of the Republican Space Agency, was onboard as a private space flight participant. As a result of the domestic and international media attention surrounding the accident involving *Starflight-1*, the Government of Aspirantia arrested Dr Vienet and Captain Linke on charges of manslaughter of the victims

- onboard Starflight-1 and breaches of the environmental laws of Aspirantia but released the Stationferry and all other crew and passengers onboard to the Government of Republica.
- 17. Significant costs were incurred by the Aspirantian Government in relation to the care and repatriation of the remaining crew and passengers of Stationferry and the return of the spacecraft itself. Dr Vienet and Captain Linke remain in custody in Aspirantia awaiting trial.
- 18. Eventually, the Federal Court of Republica dismissed the claims against both defendants on the basis that:
- (i) the Republican Space Agency has fulfilled its obligations as the licensing authority for the Government of Republica and cannot be blamed for any subsequent behaviour on the part of Stationride; and
- (ii) after hearing testimony from an independent aerospace engineer, the Court accepted his evidence that the technical specifications of *Starflight-1* and its carrier-aircraft showed that *Starflight-1* was not sufficiently powerful or advanced to ever reach an altitude of 100 km.
- 19. Startours and the Government of Aspirantia protested the verdict and the latter decided to bring a claim against the Government of Republica. The two countries agreed to submit their dispute to the International Court of Justice for a final and binding resolution.
- 20. Aspirantia contends that:
- (i) Republica is responsible for the acts and omissions of Stationride and is liable for the loss and damage suffered by Aspirantia in relation to the loss of Starflight-1;
- (ii) Republica is liable to pay the cleanup, recovery and return costs incurred by Aspirantia as a result of the emergency landing by Stationferry;
- (iii) Aspirantia acted lawfully in arresting and charging Captain Linke and Dr Vienet.
- 21. Republica contends that:
- (i) Aspirantia acted unlawfully in arresting and charging Captain Linke and Dr Vienet and must withdraw the charges against them and return them immediately to Republica;
- (ii) Republica is not liable for the damage sustained by *Starflight-1*; and

- (iii) Republica is not liable to pay Aspirantia for cleanup, recovery and return costs of the Stationferry, its passengers and its crew.
- 22. Aspirantia and Republica are both members of the United Nations and are both parties to the Outer Space Treaty, the Rescue Agreement and the Liability Convention. Neither Aspirantia nor Republica are parties to the Registration Convention. Republica signed and ratified the Vienna Convention on the Law of Treaties, while Aspirantia has not signed it.

#### Statement of additional Facts

- 1. All three states concerned are also parties to the Convention on International Aviation of 1944 (Chicago Convention incl. Annexes).
- 2. The correct name of the Republican private space company is Stationrider Corporation; it may also be referred to as Stationrider.
- 3. Stationrider is a company incorporated in Republica and majority owned by Republican nationals.
- 4. Stationrider's licence contains the requirement to take out insurance covering third party liability and have Republica included as co-insured.
- 5. Startours is incorporated in Aspirantia and majority owned by Aspirantian nationals.
- 6. Starflight-1 had Aspirantian tourists on board whereas all the Stationferry occupants were of Republican nationality.
- 7. The maiden flight of *Starflight-1* was widely promoted and advertised, both nationally and internationally, by the proud operator Startours. The State of Aspirantia paid no attention to this private initiative.
- 8. Stationferry was launched from Republican territory; and normally also returns to that territory.
- 9. The aircraft carrying *Starflight-1* is registered in Zerbica; it took off from a civil airport in Aspirantia.
- 10. Stationferry and *Starflight-1* were not registered.
- 11. The Stationferry with Mr. Ash on board returned to earth after all its official tasks had been performed.
- 12. Both the release of the capsule by Mr. Ash and the impact on the *Starflight-1* took place above the high seas; the space walk of Mr. Ash was at space station altitude.

- 13. All requirements to be met by private citizens who wish to take a ride with the Stationferry result from licensing conditions imposed on Stationrider by the Republican Space Agency.
- 14. Prior to his flight on the Stationferry, Dr. Vienet got the training normally given by Stationrider to all space flight participants (like Mr. Ash); being a former astronaut this was a routine procedure for him.
- 15. The Stationferry that made an emergency landing in Aspirantia is a later, different flight than the one that was involved in the *Starflight-1* accident; Alfons Linke was captain of both flights. Republica asked officially for the return of the Stationferry that made the emergency landing; this request included all people on board, who were all Republicans; those who were released were returned to Republica together with the Stationferry.
- 17. In the Statement of agreed facts, para. 7, the sentence "...the captain had insufficient authority..." should be read as "...the captain apparently had insufficient authority..."
- 18. There is no extradition agreement between Aspirantia and Republica.
- 19. Neither Aspirantia nor Republica requested the establishment of a Claims Commission as per the Liability Convention.

#### PART C: FINALISTS BRIEFS

### MEMORIAL FOR THE APPLICANT THE REPUBLIC OF ASPIRANTIA

George Washington University (USA)
Ms. Liana W. Yung, Ms. Christa J. Laser and
Mr. Michael Saretsky.
Faculty Advisor: Prof. Henry Hertzfeld

#### **ARGUMENT**

# I. REPUBLICA IS LIABLE TO ASPIRANTIA FOR DAMAGE TO STARFLIGHT-1 UNDER THE OUTER SPACE TREATY, THE LIABILITY CONVENTION, AND CUSTOMARY INTERNATIONAL LAW

Under the Outer Space Treaty and the Liability Convention.<sup>2</sup> a launching State is absolutely liable for causing damage to an aircraft in flight.<sup>3</sup> Additionally, the OST, the Convention, Liability and customary international law require a launching State to compensate an injured State if a space object causes damage and is due to the launching State's fault.<sup>4</sup> Republica is absolutely liable for the damage to Starflight-1 because Starflight-1 was an aircraft in flight and the triggering requirements of the Liability Convention are satisfied. Alternatively, Republica compensate Aspirantia under the theory of fault liability.

## A. This Court has Jurisdiction to Adjudicate Aspirantia's Claims for Compensation

Pursuant to Article 36 of the Statute of the International Court of Justice, this Court has jurisdiction over cases which parties refer to it as well as *ipso facto* jurisdiction over questions of treaty interpretation and international law.<sup>5</sup> In *Corfu Channel*, this Court ruled that a Respondent State voluntarily accepted jurisdiction by raising counter-claims against the Applicant.<sup>6</sup>

Under Article IX of the Liability Convention, claims for compensation "shall [first] be presented to a launching State through diplomatic channels." Article XIV expands: "If no settlement of a claim is arrived at through diplomatic negotiations...the parties concerned shall establish a Claims Commission [to resolve the claim] at the request of either party."

This Court has authority to adjudicate the present application despite the lack of request for a Claims Commission. Aspirantia has illustrated diplomacy by returning *Stationferry*, and a Claims Commission only obtains jurisdiction if a party requests one. Republica did not request one, and its submission to this Court constitutes a waiver of any jurisdictional qualms. 11

### B. Republica is Absolutely Liable for the Damage to Starflight-1

Article VII of the OST provides that a State Party "that launches...an object into outer space [or] from whose territory or facility an object is launched, is internationally liable for damage to another State Party...by such object or its component parts." Similarly, Article II

<sup>&</sup>lt;sup>1</sup> Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies, *opened for signature* Jan. 27, 1967, 18 U.S.T. 2410, 610 U.N.T.S. 205 [hereinafter OST].

<sup>&</sup>lt;sup>2</sup> Convention on International Liability for Damage caused by Space Objects, *opened for signature* Mar. 29, 1972, 24 U.S.T. 2389, 961 U.N.T.S. 187 [hereinafter Liability Convention]. <sup>3</sup> *Id.* art. II.

<sup>&</sup>lt;sup>4</sup> See id. art. III.

<sup>&</sup>lt;sup>5</sup> Statute of the International Court of Justice art. 36, June 26, 1945, 59 Stat. 1031 [hereinafter I.C.J. Statute].

<sup>&</sup>lt;sup>6</sup> Corfu Channel (Preliminary Objection) (U.K. v. Alb.), 1948 I.C.J. 15, 29 (March 25).

<sup>&</sup>lt;sup>7</sup> Liability Convention, *supra* note 2, art. IX.

<sup>&</sup>lt;sup>8</sup> *Id.* art. XIV.

<sup>&</sup>lt;sup>9</sup> See I.C.J. Statute, supra note 89, art. 36.

<sup>&</sup>lt;sup>10</sup> Liability Convention, *supra* note 2, art. XIV.

<sup>&</sup>lt;sup>11</sup> See Corfu Channel (Preliminary Objection), 1948 I.C.J. 15, 29.

<sup>&</sup>lt;sup>12</sup> OST, *supra* note 85, art. VII.

of the Liability Convention states that "[a] launching State shall be absolutely liable to pay compensation for damage caused by its space object on the surface of the Earth or to aircraft in flight." While both treaties govern liability for damages caused by space objects, the Vienna Convention on the Law of Treaties' latter-intime rule instructs this Court to apply the Liability Convention's more specific terms where the treaties conflict. Under the Liability Convention, Republica is absolutely liable as the launching State because its space object caused damage to Aspirantia's Starflight-1 aircraft while in flight.

1. <u>The Starflight-1 Incident Satisfies</u> <u>the Requirements for Absolute</u> Liability

a) Republica constitutes the launching State

The Liability Convention defines "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." Launching States are responsible for national activities "whether such activities are carried on by governmental agencies or by non-governmental entities." Private party ownership, operation,

launching, or financing does not abrogate State responsibility.<sup>17</sup>

Republica constitutes Stationferry's launching State because Stationferry launched from Republican territory<sup>18</sup> Republica procured the launch.<sup>19</sup> Republica licensed and incorporated Stationrider, <sup>20</sup> gave Stationrider permission to launch Stationferry to a permanent Republican space station,<sup>21</sup> and demonstrated authority when it requested Stationferry's return.<sup>22</sup> In terms of State liability, it is irrelevant that Stationrider was a company because Stationferry's activities had "national" scope and control.<sup>23</sup>

### b) Republica caused damage to Aspirantia

Under the Liability Convention, "damage" includes "loss of life, personal injury or impairment of health; or loss of or damage to property of States or of persons." In *Barcelona Traction*, this Court established a State's "property" right over a corporation by assuming that the State of incorporation had the power to bring a claim for wrongdoing.<sup>25</sup>

The Starflight-1 incident caused Aspirantia to suffer damage. After the capsule from Stationferry struck Starflight-1, the co-pilot and two out of three passengers immediately died, the remaining passenger and the pilot were seriously injured, 26 and Starflight-1 was blown to "scattered remnants." Aspirantia constitutes

<sup>&</sup>lt;sup>13</sup> Liability Convention, *supra* note 2, art. II (emphasis added).

<sup>&</sup>lt;sup>14</sup> See Vienna Convention on the Law of Treaties art. 30 (3), opened for signature May 23, 1969, U.N.T.S. [hereinafter VCLT] 1155 311 (codifying the customary principle of lex posterior derogate priori); see also Carl Q. Christol, The Modern International Law of Outer Space 91 (1982) (noting the Liability Convention supplemented the OST provisions). Although Aspirantia has not signed the VCLT, this Court has recognized the latter-in-time rule as customary international law for treaty interpretation. See e.g., Gabčíkovo-Nagymaros Project (Hung v. Slovk), 1997 I.C.J. 7, 38-55 (Sept. 25).

Liability Convention, *supra* note 2, art. I(c) (emphasis added).

<sup>&</sup>lt;sup>16</sup> OST, supra note 85, art VI.

<sup>&</sup>lt;sup>17</sup> See Frans G. von der Dunk, Passing the Buck to Rogers: International Liability Issues in Private Spaceflight, 86 Neb. L. Rev. 400, 410 (2007).

<sup>18</sup> Additional Facts ¶ 8.

<sup>&</sup>lt;sup>19</sup> See Liability Convention supra note 86, art. I(c). Applying Article I(c), Republica constitutes the launching State even though Stationferry was not registered.

<sup>&</sup>lt;sup>20</sup> Compromis  $\P$  9.

<sup>&</sup>lt;sup>21</sup> *Id.* ¶ 11.

<sup>&</sup>lt;sup>22</sup> Additional Facts ¶ 16.

<sup>&</sup>lt;sup>23</sup> See OST, supra note 85, art. VI.

<sup>&</sup>lt;sup>24</sup> Liability Convention, *supra* note 2, art. I(a).

<sup>&</sup>lt;sup>25</sup> See In re Barcelona Traction, Light & Power Co. (Belg. v. Spain), 1970 I.C.J. 4, 33 (Feb. 5).
<sup>26</sup> Compromis ¶ 7.

 $<sup>^{27}</sup>$  Id. ¶ 13.

the injured State because Aspirantian tourists were onboard *Starflight-1*,<sup>28</sup> Aspirantian nationals owned a majority of the Startours Corporation, and Aspirantia incorporated the company under its laws.<sup>29</sup>

c) Republica's "space object" caused the damage

The Liability Convention does not explicitly define "space object," but provides that a space object "includes [its] component parts...as well as its launch vehicle and parts thereof."30 International commentators have clarified that the term encompasses any object that is launched into orbit,<sup>31</sup> including a missile or a space vehicle intended to reach outer space.<sup>32</sup> Component parts of a spacecraft may consist of property on board as well as debris detached or thrown from the vehicle.<sup>33</sup> Although there is no universally accepted definition of debris.<sup>34</sup> the General Assembly has endorsed the following guideline: "Space debris are all man made objects including fragments and elements thereof, in Earth orbit or reentering the atmosphere."35 In cases of uncertainty, Senator William Fulbright observed that standard practice is to identify an object as a "space object" under the Liability Convention.<sup>36</sup>

Sovereignty, 72 J. Air L. & Com. 65, 109 (2007).

In Republica, the *Space Activities Act* 2000 specifically classifies a space object as a launch vehicle, a payload intended to reach an altitude of 100 kilometers above the mean sea level, or a part of such payload even if it is separated.<sup>37</sup>

The capsule that shot away from *Stationferry* and struck *Starflight-1*<sup>38</sup> was a space object because it was a man-made component part of a spacecraft that was re-entering the atmosphere. Stationferry intentionally took the cremains into outer space. Thus, the ejected capsule is tantamount to an object or debris originating from the vehicle. 41

Additionally, although Republica's Space Activities Act is not binding international law, it may be evidence of emerging State practice and opinio juris.42 Pursuant to Republica's definition under the Act, the capsule constitutes a space object.<sup>43</sup> Mr. Ash paid Stationferry's Captain Linke "a handsome amount of money",44 to permit him to take the capsule on a spacewalk above 100 kilometers, 45 and the capsule remained a space object after expelled into outer space.46 Mr. Ash Republica's own law admits that the capsule is a space object, thus Republica cannot deny this concession.

d) The space object destroyed an aircraft in flight

The Liability Convention provides that a launching State is absolutely liable for damage to an aircraft in flight.<sup>47</sup> The

<sup>&</sup>lt;sup>28</sup> Additional Facts ¶ 6.

<sup>&</sup>lt;sup>29</sup> *Compromis* ¶¶ 3-4.

<sup>&</sup>lt;sup>30</sup> Liability Convention, *supra* note 2, art I(d).

<sup>&</sup>lt;sup>31</sup> Christol, *supra* note 98, at 109; Bin Cheng, *Studies in International Space Law* 508 (1997).
<sup>32</sup> Dean N. Reinhardt, *The Vertical Limit of State* 

<sup>&</sup>lt;sup>33</sup> See Carl Q. Christol, Space Law: Past, Present and Future 217 (1991); see also Ricky J. Lee, Reconciling International Space Law with the Commercial Realities of the Twenty-First Century, 4 Sing. J. Int'l & Comp. L. 194, 227 (2000) (noting debris may result from unknown phenomena).

<sup>&</sup>lt;sup>34</sup> Lee, *supra* note 117, at 213, 227.

<sup>&</sup>lt;sup>35</sup> G.A. Res. 62/217, ¶ 26, U.N. Doc. A/RES/62/217 (Feb. 1, 2008) (endorsing the Space Debris Mitigation Guidelines of the Committee on the Peaceful Uses of Outer Space).

Reinhardt, supra note 116, at 109-10.

<sup>&</sup>lt;sup>37</sup> Compromis ¶ 10.

<sup>&</sup>lt;sup>38</sup> *Id.* ¶ 13.

 $<sup>^{39}</sup>$  *Id.* ¶ 7.

<sup>&</sup>lt;sup>40</sup> *Id*. ¶ 12.

<sup>&</sup>lt;sup>41</sup> See Christol, supra note 117, at 217.

<sup>&</sup>lt;sup>42</sup> See infra Section III(B)(1) (detailing the standard for customary law); see also I.C.J. Statute, supra note 89, art. 38(b) (stating this Court may apply international custom as evidence of accepted law).

<sup>&</sup>lt;sup>43</sup> See Compromis ¶ 10.

<sup>&</sup>lt;sup>44</sup> *Id.* ¶ 13.

<sup>&</sup>lt;sup>45</sup> *Id.* ¶ 9.

<sup>&</sup>lt;sup>46</sup> See id. ¶¶ 10(c)-(d).

<sup>&</sup>lt;sup>47</sup> Liability Convention, *supra* note 86, art. II

space treaties do not clarify the term "aircraft"; 48 however, the Convention on International Civil Aviation<sup>49</sup> defines aircraft as "any machine that can derive support in the atmosphere from the reactions of the air other than the reactions of the air against the earth's surface."50 Marietta Benkö<sup>51</sup> and Scholar Bruce Hurwitz<sup>52</sup> similarly observed that an aircraft exercises aeronautical. than astronautical. rather capabilities.53 In light of technological hybrid "aerospace advances. vehicles" demonstrating characteristics of both aircraft and spacecraft are feasible.54 Such vehicles operate as "spacecrafts" when utilizing rocket-thrust capabilities against the Earth's surface and as "aircrafts" when intending to rely aerodynamic lift to fly or descend through the air.55

The preceding functional definition for the term "aircraft" may be preferred, as the space treaties do not delineate a demarcation between airspace and outer space.<sup>56</sup> Nonetheless, some commentators utilize a spacialist approach to characterize aircrafts as vehicles in or intending to remain in

<sup>48</sup> Christol, *supra* note 117, at 208

"airspace." The line between airspace and outer space is not universally agreed upon, but "consensus may be gradually arising that... an altitude at 100 kilometers would be an appropriate altitude at which to separate the legally distinct areas." Several States proposed 100 kilometers above sea level during the Liability Convention deliberations regarding absolute liability, and several States currently delineate outer space at that altitude. Spacialist experts rationalize that a space object should be defined as an object capable of achieving at least one orbit, which can be achieved at 100 kilometers.

Starflight-1 was in aircraft under both the functionalist and spacialist definitions. Applying the functionalist approach, Starflight-1 was an aircraft at the time the capsule struck because it was only using its wings for stabilization, support, and flight; 63 the vehicle was not a spacecraft because it was not rocket thrust emploving or anv other astronautical capability.<sup>64</sup> As a party to the Chicago Convention, 65 Republica should abide by its definition of "aircraft" when employing Article II of the Liability Convention.

Applying the specialist definition, Starflight-1 was an aircraft because it did not

<sup>&</sup>lt;sup>49</sup> Convention on International Civil Aviation, opened for signature Dec. 7, 1944, 61 Stat. 1180, 15 U.N.T.S. 295 [hereinafter Chicago Convention]. Note: While the Chicago Convention addresses issues of airspace sovereignty, the Liability Convention governs the present claim for compensation because a "space object" caused the damage.

<sup>&</sup>lt;sup>50</sup> See Reinhardt, supra note 116, at 76.

Marietta Benkö, Willem de Graff & Gijsbertha C.M. Reijnen, Space Law in the United Nations 121, 122 (1985).

<sup>&</sup>lt;sup>52</sup> Bruce A. Hurwitz, State Liability for Outer Space Activities in Accordance with the 1972 Convention on International Liability for Damage Caused by Space Objects 32 (1992).

<sup>&</sup>lt;sup>53</sup> See Benkö, supra note 135, at 122.

<sup>&</sup>lt;sup>54</sup> See id. at 23; see also Lee, supra note 117, at 211 (recognizing space-planes may have dual character as a space object and as an aircraft).

<sup>55</sup> Reinhardt, supra note 116, at 86.

<sup>&</sup>lt;sup>56</sup> Christol, *supra* note 117, at 208.

<sup>&</sup>lt;sup>57</sup> See Reinhardt, supra note 116, at 120-22; see also Lee, supra note 117, at 210.

<sup>&</sup>lt;sup>58</sup> Benkö, *supra* note 135, at 121 (recognizing that the line between "airspace" and "outer space" is ambiguous as a matter of law).

<sup>&</sup>lt;sup>59</sup> Dunk, *supra* note 101, at 427.

<sup>&</sup>lt;sup>60</sup> See Christol, supra note 98, at 442; see also Lee, supra note 117, at 209 (observing the Soviet Union, one of the main proponents for the space treaties, proposed 100 kilometers as a demarcation line).

<sup>&</sup>lt;sup>61</sup> See Dunk, supra note 101, at 425-27 (listing Pakistan, Russia, Germany, South Africa, Australia, and the United States as generally observing the 100 kilometer demarcation line); see also Reinhardt, supra note 116, at 90 (noting "many legal scholars" would delineate space at 100 kilometers).

<sup>&</sup>lt;sup>62</sup> See Christol, supra note 98, at 109.

<sup>&</sup>lt;sup>63</sup> Compromis  $\P$  6.

<sup>&</sup>lt;sup>64</sup> See Benkö, supra note 135, at 122.

<sup>&</sup>lt;sup>65</sup> Additional Facts ¶ 1.

travel to 100 kilometers. 66 Starflight-1 only reached 93 kilometers. 67 Republica, through its Space Activities Act, seemingly adopts the spacialist definition by defining "space object" as an object traveling beyond 100 kilometers. 68 Under this definition, Republica admits that Starflight-1 was an aircraft by finding it "was not sufficiently powerful or advanced to ever reach an altitude of 100 kilometers." 69

### 2. <u>Republica Cannot Establish a</u> <u>Defense for Absolute Liability</u>

Article VI of the Liability Convention allows exoneration from absolute liability "to the extent that a launching State establishes that the damages...resulted either wholly or partially from gross negligence."<sup>70</sup> Gross negligence has been defined as "the failure to exercise even that care which a careless person would use."71 Generally, a State may also escape absolute liability by proving assumption of risk. 72 Article VI of the Liability Convention, however, does not recognize this defense.73

Republica may argue that Aspirantia's regulation of commercial space flights was so insufficient as to constitute gross negligence,<sup>74</sup>

but the damage to *Starflight-1* did not stem from Aspirantia's actions at all; *Starflight-1* was merely returning back to Earth when an object from *Stationferry* crashed into it. <sup>75</sup> Potential arguments regarding Aspirantia's space regulations are irrelevant because Aspirantia's laws did not cause the capsule to damage contact *Starflight-1*.

Republica may contend that the deceased passengers and co-pilot were grossly negligent for not having worn their headgear, but that decision was reasonable. *Three* out of five individuals, including the co-pilot, removed the obstructive helmets to get a better view of the Earth from traditional airspace. Moreover, their actions should be considered with the fact that they followed the Startours contract throughout the flight by wearing pressurized suits. 77

Lastly, although Republica may claim that Aspirantia assumed the risk of damage by allowing Startours to commercial offer suborbital flights, the assumption of risk defense is not available under the Liability Convention.<sup>78</sup> Regardless, Starflight-1 could not have assumed the risk because, despite international publicity regarding Starflight-1's maiden flight, Republica did not inform neighboring Aspirantia or any other nation of its decision to toss the capsules into orbit.<sup>79</sup> Thus, no State could have knowingly assumed risk of contact.

Accordingly, Republica cannot apply any defenses for absolute liability and must compensate Aspirantia for damages to *Starflight-1*.

<sup>&</sup>lt;sup>66</sup> See Dunk, supra note 101, at 427.

<sup>&</sup>lt;sup>67</sup> Compromis  $\P$  5.

<sup>&</sup>lt;sup>68</sup> *Id.* ¶ 10.

<sup>&</sup>lt;sup>69</sup> *Id.* ¶ 18(ii).

<sup>&</sup>lt;sup>70</sup> Liability Convention, *supra* note 86, art. VI.

Dan B. Dobbs, Robert E. Keeton & David G.
 Owen, Prosser and Keeton on the Law of Torts
 211-12 (W. Page Keeton ed., 5th ed. 1984).

<sup>&</sup>lt;sup>72</sup> See Home Missionary Society (U.S. v. U.K.), 6 R. Int'l Arb. Awards 42, 44 (1920) (ruling that missionaries in Sierra Leone assumed the risk of locals revolting).

<sup>&</sup>lt;sup>73</sup> See Liability Convention, supra note 86, art VI (detailing limited circumstances for when exoneration applies).

<sup>&</sup>lt;sup>74</sup> See Compromis ¶ 3. Republica may also try to argue that Aspirantia is precluded from bringing a claim for damages because Starflight-1 was not registered; however, registration is not mandated under the Chicago Convention because Starflight-1 did not fly over another State's territory, see Chicago Convention, supra note 133, arts. 17, 20, 96, and Aspirantia is not a

party to the Convention on the Registration of Objects Launched into Outer Space, opened for signature Jan. 14, 1975, 28 U.S.T. 695, 1023 U.N.T.S.15 [hereinafter Registration Convention]. Compromis ¶ 22.

<sup>&</sup>lt;sup>75</sup> Compromis  $\P$  7.

<sup>&</sup>lt;sup>76</sup> *Id.* ¶.

<sup>&</sup>lt;sup>77</sup> *Id*. ¶ 2.

<sup>&</sup>lt;sup>78</sup> See Liability Convention, supra note 86, art. IV.

<sup>&</sup>lt;sup>79</sup> Compromis ¶ 12.

### C. Conversely, Republica as Liable as a Matter of Fault

Article III of the Liability Convention provides that if damage is caused "elsewhere than on the surface of the Earth to a space object of one launching State...by a space object of another launching State, the latter shall be liable only if the damage is due to its fault or the fault of persons for whom it is responsible."80 A State is responsible for an individual when there is over person.81 "effective control" the Customary principles of State responsibility compel liability for damages even when a State's space activities are lawful.82

If the Court determines that *Starflight-1* was not an aircraft in flight under the absolute liability analysis, <sup>83</sup> it must be a spacecraft launched into outer space and therefore constitutes a space object. <sup>84</sup> If that is the case, Republica is liable to Aspirantia as a matter of fault under Article III of the Liability Convention. <sup>85</sup>

### 1. <u>Aspirantia Constitutes the Injured</u> Launching State

As discussed above, a "launching State" includes a State that procures the launching of a space object and a State from whose territory a space object is launched. <sup>86</sup> To prevent confusion in cases of multiple possible launching States, the United Nations General Assembly has suggested that launching authorities register their space objects. <sup>87</sup>

procured Starflight-1's Aspirantia launch because it incorporated Startours to utilize the vehicle. 88 Moreover, Starflight-1's launch originated in Aspirantian territory because Zerbica's carrier-aircraft took off from a civil airport in Aspirantia and Starflight-1 subsequently launched from that carrier.89 Republica may argue that Zerbica is the applicable launching State, but Zerbica is only connected to the carrier-aircraft, not to Starflight-1.90 Although registration could have indicated the appropriate launching State, Aspirantia is not a party to the Registration Convention and nonetheless satisfies qualifications to be the launching State under the Liability Convention.91

### 2. <u>Damage Was Due to Republica's</u> Fault

The Liability Convention does not explicitly define "fault," but fault is traditionally established when there is "a failure to exercise the degree of prudence considered reasonable under the circumstances." The reasonableness of State actions depends on the foreseeability of harm. Due to the increasing accumulation of debris in low earth orbit, respected legal scholar Bin Cheng has asserted that damage to a space object by another State's space debris should lead to "an at least rebuttable, if not irrebuttable, presumption of fault." Similarly, Professor Carl Christol has stressed that States should avoid conduct that is likely to produce debris or pollution in space.

The OST provides certain expectations for reasonable actions. Under Article IX, a State must undertake international consultations before its nationals conduct any activity that "would cause potentially harmful interference

<sup>&</sup>lt;sup>80</sup> Liability Convention, supra note 86, art. III.

<sup>&</sup>lt;sup>81</sup> See Military and Paramilitary Activities (Nicar. v. U.S.), 1986 I.C.J. 14, 43 (June 27) (finding the United States was not responsible for certain actions by Nicaraguan contras in part because the United States did not retain "effective control" over them).

<sup>82</sup> See Lee, supra note 117, at 221.

<sup>83</sup> See supra Section I(B)(d).

<sup>&</sup>lt;sup>84</sup> See Christol, supra note 98, at 109; see also Cheng, supra note 115, at 508.

<sup>85</sup> Liability Convention, supra note 86, art III.

<sup>&</sup>lt;sup>86</sup> *Id.* art. I(c).

<sup>&</sup>lt;sup>87</sup> See G.A. Res. 59/115, ¶ 2, U.N. Doc. A/RES/59/115 (Jan. 25, 2005) (recognizing the State of registry as the State responsible for damage by a space object); see also Registration

Convention, *supra* note 158, art. II (stating a launching State shall register its space object).

<sup>&</sup>lt;sup>88</sup> Additional Facts ¶ 5.

<sup>&</sup>lt;sup>89</sup> *Id*. ¶ 9.

 $<sup>^{90}</sup>$  *Id.* ¶ 4.

<sup>&</sup>lt;sup>91</sup> See Liability Convention, supra note 86, art. I(c).

<sup>&</sup>lt;sup>92</sup> Hurwitz, supra note 136, at 33.

<sup>93</sup> Christol, *supra* note 98, at 96.

<sup>&</sup>lt;sup>94</sup> Cheng, *supra* note 115, 509.

<sup>&</sup>lt;sup>95</sup> See Christol, supra note 98, at 109.

with activities of other States." Article XI likewise mandates States to inform the public "to the greatest extent feasible and practicable, of the nature, conduct, locations and results of such activities."

The deaths, injuries, and damage to Starflight-1 were due to Republica's fault. Republica did not act as a reasonably prudent State in sanctioning the release of cremains because damage to another launching State was foreseeable; national and international experts protested the release as imprudent use of outer space. Yet, the Republican Space Agency approved the activity and Stationferry's Captain Linke authorized private possession of a capsule at the Republican space station.

Republica maintained effective control over the actors because Republica licensed Stationrider, 100 gave the company permission to offer private rides, 101 and oversaw space flight participant training. 102 Republica may argue that it acted reasonably through the Space Agency's licensing requirements, 103 but space flight training is only a preliminary step. There is no evidence that Republica followed through or actually regulated the cremains upon release.

Furthermore, Republica is at fault because it defied its notification responsibilities under the OST. Despite *Starflight-1*'s publicized launch and the tension surrounding the cremains, Republica did not inform other nations of the potentially harmful activity.<sup>104</sup>

3. <u>Republica Violated an Internationally Recognized Legal Obligation</u>

A State is also at fault when it violates an internationally recognized legal obligation. One of the most widely

recognized obligations legal is State responsibility, 106 which stems from the Roman legal maxim sic utere tuo ut alienum non laeda: use your own property so as not to damage In Corfu Channel, this Court upheld the principle of State responsibility by finding Albania liable to the United Kingdom for deceased crew members and destroyed ships when Albania failed to act with due care in waterway. 108 maintaining an international Similarly, in *Trail Smelter*, an arbitration panel ruled that no State has the right to use or permit the use of its territory in a manner that will injure the property of another. 109

Placing accountability on launching States is consistent with principles of equity, public policy, and justice. 110 Launching States stand to benefit from successful space activities and should be responsible for any damage the activities generate. 111 Moreover, State liability encourage economically technologically capable launching States to engage in cost-effective monitoring of this inherently dangerous pursuit. 112 States, in turn, can prevent unwarranted liability for commercial activities by implementing indemnification laws. In fact, many space-faring nations, including the United States and Australia, have instituted such statutes. 113

<sup>&</sup>lt;sup>96</sup> OST, supra note 85, art. IX.

<sup>&</sup>lt;sup>97</sup> *Id.* art. XI.

<sup>&</sup>lt;sup>98</sup> Compromis ¶ 12.

<sup>&</sup>lt;sup>99</sup> *Id.* ¶ 13.

<sup>&</sup>lt;sup>100</sup> *Id.* ¶ 9.

<sup>&</sup>lt;sup>101</sup> *Id.* ¶ 11.

<sup>&</sup>lt;sup>102</sup> Additional Facts ¶ 13.

<sup>&</sup>lt;sup>103</sup> *Id*.

<sup>&</sup>lt;sup>104</sup> Compromis ¶ 12.

<sup>&</sup>lt;sup>105</sup> See Ian Brownlie, Principles of Public International Law 436-37 (6th ed. 2003).

<sup>&</sup>lt;sup>106</sup> See Gabčikovo-Nagymaros Project, 1997 I.C.J. 7, 38; see also Cheng, supra note 115, at 289 (noting the Soviets initially argued that the Liability Convention was superfluous because "compensation [for damage caused by space objects] would undoubtedly be payable").

Black's Law Dictionary 1757 (8th ed. 2004).
 Corfu Channel (Merits) (U.K. v. Alb.), 1949
 I.C.J. 4, 23 (Apr. 9); Corfu Channel (Assessment of Compensation) (U.K. v. Alb.), 1949
 I.C.J. 244, 247 (Dec. 15).

<sup>&</sup>lt;sup>109</sup> Trail Smelter (U.S. v. Can.), 3 R. Int'l Arb. Awards 1911 (U.S.-Can. Arb. Trib. 1941).

<sup>&</sup>lt;sup>110</sup> Eric A. Posner & Alan Sykes, *An Economic Analysis of State and Individual Responsibility Under International Law*, 9 Am. L. & Econ. Rev. 72, 75-76 (2007).

<sup>111</sup> Christol, *supra* note 98, at 107.

<sup>&</sup>lt;sup>112</sup> Posner, *supra* note 194, at 75.

<sup>113</sup> Lee, *supra* note 117, at 232.

Republica is at fault because it failed to assume State responsibility for damaging Aspirantia's property, Starflight-1. 114 Republica is a prosperous nation, has developed extensive space-related technologies, 115 and is a party to three space treaties. 116 It therefore has the resources to assume liability and cannot evade responsibilities. Furthermore. Stationferry's flights had been successful, Republica would have benefited because Startours is a Republican company Stationferry transported Republican nationals. 117 Republica should thus accept liability for Stationferry's actions as a matter of equity. 118

Whether under absolute or fault liability, the OST, the Liability Convention, customary international law, and principles of justice mandate that Republica compensate Aspirantia for *Starflight-1* damages. 119

II. REPUBLICA IS LIABLE TO ASPIRANTIA FOR COSTS RELATING TO STATIONFERRY'S INTRUSION AND RETURN UNDER THE RESCUE AND RETURN AGREEMENT, THE LIABILITY CONVENTION, AND CUSTOMARY LAW

Under the OST and the Rescue and Return Agreement, States must recover and return space objects and spacecraft personnel that land in their territory. <sup>120</sup> Consistent with the principle

of State responsibility, the Rescue and Return Agreement also provides that expenses incurred in recovering space objects shall be borne by the launching authority. Pursuant to these provisions, Republica is liable to Aspirantia for the expenses related to *Stationferry*'s return. Alternatively, Republica must compensate Aspirantia for cleanup and recovery costs under the Liability Convention and customary international law. 123

# A. Republica is Liable for Expenses Under the Rescue and Return Agreement

1. <u>Aspirantia Was Obligated to Return</u> Stationferry

The OST states that objects launched into outer space "found beyond the limits of the State Party...shall be returned to that State Party."124 Article 5(5) of the Rescue and Return Agreement adds: "Upon request of the launching authority, objects launched into outer space or their component parts found beyond the territorial limits of the launching authority shall be returned to...the launching authority."125 Pursuant to the VCLT's latter-intime rule, the Rescue and Return Agreement should be read as a supplement to the OST, rather than a replacement. 126

Republica officially requested Stationferry's return. Pursuant to the OST and Article 5(3) of the Rescue and Return Agreement, Aspirantia duly returned the spacecraft. 128

See infra Section III(B)(1) (discussing different forms of State territory).

<sup>&</sup>lt;sup>115</sup> Compromis ¶ 2.

<sup>&</sup>lt;sup>116</sup> *Id.*  $\P$  22.

Additional Facts ¶¶ 3, 6.

<sup>118</sup> If private citizens are actually at fault, Republica may be indemnified under its insurance policy. See id. ¶ 4.

<sup>&</sup>lt;sup>119</sup> See Liability Convention, supra note 86, arts. II, III; see also Corfu Channel (Merits), 1949 I.C.J. 4, 23.

<sup>&</sup>lt;sup>120</sup> OST, *supra* note 85, art. VIII; Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space arts. 4-5, *opened for signature* Apr. 22, 1968, 19 U.S.T. 7570, 672 U.N.T.S. 119 [hereinafter Rescue and Return Agreement].

<sup>&</sup>lt;sup>121</sup> Rescue and Return Agreement, *supra* note 204, art. 5(5).

<sup>&</sup>lt;sup>122</sup> See Liability Convention, supra note 86, arts. II. XII.

<sup>&</sup>lt;sup>123</sup> See Corfu Channel (Merits), 1949 I.C.J. 4, 23.

OST, supra note 85, art. VIII.

Rescue and Return Agreement, *supra* note 204, art. 5(3) (emphasis added).

<sup>&</sup>lt;sup>126</sup> See Christol, supra note 98, at 204.

<sup>127</sup> Additional Facts ¶ 16.

Rescue and Return Agreement, *supra* note 204, art. 5(3).

### 2. <u>Aspirantia Diplomatically Returned</u> the Passengers and Crew

The OST states that astronauts are "envoys of mankind" and that "in the event of accident, distress, or emergency landing...they shall be safely and promptly returned to the State of registry of their space vehicle." Similarly, the Rescue and Return Agreement adds that "the personnel of a spacecraft" should be returned in the event of the above situations and in the event of an unintended landing. As discussed infra, Stationferry's landing may not have been due to an accident, distress, emergency or unintended landing, and

not have been due to an accident, distress, emergency or unintended landing, and *Stationferry*'s passengers may not qualify for protection as spacecraft personnel. <sup>131</sup> Nonetheless, Aspirantia followed the spirit of the OST and Rescue and Return Agreement by releasing *Stationferry*'s crew members and passengers (other than the two individuals it lawfully arrested) to their State of nationality, Republica. <sup>132</sup>

## 3. <u>Republica is Obligated to Compensate Aspirantia for Return Costs</u>

Article 5(5) of the Rescue and Return Agreement states: "Expenses incurred in fulfilling obligations to recover and return a space object or its component parts...shall be borne by the launching authority."133 launching authority is "the State responsible for launching."134 While the obligations referenced deal with the recovery 135 and return of space objects, 136 the treaty is silent in regards to people. 137 One commentator has equated this silence the lack of a payment with requirement. 138 Nonetheless, in line with general principles of equity, this Court has recognized that unjust enrichment should be avoided.<sup>139</sup>

Pursuant to Article 5(5) of the Rescue and Return Agreement, Republica officially requested Stationferry's return and must compensate Aspirantia for the expenses. 140 Although the Rescue and Return Agreement does not expressly mention reimbursement for returning individuals, the costs should be attached under the spirit of Article 5(5) because Republica requested the vehicle and passengers at the same time. Assigning costs to Aspirantia would create unjust enrichment and establish quality rescues. 141 disincentives for high Furthermore, Article 5(5) was adopted before drafters could envision private spaceflight participants, 142 and if silence denotes lack of a payment obligation, the provision should only apply to astronauts (or, at most, personnel). 143 Private space flight participants, unlike "envoys of mankind," travel solely for personal purposes and returning States should not bear the cost of their repatriation.<sup>144</sup>

# B. Republica is Liable to Aspirantia for Cleanup, Recovery, and Return Costs Related to Stationferry's Landing Under the Liability Convention and Customary Law

Pursuant to the customary principle of State sovereignty, Article II of the Liability Convention imposes absolute liability for damage caused by a space object to the surface of the Earth. When *Stationferry* landed in Aspirantia, Aspirantia not only sustained direct damages to its lake, it suffered consequential

<sup>&</sup>lt;sup>129</sup> OST, supra note 85, art V.

Rescue and Return Agreement, *supra* note 204, art 4 (emphasis added).

<sup>&</sup>lt;sup>131</sup> See discussion infra, Section III(A).

<sup>&</sup>lt;sup>132</sup> Compromis ¶ 17.

Rescue and Return Agreement, *supra* note 204, art. 5(5).

<sup>134</sup> *Id.* art. 6.

<sup>&</sup>lt;sup>135</sup> *Id.* art. 5(2).

<sup>136</sup> Id. art. 5(3).

<sup>137</sup> Christol, *supra* note 98, at 200.

<sup>&</sup>lt;sup>138</sup> See id.

<sup>&</sup>lt;sup>139</sup> See North Sea Continental Shelf (F.R.G. v. Den./F.R.G. v. Neth.), 1969 I.C.J. 3, 136 (Feb.

<sup>20) (</sup>separate opinion of Judge Ammoun).

Rescue and Return Agreement, *supra* note 204, arts. 5(5), 6.

<sup>141</sup> Additional Facts ¶ 16.

<sup>&</sup>lt;sup>142</sup> See Christol, supra note 98, at 200.

<sup>&</sup>lt;sup>143</sup> See OST, supra note 85, art. V.

<sup>&</sup>lt;sup>144</sup> See Posner, supra note 194, at 75-76 (observing State responsibility stems in part from a State's ability to benefit from an individual's actions).

Liability Convention, supra note 86, art. II

damages in returning the spacecraft and passengers. Under Article II, Republica is absolutely liable for all proximate costs incurred. 147

### 1. <u>Republica is Absolutely Liable for</u> <u>Direct Damages to the Aspirantian</u> Lake

Under the Chicago Convention and customary law, States retain exclusive sovereignty over their territories, the airspace above their territories, and their territorial waters. 148 Consistent with this principle, States have a firm obligation to avoid unwelcomed intrusions into other States' terrain. 149 example, in Corfu Channel, this Court found that British minesweeping activities in Albanian violated Albania's sovereignty. 150 Similarly, in Trail Smelter, an arbitration panel authorized recovery when Canada's smelter plant leaked noxious fumes over the Washington State boarder. 151 One may argue that space objects should be able to pass through sovereign airspace because outer space is the common heritage of all mankind, 152 but scholars assert that such a determination would be contrary to the principles of international law. 153

The international obligation to respect other States' territorial sovereignty supports absolute liability under Article II of the Liability Convention. The Cosmos 954 settlement illustrates this application; after Canada claimed that the Soviet Union was liable for damage by a fallen satellite under the Liability Convention and customary territorial law, the Soviet Union

settled by paying three million Canadian dollars in compensation. Likewise, when U.S.A. 193, a United States satellite carrying hydrazine fuel, malfunctioned in space, a United States ambassador pledged to compensate countries if debris landed in their territory. 156 Pursuant to the OST and the long-standing principle of State responsibility, States assume international liability for national activities bv governmental and non-governmental entities. 157

The requirements for absolute liability under Article II of the Liability Convention are satisfied: was Stationferry's Republica discussed supra: 158 launching State, as Stationferry constitutes a space object because it was thrust-powered and ascended to 350 kilometers;159 and Captain Linke's intentional release of fuel caused serious damage to an Aspirantian lake which is part of the surface of the Earth. 160

Republica is responsible for Captain Linke's actions because he was a Republican national acting on behalf of a Republican company. Moreover, the flight furthered Republica's national objective of supplying the Republican space station. Any possible rebuttals that the landing was an emergency or that Captain Linke mistook Aspirantia's lake for the ocean are irrelevant because the Liability Convention imposes absolute liability.

2. Republica is Absolutely Liable for Resulting Rescue and Return Costs
Article XII of the Liability
Convention states: Damages "shall be

<sup>&</sup>lt;sup>146</sup> Compromis ¶ 17.

<sup>&</sup>lt;sup>147</sup> Christol, *supra* note 117, at 222-23.

<sup>&</sup>lt;sup>148</sup> Chicago Convention, *supra* note 133, arts. 1-2; Cheng, *supra* note 115, at 476; Lee, *supra* note 117, at 207.

<sup>&</sup>lt;sup>149</sup> See Military and Paramilitary Activities, 986 I.C.J. 14, 128 (ruling intentional flights over Nicaragua breached state sovereignty).

<sup>&</sup>lt;sup>150</sup> See Corfu Channel (Merits), 1949 I.C.J. 4, 33-35

<sup>151</sup> Trail Smelter, 3 R. Int'l Arb. Awards 1911.

<sup>152</sup> See OST, supra note 85, art. I.

<sup>&</sup>lt;sup>153</sup> See, e.g., Lee, supra note 117, 208.

<sup>&</sup>lt;sup>154</sup> See Corfu Channel, 1949 I.C.J. 4, 23.

<sup>&</sup>lt;sup>155</sup> See Benkö, supra note 135, at 49-51.

<sup>156</sup> See David A. Koplow, Asat-Isfaction: Customary International Law and the Regulation of Anti-Satellite Weapons, 30 Mich. J. Int'l L. 1187, 1210, n. 73 (2009).

<sup>157</sup> OST, supra note 85, art VI; see also Trail Smelter, 3 R. Int'l Arb. Awards 1911.

<sup>&</sup>lt;sup>158</sup> See supra, Section I(B)(1)(a).

<sup>159</sup> Compromis ¶ 9; see also Section I(B)(1)(c).

<sup>&</sup>lt;sup>160</sup> Compromis ¶ 15.

<sup>161</sup> Additional Facts ¶ 6.

<sup>&</sup>lt;sup>162</sup> See OST, supra note 85, art VI.

<sup>&</sup>lt;sup>163</sup> Compromis ¶ 15.

<sup>&</sup>lt;sup>164</sup> See Liability Convention, supra note 86, art II.

determined in accordance with international law and principles of justice and equity, in order to provide such reparation in respect of the damage as will restore . . . the condition which would have existed if the damage had not occurred." <sup>165</sup> In the *Chorzów Factory* case, the Permanent Court of International Justice employed this customary principle by finding that reparation should be made to return an injured party to a position they were in prior to the wrongful act. <sup>166</sup>

The Liability Convention does not expressly address indirect damages; 167 however, in light of Article XII, Chorzów, Corfu Channel, and Trail Smelter, many academic scholars agree that the term "cause" covers proximately caused indirect damages. 168 other words, an injured State may be allowed to recover for additional expenses stemming from the initial impact of a space object to its territory on the surface of the Earth. 169 For example, there was no direct property damage<sup>170</sup> when the Soviet satellite, Cosmos 954, dropped debris into Canadian territory and the Soviet Union paid Canada millions of dollars, 171 but consequential damages arose while Canada conducted cleanup efforts pursuant to its common law duty to mitigate harm. 172

Similar to the Cosmos 954 case, Aspirantia adhered to its duty to mitigate

 $^{165}$  Id. art. XII

damages by retrieving foreign space materials.<sup>173</sup> Under the Liability Convention and customary law, Republica is responsible for returning Aspirantia to similar circumstances as before the *Stationferry* incident.<sup>174</sup> Republica would fulfill this obligation by compensating Aspirantia for the direct damages to the Aspirantian lake as well as for the indirect expenses in returning the *Stationferry* vehicle and passengers as Republica requested.<sup>175</sup>

# III. ASPIRANTIA LAWFULLY ARRESTED, CHARGED, AND DETAINED CAPTAIN LINKE AND DR. VIENET BECAUSE A STATE MAY PROSECUTE CRIMES COMMITTED ON ITS TERRITORY

Aspirantia does not have a duty to return Captain Linke or Dr. Vienet under the Rescue and Return Agreement and may prosecute the individuals under customary international law. Republica may try to evade Aspirantia's lawful charges by alleging diplomatic immunity or safe-passage privileges, but no defense applies.

## A. The Obligation to Return Crew Members and Passengers is Not Absolute

Republica may assert that the Rescue and Return Agreement commands the return of all individuals onboard *Stationferry*, but the Rescue and Return Agreement's provisions regarding the return of people do not apply to intentional landings or space flight participants. 176

### 1. <u>Stationferry Intentionally Entered</u> <u>Aspirantian Territory</u>

The Rescue and Return Agreement only applies in the case of "accident, distress, emergency, or unintended landing." An unintended landing may include a landing due to

See Factory at Chorzów (Ger. v. Pol.), 1928
 P.C.I.J. (ser. A) No. 17 (Sept. 13).

<sup>&</sup>lt;sup>167</sup> Christol, *supra* note 98, at 222-23.

<sup>&</sup>lt;sup>168</sup> See id. (arguing "cause" should only require proximate causation); see also Lee, supra note 117, at 224-25 (observing that costs incurred in mitigating harm are presumable grounds for compensation).

<sup>&</sup>lt;sup>169</sup> Christol, *supra* note 98, at 222-23.

<sup>&</sup>lt;sup>170</sup> Peter Haanappel, Some Observations on the Crash of the Cosmos 954, 6 J. Space L. 147, 148 (1978).

<sup>&</sup>lt;sup>171</sup> See David Goren, Nuclear Accidents in Space and on Earth: An Analysis of International Law Governing the Cosmos-954 and Chernobyl Accidents, 5 Geo. Int'l Envtl. L. Rev. 855, 855 (1993).

<sup>&</sup>lt;sup>172</sup> See Christol, supra note 98, at 97.

<sup>&</sup>lt;sup>173</sup> Compromis ¶ 17.

<sup>&</sup>lt;sup>174</sup> Liability Convention, *supra* note 86, art. XII.

<sup>&</sup>lt;sup>175</sup> Christol, *supra* note 117, at 222-23.

<sup>&</sup>lt;sup>176</sup> See Rescue and Return Agreement, supra note 204, art. 2.

<sup>&</sup>lt;sup>177</sup> *Id*.

mistake or navigational error.<sup>178</sup> Return is not mandated when a spacecraft *intentionally* lands in another State's territory.<sup>179</sup> This absence of protection is consistent with the principle of State sovereignty.<sup>180</sup>

Although Stationferry declared an emergency, <sup>181</sup> there is insufficient evidence that the landing into Aspirantia was in fact owing to accident, distress, emergency, or unintended landing. <sup>182</sup> The evidence indicates that Captain Linke maintained control over the spacecraft, and intended to land the spacecraft on an Aspirantian runway. <sup>183</sup> Thus, the Rescue and Return Agreement is inapplicable and Aspirantia assumes no duty to return either Captain Linke or Dr. Vienet.

### 2. <u>Dr. Vienet is Not Protected as an Astronaut or Spacecraft Personnel</u>

The OST mandates the return of astronauts as "envoys of mankind." <sup>184</sup> Similarly, the Rescue and Return Agreement requires the return of spacecraft personnel. <sup>185</sup> During treaty discussions, the drafters only envisioned the term "personnel" as applying to spacecraft crew members. <sup>186</sup>

Although one could argue that protecting personnel but not space flight participants is irrational, the VCLT provides that the plain meaning of a term should be applied

absent ambiguity. The Chicago Convention illustrates that the term "personnel" is not ambiguous by expressly distinguishing between "crew members" and "passengers." Similarly, the United States Federal Aviation Administration differentiates "crew members" from "space flight participants."

Dr. Vienet was neither an astronaut nor spacecraft personnel, but a private space flight participant. Even though Dr. Vienet was a former astronaut, he was not hired to perform a specific task for the *Stationferry* flight. Pather, he received routine space flight participant training and was acting as a private paying passenger. Republica has signed and ratified the VCLT and should adhere to the plain meaning of the term "personnel." Dr. Vienet is not protected under this definition, and Aspirantia has no duty to return him to Republican authorities.

### B. <u>Aspirantia May Lawfully Prosecute</u> Captain Linke and Dr. Vienet

Under customary international law, States may assert jurisdiction over non-nationals who commit crimes in their territory or commit crimes that substantially affect their territory. <sup>194</sup> Aspirantia may accordingly charge and detain Captain Linke and Dr. Vienet.

<sup>178</sup> Christol, supra note 98, at 184.

<sup>&</sup>lt;sup>179</sup> See Rescue and Return Agreement, supra note 204, art. 4; see also OST, supra note 85, art. VI.

<sup>&</sup>lt;sup>180</sup> See Corfu Channel, 1949 I.C.J. 4, 23.

<sup>&</sup>lt;sup>181</sup> Compromis ¶ 15.

<sup>&</sup>lt;sup>182</sup> Rescue and Return Agreement, *supra* note 204, art. 4.

<sup>&</sup>lt;sup>183</sup> Compromis ¶ 15.

<sup>&</sup>lt;sup>184</sup> OST, supra note 85, art. V.

Rescue and Return Agreement, *supra* note 204, art. 4 (emphasis added).

<sup>186</sup> See Cheng, supra note 115, at 232. (observing that the treaties would need to be amended or differently construed once space exploration developed to include "persons other than members of the crew").

<sup>&</sup>lt;sup>187</sup> VCLT, *supra* note 98, art. 31(1). Republica has ratified the VCLT and the "plain meaning doctrine" is established customary law.

<sup>&</sup>lt;sup>188</sup> See Chicago Convention, supra note 133, arts. 13, 30, 42.

<sup>&</sup>lt;sup>189</sup> See Federal Aviation Administration, "Human Space Flight Requirements for Crew and Space Flight Participants; Final Rule," 71 Fed. Reg. 75616 (December 15, 2006).

<sup>&</sup>lt;sup>190</sup> See Compromis ¶ 16.

<sup>191</sup> Additional Facts ¶ 14.

<sup>&</sup>lt;sup>192</sup> *Compromis* ¶ 16.

<sup>&</sup>lt;sup>193</sup> *Id.* ¶ 22.

<sup>194</sup> See Restatement (Third) of Foreign Relations Law § 402 (1987) (outlining the customary principle of territoriality and the effects doctrine).

### 1. <u>International Law Permits a State to</u> <u>Prosecute Crimes Committed on its</u> Territory

Under customary international law, State courts may exercise jurisdiction over nonnationals who commit crimes in their territory. 195 The Lotus case is often cited in support of this principle. 196 In that case, the Lotus. a French vessel flying the French flag, collided with a Turkish vessel. 197 Eight Turkish citizens died, and Turkey proceeded to prosecute the Lotus's commander for manslaughter. 198 Although France argued that the law of the pilot's flag should control, the Permanent Court Justice upheld Turkey's of International prosecution. 199 In 1990, an international arbitration panel preserved the Lotus ruling in Rainbow Warrior; after French spies destroyed a sea vessel harbored in New Zealand, the Rainbow Warrior panel granted great deference to New Zealand's manslaughter charges. 200

A State may limit foreign prosecution of its citizens by instituting extradition agreements. Absent such an agreement, international custom recognizes a State's right to prosecute non-nationals within its territory. For instance, in *Alvarez-Machain*, the Supreme Court of the United States charged a Mexican citizen for violating United State's criminal laws, and the Supreme Court upheld jurisdiction over the non-resident even though his presence

in the country was procured by means of forcible abduction. <sup>203</sup>

Pursuant to Articles 1 and 2 of the Chicago exclusive Convention, territorial sovereignty extends to land, airspace, and territorial waters.<sup>204</sup> Territory may also include objects such as ships, aircrafts, and space objects.<sup>205</sup> For instance, in the *Lotus* decision, the court ruled that the Turkish vessel flying the Turkish flag constituted Turkish territory.<sup>206</sup> Although outer space cannot be appropriated, <sup>207</sup> the OST similarly provides that a launching State retains jurisdiction and control over objects launched into space.<sup>208</sup> If nationality cannot be determined with a flag or registration document, the Barcelona Traction case found ownership rests with State the of incorporation.<sup>209</sup> Concurrent jurisdiction may also be possible.<sup>210</sup>

After the *Lotus* case, but before the *Rainbow Warrior* affair, two multilateral treaties established a flag State's jurisdictional authority in the high seas;<sup>211</sup> however, there is inadequate evidence that the treaties' reflect binding customary international law.<sup>212</sup> For a rule to become customary law it must be a "general and

<sup>&</sup>lt;sup>195</sup> See Brownlie, supra note 189, at 298, 303; see also Posner, supra note 194, at 123 (noting individuals may be held criminally liable for violating international law).

<sup>&</sup>lt;sup>196</sup> S.S. "Lotus" (Fr. v. Turk.), 1927 P.C.I.J. (ser. A) No. 10 (Sept. 7).

<sup>&</sup>lt;sup>197</sup> *Id.* at 10.

<sup>&</sup>lt;sup>198</sup> *Id*.

<sup>&</sup>lt;sup>199</sup> *Id.* at 9.

<sup>&</sup>lt;sup>200</sup> See Rainbow Warrior (N.Z. v. Fr.), 20 R. Int'l Arb. Awards 217 (N.Z.-Fr. Arb. Trib. 1990).

<sup>&</sup>lt;sup>201</sup> See e.g., United States v. Alvarez-Machain, 504 U.S. 655, 664 (1992).

<sup>&</sup>lt;sup>202</sup> See id. ("In the absence of an extradition treaty, nations are under no obligation to surrender those in their country to foreign authorities for prosecution.").

<sup>&</sup>lt;sup>203</sup> This Court should recognize the *Alvarez-Machain* holding as evidence of international custom and general principles of law recognized by civilized nations. *See* I.C.J. Statute, *supra* note 89, art. 38.

<sup>&</sup>lt;sup>204</sup> See Chicago Convention, supra note 133, arts. 1-2.

<sup>&</sup>lt;sup>205</sup> See Lee, supra note 117, at 198.

<sup>&</sup>lt;sup>206</sup> Lotus, 1927 P.C.I.J. (ser. A) No. 10, at 30-31.

<sup>&</sup>lt;sup>207</sup> See OST, supra note 85, art. 1.

<sup>&</sup>lt;sup>208</sup> See id. art. VII.

<sup>&</sup>lt;sup>209</sup> See Barcelona Traction, 1970 I.C.J. 4, 33.

<sup>&</sup>lt;sup>210</sup> See Lee, supra note 117, at 198.

Unification of Certain Rules Relating to Penal Jurisdiction in Matters of Collision or other Incidents of Navigation art. 11, opened for signature May 10, 1952, 439 U.N.T.S. 233 (stating that the flag state or the state of which the accused is a national retains jurisdiction over penal proceedings); Convention on the High Seas, opened for signature Apr. 29, 1958, 450 U.N.T.S. 82 [hereinafter High Seas Convention].

consistent practice of States followed by them from a sense of legal obligation."<sup>213</sup> International custom is not lightly regarded as having been attained.<sup>214</sup> New practices are not customary law until they are "extensive and virtually uniform," especially with respect to States whose interests are specifically affected.<sup>215</sup>

There is no evidence that the French position in *Lotus*, which grants primary jurisdiction to the pilot's flag State, has become consistent state practice due to *opinio juris*. <sup>216</sup> Thus, Republica is obliged to follow previously established customary law and allow Aspirantia to prosecute crimes committed in its territory. <sup>217</sup>

Both the manslaughter of Aspirantian environmental nationals and damage substantially affected Aspirantian territory. When Captain Linke intentionally released fuel into an Aspirantian lake, 218 the environmental affected Aspirantia's damage sovereign territorial waters.<sup>219</sup> The damage to Starflight-1 was also to Aspirantia's territory because the vehicle is analogous to the Turkish vessel in Lotus<sup>220</sup> and there were Aspirantian citizens onboard.<sup>221</sup> Although *Starflight-1* was not yet registered,<sup>222</sup> the *Barcelona Traction* case supports jurisdiction because Aspirantia is the

Restatement (Third) of Foreign Relations Law § 102(2); see also Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 1996 I.C.J. 226, 253 (July 8) (reiterating that customary international law requires actual state

practice and *opinio juris*).

214 *Military and Paramilitary Activities* (Nicar. v. U.S.), 1986 I.C.J. 14, 43.

State of incorporation.<sup>223</sup> Moreover, Aspirantia may prosecute both individuals because they were arrested after they landed in Aspirantian territory.<sup>224</sup> Analogous to the *Alvarez-Machain* case, it is irrelevant whether the individuals entered Aspirantia intentionally or Aspirantia retains the right to prosecute people within its borders.<sup>225</sup> If Republica wanted to restrict Aspirantia's territorial jurisdiction over Republican nationals, Republica could and should have formulated extradition an agreement.<sup>226</sup>

### 2. <u>General Principles of International</u> Law Support Aspirantia's Charges

This Court recognizes "general principles of law recognized by civilized nations" as persuasive sources of law. 227 Applying civilized nations' standards for manslaughter and environmental harm, this Court should find that Aspirantia has sufficient evidence to prosecute Captain Linke and Dr. Vienet for the manslaughter of the victims onboard *Starflight-1* and for violating Aspirantia's environmental laws. 228

a) International law supports Aspirantia's manslaughter charges

The United States Model Penal Code defines manslaughter as a homicide that "is committed recklessly." Likewise, the

North Sea Continental Shelf (F.R.G. v. Den./F.R.G. v. Neth.), 1969 I.C.J. 3, 41-43 (Feb. 20)

<sup>&</sup>lt;sup>216</sup> See Brownlie, supra note 189, at 306.

<sup>&</sup>lt;sup>217</sup> See Lotus, 1927 P.C.I.J. (ser. A) No. 10, at 30-31.

<sup>&</sup>lt;sup>218</sup> Compromis ¶ 15.

<sup>&</sup>lt;sup>219</sup> Chicago Convention, *supra* note 133, art. 2.

<sup>&</sup>lt;sup>220</sup> See Lotus, 1927 P.C.I.J. (ser. A) No. 10, at 30-31.

<sup>&</sup>lt;sup>221</sup> Additional Facts ¶ 6.

 $<sup>^{222}</sup>$  *Id.* ¶ 10.

<sup>&</sup>lt;sup>223</sup> See Barcelona Traction, 1970 I.C.J. 4, 33; Compromis  $\P$  3. The Starflight-1 vehicle constitutes Aspirantian territory even though the incident occurred above the high seas. See Additional Facts  $\P$  12.

<sup>&</sup>lt;sup>224</sup> Compromis ¶ 15.

<sup>&</sup>lt;sup>225</sup> See Alvarez-Machain, 504 U.S. at 664.

No extradition agreement was formed. Additional Facts ¶ 18.

<sup>&</sup>lt;sup>227</sup> I.C.J. Statute, *supra* note 89, art. 38(d); *see also Factory at Chorzów*, 1928 P.C.I.J. (ser. A) No. 17, at 29 (using general principles of law to clarify the concept of "reparations").

This analysis illustrates that Aspirantia charged Captain Linke and Dr. Vienet for legitimate purposes and not due to bribery or hostage holding.

<sup>&</sup>lt;sup>229</sup> Model Penal Code § 210.3 (1962) (U.S.).

French Civil Code defines manslaughter, or homicide involontaire, as "the fact of causing death by such awkwardness, imprudence, inattention, negligence, or omission of a legal obligation imposed by law regulation."<sup>230</sup> In *Lotus*, Turkey prosecuted a French watchman for manslaughter after his inattention supposedly caused eight deaths.<sup>231</sup>

A competent tribunal could reasonably find Captain Linke and Dr. Vienet guilty of manslaughter. Captain Linke was responsible for directing Stationferry when the metal cremains capsule killed three individuals on Starflight-1.<sup>232</sup> Captain Linke's decision to exchange a capsule for a substantial amount of money was unquestionably reckless in light of international protests regarding cremains.<sup>233</sup> Moreover, as the Director-General of the Republican Space Agency<sup>234</sup> monitored Stationferry's training procedures and sanctioned the capsules' dispersal, 235 Vienet's insufficient imposition of regulations was reckless under the circumstances. 236 Similar to the Lotus watchman, Captain Linke and Dr. Vienet imprudently carried out their influential positions. 237 Aspirantia may thus charge them for manslaughter.

> b) International law supports Aspirantia's environmental damage claim

Aspirantia may lawfully charge and detain the two men for violating its environmental laws. Consistent with the principle of State sovereignty, individuals have an international responsibility to inform other States of possible territorial intrusions.<sup>238</sup> For example, when the United States thought its plane was going to land on China's Hainan Island, individuals issued mayday and distress alerts to notify China.<sup>239</sup>

Captain Linke breached Aspirantia's sovereignty and environmental laws by landing in Aspirantian territory and dispersing fuel into one of its lakes.<sup>240</sup> At the very least, Captain Linke should have notified Aspirantia of a potential territorial intrusion.<sup>241</sup> Captain Linke had the time to land the spacecraft safelv<sup>242</sup> and should have had sufficient time to issue an alert.

As the Director-General of Republican Space Agency,<sup>243</sup> Dr. Vienet may also be charged for violating Aspirantia's environmental laws. A competent tribunal could reasonably find that Dr. Vienet, on behalf of the Republican Space Agency, did not institute sufficient regulations for Stationferry's landing procedures or notification requirements.<sup>244</sup> Republica may argue that it retains jurisdiction over its nationals, but Captain Linke and Dr. Vienet subjected themselves to Aspirantia's legal regime when they landed in Aspirantia.<sup>245</sup>

### 3. No Defenses Apply

a) Neither Linke nor Vienet can seek diplomatic immunity

The Vienna Convention on Diplomatic Relations states, "The person of a diplomatic agent shall be inviolable."246 Although the Convention lists an "envoy" as an

<sup>&</sup>lt;sup>230</sup> Code Pen. art 221-6 (2000) (Fr.) ("[L]e fait de causer [la mort] par maladresse, imprudence, inattention, negligence ou manquement à une obligation de sécurité ou de prudence imposée par la loi ou le règlement.").

<sup>&</sup>lt;sup>231</sup> Lotus, 1927 P.C.I.J. (ser. A) No. 10, at 3.

<sup>&</sup>lt;sup>232</sup> *Compromis* ¶¶ 7, 9.

 $<sup>^{233}</sup>$  *Id.* ¶ 13.

 $<sup>^{234}</sup>$  *Id.* ¶ 16.

<sup>&</sup>lt;sup>235</sup> *Id.* ¶ 12.

<sup>&</sup>lt;sup>236</sup> See Model Penal Code § 210.3.

<sup>&</sup>lt;sup>237</sup> See Lotus, 1927 P.C.I.J. (ser. A) No. 10, at 3.

<sup>&</sup>lt;sup>238</sup> See Glenn H. Reynolds & Robert P. Merges, Outer Space: Problems of Law and Policy 181-82 (2d. ed. 1997).

<sup>&</sup>lt;sup>239</sup> Press Release, Secretary Rumsfeld Briefs on Collision EP-3 (Apr. 13, 2001) http://www.defenselink.mil/transcripts/transcript .aspx?transcriptid=1066.

240 Compromis ¶ 15.

<sup>&</sup>lt;sup>241</sup> See Reynolds, supra note 322, at 181-82.

 $<sup>^{242}</sup>$  *Id.* ¶ 15.

<sup>&</sup>lt;sup>243</sup> Compromis ¶ 16.

<sup>&</sup>lt;sup>244</sup> See Additional Facts ¶ 13.

<sup>&</sup>lt;sup>245</sup> See Alvarez-Machain, 504 U.S. at 664.

<sup>&</sup>lt;sup>246</sup> Vienna Convention on Diplomatic Relations, opened for signature Apr. 18, 1961, 23 U.S.T. 3227, 500 U.N.T.S. 95.

included category, it does not specifically refer to astronauts. 247 For this reason, some commentators have asserted that the term "envoy of mankind" in the OST was "no more than a figure of speech without really any legal significance."248 Regardless, Astronauts may not be considered "envoys of mankind" when engaged in combat, piracy, or espionage because pirates and spies have historically considered enemies of all mankind. 249 personal capacity distinction is reflected in the Convention on Privileges and Immunities of the United Nations<sup>250</sup> where the General Assembly grants "experts" immunity from personal arrest only "during the period of their mission." 251

If this Court finds that astronauts have diplomatic immunity under the Convention, that immunity would not apply to Captain Linke or On the Stationferry flight, the Dr. Vienet. were not developing individuals exploration as "envoys of mankind, but acting as private businessmen.<sup>252</sup> Republica may assert that Dr. Vienet should be afforded diplomatic immunity based on his former astronaut status or his current position at the Republican Space Agency; however, Dr. Vienet was acting as a private passenger, not as an "envoy of mankind" or an "expert" on a United Nations mission. 253

> b) There no applicable are defenses under the Chicago Convention or the concept of force majeure

Under Article 5 of the Chicago Convention, a civil aircraft may make a nontraffic stop in another State's territory254 for

"any purpose other than taking on or discharging passengers, cargo or mail."255 While an individual is in a State's territory, that State's laws regarding departure govern.256 Additionally, the High Seas Convention permits qualified territorial intrusion under force majeure circumstances, which make an action more than simply difficult.257

Captain Linke and Dr. Vienet may try to assert that Article 5 of the Chicago Convention applies to Stationferry, however, Stationferry's landing into Aspirantian territory was not for a non-traffic purpose; the vehicle landed for the purpose of discharging passengers.<sup>258</sup> Similarly. the individuals cannot claim a force majeure defense because there is evidence Stationferry made the easiest landing possible.<sup>259</sup> Assuming, arguendo, that one of these defenses applied and the individuals had a right to land, Aspirantia's laws regarding departure would still govern.<sup>260</sup> Aspirantia may therefore prosecute the two individuals within its territory.

Aspirantia acted lawfully when it charged and arrested Captain Linke and Dr. Vienet because it did not have a responsibility to return the individuals and customary law supports its prosecution. Republica cannot use lawful detention to escape liability for the damages relating to Starflight-1 Stationferry.

### **SUBMISSIONS TO THE COURT**

For the foregoing reasons, the Republic of Aspirantia, Applicant, respectfully requests this Court to adjudge and declare that:

1. Republica is liable for the destruction of Starflight-1 and for the deaths and injuries sustained by the individuals onboard;

<sup>&</sup>lt;sup>247</sup> *Id.* at art. 14(1)(b).

<sup>&</sup>lt;sup>248</sup> See, e.g., Cheng, supra note 115, at 507.

<sup>&</sup>lt;sup>249</sup> See Robert A. Ramey, Armed Conflict on the Final Frontier: The Law of War in Space, 48 A.F. L. Rev. 1, 50 (2000).

<sup>&</sup>lt;sup>250</sup> Convention on Privileges and Immunities of the United Nations art. VI, Feb. 13, 1946, 21 U.S.T. 1418, T.I.A.S. No. 6900, 1 U.N.T.S. 15, T.S. 993 (entered into force on Apr. 29, 1970). <sup>251</sup> *Id*.

<sup>&</sup>lt;sup>252</sup> Compromis ¶¶ 13, 16

<sup>&</sup>lt;sup>253</sup> Id.

<sup>&</sup>lt;sup>254</sup> Chicago Convention, *supra* note 133, art. 5.

<sup>&</sup>lt;sup>255</sup> *Id.* art. 96(d).

<sup>&</sup>lt;sup>256</sup> See id. art. 13.

<sup>&</sup>lt;sup>257</sup> High Seas Convention, *supra* note 295, art.

<sup>&</sup>lt;sup>258</sup> See Chicago Convention, supra note 133, arts. 5, 96(d).

<sup>&</sup>lt;sup>259</sup> Compromis ¶ 15; High Seas Convention, supra note 295, art. 14(3).

<sup>&</sup>lt;sup>260</sup> See Chicago Convention, supra note 133, art. 13.

- 2. Republica is liable for the cleanup, recovery and return costs incurred as a result of *Stationferry*'s landing into Aspirantia's territory; and
- 3. Aspirantia did not contravene international law by arresting and charging Captain Linke and Dr. Vienet.

### MEMORIAL FOR THE RESPONDENT KINGDOM OF REPUBLICA

National University of Singapore, Singapore. Ms. Ying Li Zanetta Joan Sit, Mr. Dominic Wei'an Tan and Mr. Muhammad Aidil bin Zulkifli,

Faculty Advisor: Prof. Lim Lei Theng.

### **ARGUMENT**

I. ASPIRANTIA MUST RETURN CAPTAIN LINKE AND DR VIENET TO REPUBLICA UNDER ART 4 OF THE RESCUE AGREEMENT.

Aspirantia is obliged to return Captain Linke and Dr Vienet because they were personnel of a spacecraft who landed in Aspirantia under distress. This obligation is absolute and unconditional. Aspirantia's refusal to release these Republican nationals from its custody is inconsistent with the ethos and humanitarian spirit of the Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space ('Rescue Agreement').

# A. Aspirantia is under an absolute obligation to return Captain Linke and Dr Vienet under Art 4 of the Rescue Agreement.

Under Art 4 of the Rescue Agreement, states are obligated to return any personnel of a spacecraft who land in their territory owing to distress. On the facts, the requirements of 'distress' and 'personnel of spacecraft' are met. The only exception to this obligation is if a peremptory norm (recognized under international law) is breached. This exception is not applicable here as Captain Linke and Dr Vienet did not breach any peremptory norm.

Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space, opened for signature 22 April 1968, 672 U.N.T.S. 119 (entered into force 3 December 1968) ('Rescue Agreement').

### 1. <u>Stationferry landed in Aspirantia</u> under circumstances of distress.

'Distress' is a situation where human life is at stake and there is the immediate concern of saving people's lives.2 In the commentaries to the International Commission ('ILC') Draft Articles Responsibility of States for Internationally Wrongful Acts, the ILC recognizes that distress cases usually involve "aircraft or ships entering State territory following mechanical navigational failure".3 The danger posed to a spacecraft's crew by the loss of engine power<sup>4</sup> is recognized by leading space agencies like NASA. In these circumstances, NASA's Space Shuttle Manual instructs crew to ditch the shuttle through the in-flight crew escape system.<sup>5</sup>

With the loss of engine power, and malfunctioning of navigation and guidance systems, there was an imminent danger that *Stationferry* would not be able to safely navigate back to Republica. In order to preserve life onboard, Captain Linke had no choice but to land *Stationferry* in the nearest possible facility.

# 2. <u>Captain Linke and Dr. Vienet are</u> 'personnel of a spacecraft' under Art 4 of the Rescue Agreement.

All persons onboard a spacecraft are 'personnel of a spacecraft' under Art 4 of the Rescue Agreement. Drafters of the Rescue Agreement intended for the word 'personnel' to include "any and all people onboard a spacecraft". The travaux préparatoires of the Rescue Agreement and domestic legislation processes show that states like the US understood the term to mean "everyone onboard". The duty to return also extends to personnel of a commercial flight.

Art 31(1) of the *Vienna Convention on* the Law of Treaties states that the primary rule of interpretation is to apply the plain and ordinary meaning of the proviso. <sup>11</sup> The plain and ordinary meaning of the word 'personnel' is broad because it does not carry any connotation of governmental activity.

Although Captain Linke and Dr Vienet were onboard *Stationferry* as private flight participants, both are considered to be 'personnel of *Stationferry*' for the purposes of the *Rescue Agreement*. The fact that they were not governmental agents is irrelevant because

<sup>&</sup>lt;sup>2</sup> International Law Commission, *ILC Draft Articles on Responsibility of States for Internationally Wrongful Acts, with commentaries* (2001), commentary (1) and (6) to art 24, UN Doc A/56/10 ('Commentary to Draft Articles').

<sup>&</sup>lt;sup>3</sup> International Law Commission, *Draft Articles* on Responsibility of States for Internationally Wrongful Acts, GA Res. 56/83, UN GAOR, 56<sup>th</sup> sess, supp no 49, UN Doc. A/56/49 ("Draft Articles").

<sup>&</sup>lt;sup>4</sup> Compromis ¶15.

<sup>&</sup>lt;sup>5</sup> NASA Space Shuttle Manual (1988) Kennedy Space Centre's Science, Technology and Engineering Homepage

<sup>&</sup>lt;a href="http://science.ksc.nasa.gov/shuttle/technology/sts-newsref/sts-egress.html#sts-inflight\_egress">http://science.ksc.nasa.gov/shuttle/technology/sts-newsref/sts-egress.html#sts-inflight\_egress> at 1 March 2010.

<sup>&</sup>lt;sup>6</sup> Compromis ¶15.

<sup>&</sup>lt;sup>7</sup> Compromis ¶15.

<sup>&</sup>lt;sup>8</sup> J H Carver, 'Factual Issues' in Karl-Heinz Böckstiegel (ed), Manned Space Flight, Legal Aspects in the Light of Scientific and Technical Development: Proceedings of an International Colloquium, Cologne, May 20-22 1992 (1993) 149, 194.

<sup>&</sup>lt;sup>9</sup> Legal Sub-Committee of the United Nations Committee on the Peaceful Uses of Outer Space, Proposals, Amendments and other Documents relating to assistance to and return of astronauts and space vehicles, UN Doc. A/AC.105/37 Annex 1 at 10; see also Hearings before the Committee on Foreign Relations, Senate Executive D, 90<sup>th</sup> Cong. 1<sup>st</sup> Sess. 27 (1967).

<sup>&</sup>lt;sup>10</sup> Mark Sundahl, 'Rescuing Space Tourists: A Humanitarian Duty and Business Need' (2007) Proceedings of the Fiftieth Colloquium on the Law of Outer Space 204.

<sup>&</sup>lt;sup>11</sup> Vienna Convention on the Law of Treaties, 23 May 1969, 1155 U.N.T.S. 331, art 31 (entered into force 27 January 1980) ('VCLT'); see also Richard K Gardiner, Treaty Interpretation (2008) 141.

the *Rescue Agreement* was prompted by sentiments of humanity.<sup>12</sup> Therefore, the phrase 'personnel of a spacecraft' should be interpreted broadly to include persons like Captain Linke and Dr Vienet who, like other astronauts, travelled into outer space.

3. The exercise of criminal jurisdiction is not an exception to Art 4 of the Rescue because the obligation to return under Art 4 of the Rescue Agreement is absolute and unconditional.

Barring a breach of peremptory norms, a state's obligation to safely and promptly return distressed personnel of a spacecraft under Art 4 of the Rescue Agreement is unqualified and unconditional. Applying the 'ordinary meaning' interpretation rule of Art 31(1) of the *VCLT*, the use of mandatory language like 'shall' indicates an obligation to perform. 13 Well-learned publicists such as Prof Christol opine that the language of Art 4 is unqualified and not subject to any condition.<sup>14</sup> Furthermore, state practice, which includes legislative acts, 15 supports the conclusion that Art 4 of the Rescue Agreement imports an unconditional and absolute obligation. For example, the US Congress ratified US entry into the Rescue Agreement on the understanding that the obligation under Art. 4 is unqualified and "an unconditional stipulation". 16 The travaux préparatoires of the Rescue Agreement reveal that the 'unconditional' nature of Art 4 was a victory of the US proposal over the Soviet proposal which sought to condition the duty to return on compliance with the Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space. The drafters of the Rescue Agreement stated that the Soviet proposal serves to weaken "the humanitarian purpose of the returning astronauts found in distress by subjecting it to the vicissitudes of international politics" and hence rejected it.<sup>17</sup>

A state is obligated to return personnel of spacecraft under Art 4 of the *Rescue Agreement* even if crimes have been committed. <sup>18</sup> Some academics state that this position is subject to one exception that has developed in international law <sup>19</sup> since *Rescue Agreement*'s entry into force in 1968.

A state is not obliged to return personnel of spacecraft under Art 4 of the Rescue Agreement if there is a breach of non-derogable peremptory norms (jus cogens). Such a breach (eg commission of offences like genocide) would entitle any state to exercise criminal jurisdiction based on the principle of universal jurisdiction. Therefore, Art 4 of the Rescue Agreement must be read in light of Art 53 of the VCLT which does not allow treaties to derogate from international law principles that are recognized as jus cogens.

Captain Linke and Dr Vienet did not commit any crimes that can be reasonably characterized as breaches of peremptory norms that would readily invoke the principle of universal jurisdiction. The burden is Aspirantia to prove that the crimes manslaughter and breaches of environmental laws amount to breaches of peremptory norms that are similar to crimes of genocide and crimes against humanity. In the absence of such proof, Republica is entitled to the safe and prompt return of Captain Linke and Dr Vienet under Art 4 of the Rescue Agreement which, in the absence breaches of peremptory norms, unconditional and absolute.

<sup>&</sup>lt;sup>12</sup> Rescue Agreement, opened for signature 22 April 1968, 672 UNTS 119, 4<sup>th</sup> recital (entered into force 3 December 1968).

<sup>&</sup>lt;sup>13</sup> *VCLT*, 23 May 1969, 1155 U.N.T.S. 331, art 31 (entered into force 27 January 1980).

<sup>&</sup>lt;sup>14</sup> Carl Q Christol, *The Modern International Law of Outer Space* (1982) 193.

<sup>&</sup>lt;sup>15</sup> Richard K Gardiner, *Treaty Interpretation* (2008) 228.

<sup>&</sup>lt;sup>16</sup> Hearings before the Comm. On Foreign Relations, Senate Executive D, 90<sup>th</sup> Cong. 1<sup>st</sup> Sess. 27 (1967).

<sup>&</sup>lt;sup>17</sup> Paul G Dembling & Aroms, 'The Treaty on Rescue and Return of Astronauts and Space Objects' (1969) 9 William and Mary Law Review 630, 652.

<sup>18</sup> Ibid.

<sup>&</sup>lt;sup>19</sup> Cedric Ryngaert, *Jurisdiction in International Law* (2008) 108 [d].

<sup>&</sup>lt;sup>20</sup> Ibid 110.

# B. Even if the exercise of criminal jurisdiction is an exception to the obligation to return under the rescue agreement, Aspirantia exercised it unlawfully.

Republica, not Aspirantia, is the proper state to first assert criminal jurisdiction because Republica is the presumed state of registry of Stationferry.<sup>21</sup> Republica is entitled to exercise criminal jurisdiction based on the 'nationality principle' because Captain Linke and Dr Vienet are its nationals.<sup>22</sup> This is in accordance with the general jurisdictional rules in space law embodied in Art VIII of Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies ("OST")<sup>23</sup> where the jurisdiction of the flagship state is given primacy. Aspirantia has unlawfully usurped Republica's right to exercise criminal jurisdiction over its nationals.

1. Aspirantia's exercise of criminal jurisdiction over Dr. Vienet is unlawful because he is entitled to sovereign immunity as Republica's governmental agent.

The governmental acts of a state materiae) are protected (ratione sovereign immunity and cannot adjudicated by another state. Dr Vienet was carrying out the governmental acts of Republica in his capacity as the Director-General of the Republican Space Agency. Therefore, immunity ratione materiae applies to him and he cannot be prosecuted by Aspirantia.

a. Dr. Vienet is a governmental agent because he administers the space policies and regulations as the Director-General of the Republican Space Agency.

Art 5 of the UN Convention on Jurisdictional Immunities of States and Their Property<sup>24</sup> states that "a state enjoys immunity in respect of itself... from the jurisdiction of the courts of another state". 'State' is defined in Art. 2(1)(b)(iii) as 'agencies or instrumentalities of the state...to the extent that they are entitled to perform and are actually performing acts in the exercise of sovereign authority of the state'. 'Internal administration acts' and 'legislative acts' are sovereign acts which are entitled to immunity from the jurisdiction of other states.<sup>25</sup>

These rules codify the general principles of international law relating to sovereign immunity. These general principles of international law, through Art. I of *OST*, apply to space authorities too.

The RSA exercises governmental functions because it administers Republica's licensing policies and regulations.<sup>27</sup> Therefore, Dr Vienet as the Director-General of RSA, is an agent of state who is charged with administering Republica's space regulations.

b. Dr. Vienet was carrying out a governmental act when he authorized the mission during which the cremains capsule was released.

For an act to be a sovereign act, it has to be an act that only the government can

<sup>&</sup>lt;sup>21</sup> Compromis ¶9, 11.

<sup>&</sup>lt;sup>22</sup> Compromis ¶9, 13, 16.

<sup>&</sup>lt;sup>23</sup> Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies, 27 January 1967, 610 U.N.T.S. 205 (entered into force 10 October 1967) ('Outer Space Treaty').

<sup>&</sup>lt;sup>24</sup> United Nations Convention on Jurisdictional Immunities of States and Their Property, GA Res 59/38, UN GAOR, 59<sup>th</sup> sess, supp no 49, UN Doc A/59/49 (2005).

<sup>&</sup>lt;sup>25</sup> Victory Transport (1967) 35 ILR 110; see also Jean-Flavien Lalive, 'L'immunité de Jurisdiction des États et des Organisations Internationales' (1953) 84 Recueil des Cours de l'Academie de droit internatinal de La Haye 205, 396; Malcolm Nathan Shaw, International Law (6<sup>th</sup> ed, 2008) 708.

<sup>&</sup>lt;sup>26</sup> See generally Shaw, above, 670.

<sup>&</sup>lt;sup>27</sup> Compromis ¶18(i).

perform "as opposed to an act which any private citizen can perform". 28 Academics state that the same test applies in the context of space law. 29 For example, by Dr Csabafi, a well-learned publicist, states that the purpose of this sovereign immunity is to ensure the effective functioning of the public vessel. 30 This immunity extends to both criminal and civil liability. 31

Art VI of the *OST* states that each state is responsible for its national space activities, regardless of whether the activities are carried out by governmental agencies or by non-governmental entities. The *OST* recognizes that each state has the power to authorize and continually supervise its national space activities.

Republica, through the RSA, has the power to authorize space missions by both governmental and non-governmental entities. The power to regulate these matters is not exercisable by any private citizen. The authorization is governmental in character because it involves Republica's interest in ensuring compliance with the provisions of the OST. Dr Vienet, as the Director-General of the RSA, is entitled to sovereign immunity ratione materiae for the act of authorizing the particular mission by Stationferry on 12 January 2009 because such authorization is a governmental act that is only within the powers of the state of Republica.

To prosecute Dr Vienet for the crime of manslaughter would inevitably involve the discussion of the merits of authorizing *Stationferry*'s 12 January 2009 mission. But Aspirantia is not entitled to, by way of criminal proceedings, "adjudicate on the conduct of" Republica because such adjudication would undermine the principle of sovereign equality which is a fundamental feature of international law. Therefore, the continued detention of Dr

<sup>28</sup> I Congreso del Partido [1983] AC 244, 267.

Vienet by Aspirantia is a breach of general international law.

- 2. Aspirantia's exercise of criminal jurisdiction over Republica's nationals is unreasonable because Republica is the proper state to first assert criminal jurisdiction.
  - a. Republica, Stationferry's state of registry, is the proper state to first assert criminal jurisdiction over Captain Linke and Dr Vienet

The flag state is the first state to assert criminal jurisdiction over persons onboard its spacecrafts. The laws of the flag state apply to acts and omissions of persons onboard a spacecraft registered in the flag state, regardless of whether the acts and omissions occur within the confines of the spacecraft.<sup>33</sup> Professor Gorove stated that Art VIII of the *OST* "entitles the state of registry to jurisdiction *first of all*" over the registered space object and its personnel and passengers by analogizing to parallel legal regimes.<sup>34</sup>

This rule of "primacy of jurisdiction"<sup>35</sup> of the flag state is not unique to international space law. It is found in parallel legal regimes, particularly in international penal regimes applicable to vessels on the high seas and civil aircrafts in flight. The same jurisdictional rules that apply to maritime vessels on the high seas apply equally to spacecrafts because both vehicles traverse commercium res extra where territories no state can assert sovereignty.36

<sup>&</sup>lt;sup>29</sup> Imre Anthony Csabafi, *The Concept of State Jurisdiction in International Space Law* (1971) 73

<sup>&</sup>lt;sup>30</sup> Ibid 74.

<sup>&</sup>lt;sup>31</sup> Ex parte Pinochet (No. 3) [2000] 1 AC 147, 201 ('Pinochet').

<sup>&</sup>lt;sup>32</sup> Pinochet [2000] 1 AC 147, 201.

<sup>&</sup>lt;sup>33</sup> Stephen Gorove, 'Criminal Jurisdiction in Outer Space' (1972) 6 *International Lawyer* 313, 322.

<sup>&</sup>lt;sup>34</sup> Ibid 320.

<sup>&</sup>lt;sup>35</sup> Ibid; see also Gabriella Catalano Sgrosso, 'Legal Status, Rights and Obligations of the Crew in Space' (1998) 26 *Journal of Space Law* 163, 181.

<sup>&</sup>lt;sup>36</sup> Bin Cheng, Studies in International Space Law (1997) 387-388.

Consequently, the law of the flagship state applies to govern the actions of persons onboard such vehicles. This rule has been codified in international instruments like the 1982 United Nations Convention on the Law of the Sea<sup>37</sup> where Art 97(1) states that "no penal or disciplinary proceedings may be instituted against such person except before the judicial or administrative authorities either of the flag state or of the state of which such person is a national." The same rule, codified in the 1958 Geneva Convention on the High Seas<sup>38</sup>, was declared by a US court to be a rule of international law.<sup>39</sup>

Although the PCIJ held in the SS Lotus case that criminal jurisdiction can be predicated on the harmful results caused to another state, 40 the abovementioned international conventions have adopted the arguments made by France that "from a practical standpoint in maritime matters, the law of the flagship state must govern the captain of a vessel". Accordingly, academics have argued that "jurisdiction is [only] appropriate in the injured forum...in cases of intentional violence". 42 The position that jurisdiction by an injured forum is predicated on only intentional violence is supported by Arts 1(a)-(e) and Arts 5-7 of the Convention for the Suppression of Unlawful Acts Against the Safety of Civil Aviation (Montreal Convention 1971).<sup>43</sup>

Arts 5(2) and 16(1) of the Tokyo Convention<sup>44</sup> on Offences and Certain Other Acts Committed on Board Aircraft (1963) also expressly recognize the "primary interest as to the exercise of jurisdiction of the state of registry".<sup>45</sup> Academics state that "this principle is believed to be a good analogy for spacecraft".<sup>46</sup>

Likewise, Aspirantia is not entitled to exercise criminal jurisdiction. First, Republica is the flagship state of *Stationferry*. Accordingly, Republica's laws, not Aspirantia's, ought to govern the actions of Captain Linke and Dr onboard who were Stationferry. Aspirantia's exercise of criminal jurisdiction would undermine international comity and cause conflict because it would create a negative precedent for states to unilaterally assert jurisdiction in a world where jurisdictional-overlaps are inevitable.<sup>47</sup> The international conventions relating to aircrafts are applicable in this case since Stationferry, an "aerospacecraft could also be brought under the scope of the [Tokyo] Convention".48

Second, the facts do not show that the offences allegedly committed by Captain Linke and Dr Vienet have the character of 'intentional violence' akin to acts like terrorism, piracy and sabotage envisioned by parallel international conventions.

Thus, Republica is the proper state to first assert criminal jurisdiction over Republica's nationals.

b. Customary international law entitles Republica to assert criminal jurisdiction based on the 'nationality principle'.

In international space law, the nationality principle is one of the primary bases for asserting criminal jurisdiction for acts

<sup>&</sup>lt;sup>37</sup> United Nations Convention on the Law of the Sea, opened for signature 10 December 1982, 1833 U.N.T.S. 3 (entered into force 16 November 1994).

<sup>&</sup>lt;sup>38</sup> Convention on the High Seas, opened for signature 29 April 1958, 450 U.N.T.S. 82 (entered into force 30 September 1962).

<sup>&</sup>lt;sup>39</sup> United States v William, 589 F.2d 210, (5<sup>th</sup> Cir. 1979) 212 n.1 affirmed on appeal at 617 F.2d 1063, 1090 (5<sup>th</sup> Cir, 1980).

<sup>&</sup>lt;sup>40</sup> SS Lotus (France v Turkey) (Merits) (1927) P.C.I.J. (ser. A/B), No 10, 27 ('SS Lotus').

<sup>&</sup>lt;sup>41</sup> Christopher L Blakesley, 'Extraterritorial Jurisdiction' in M Cherif Bassiouni (ed), International Criminal Law (Volume II): Multilateral and Bilateral Enforcement Mechanisms (3<sup>rd</sup> ed, 2008) 99.

<sup>&</sup>lt;sup>42</sup> Ibid 100.

<sup>&</sup>lt;sup>43</sup> Convention for the Suppression of Unlawful Acts Against the Safety of Civil Aviation, 23

September 1971, 974 U.N.T.S. 177 (entered into force 26 January 1973).

<sup>&</sup>lt;sup>44</sup> Convention on Offences and Certain Other Acts Committed on Board Aircraft, 14 September 1963, 704 U.N.T.S. 219 (entered into force 4 December 1969).

<sup>&</sup>lt;sup>45</sup> Csabafi, above, 60.

<sup>46</sup> Ibid.

<sup>&</sup>lt;sup>47</sup> See generally Ryngaert, above, 127-133.

<sup>&</sup>lt;sup>48</sup> Csabafi, above, 59.

occurring in outer space.<sup>49</sup> The passive personality and territorial principles are the secondary bases for such an assertion.<sup>50</sup> These rules of jurisdiction as codified in Art 22 of the *ISSA* have evolved into rules of customary international law.

Article 38(1)(b) of the Statute of the International Court of Justice (1945) ('ICJ Statute') refers to 'international custom, as evidence of a general practice accepted as law'. <sup>51</sup> Therefore, a state claiming the existence of a rule of customary international law has to prove <sup>52</sup> the existence of general practice among 'most-affected' states and 'opinio juris'. <sup>53</sup> Both requirements are fulfilled here.

<sup>49</sup> See eg, art 22(1) of the 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, 29 January 1998, 2001 WL 679938 (entered into force 27 March 2001) ('ISSA'); see also Francis Lyall and Paul B Larsen, Space Law: A Treatise (2009) 145-146; Michael Chatzipanagiotis, 'Criminal and Disciplinary Issues Pertaining to Suborbital Space Tourism Flights' (2007) Proceedings of The Fiftieth Colloquium on the Law of Outer Space 215, 221.

<sup>50</sup> ISSA, 29 January 1998, 2001 WL 679938, art 22(2) (entered into force 27 March 2001); see also Hans P Sinha, 'Criminal Jurisdiction on the International Space Station' (2004) 30 Journal of Space Law 85, 116-117; Yun Zhao, 'Developing a Legal Regime for Space Tourism: Pioneering a Legal Framework for Space Commercialization' (2005) Proceedings of the Forty-Eighth Colloquium on the Law of Outer Space 198, 201.

51 Statute of the International Court of Justice art 38(1)(b) ('ICJ Statute').

General practice is established by the fact that most space-faring nations have subscribed to these rules by being parties to the ISSA. The ISSA has 16 participating space agencies/authorities which represent majority of the nations involved in space activities including big players such as the United States, Russia and European states.<sup>54</sup> This is demonstrated by the statistic that as of November 16 2009, 94.8% of astronauts come from participant-states of the ISSA. The requirement of practice need not be universal. It only needs to be representative of the majority of 'most-affected' states.<sup>55</sup> Therefore, this requirement is established.

Opinio juris is established by the fact that spacefaring nations, especially parties to the ISSA, have incorporated these rules of jurisdiction in their domestic space legislation. For example, the United States of America has incorporated the rules in Art 22 ISSA in its domestic legislation 18 U.S.C. § 7(6) which limits assertions of criminal jurisdiction to persons onboard a US space vehicle.<sup>56</sup> This US domestic legislation recognizes the nationality principle alongside the flag state principle because it includes the qualification "until the authorities competent take over responsibility...for persons...aboard". Furthermore, the US voluntarily incorporated these rules into its domestic legislation despite having its large bases of jurisdiction in Art 22 of the 1988 ISSA limited drastically by the 1998 amendments.<sup>57</sup> Such domestic legislation is evidence of a state's subjective belief in its legal obligation to follow these rules.<sup>58</sup>

<sup>&</sup>lt;sup>52</sup> SS Lotus, PCIJ Reports, Series A, No. 10 (1927)

<sup>&</sup>lt;sup>53</sup> See Continental Shelf (Libyan Arab Jamahiriya/Malta) [1985] ICJ Rep 13; see also Ian Brownlie, Principles of Public International Law (6<sup>th</sup> ed, 2003) 7-9.

See Reference Guide to the International Space Station (2007) NASA Website <a href="http://www.nasa.gov/mission\_pages/station/news/ISS\_Reference\_Guide.html">http://www.nasa.gov/mission\_pages/station/news/ISS\_Reference\_Guide.html</a> at 11 March 2010.

<sup>55</sup> North Sea Continental Shelf (F.R.G. v Den.) [1969] ICJ Rep 3, [73].

<sup>&</sup>lt;sup>56</sup> 18 U.S.C. § 7(6); see also Sinha, above, 99-100.

<sup>&</sup>lt;sup>57</sup> Sinha, above, 98-99.

<sup>&</sup>lt;sup>58</sup> See Gerardine Meishan Goh, 'Keeping the Peace in Outer Space: a legal framework for the prohibition of the use of force' (2004) 20 *Space Policy* 259, 265; Zimmerman et al (eds), *The* 

assertion of criminal Aspirantia's jurisdiction is unlawful because Republica neither concurred with Aspirantia's exercise of criminal jurisdiction<sup>59</sup> over Captain Linke and Dr Vienet nor refused to "submit the case to its authorities for purposes competent prosecution".60 This unilateral action undermines the fundamental principles of 'sovereign equality' and fairness which the rules in Art. 22 of ISSA (1998) seek to promote.<sup>61</sup> Republica was denied the opportunity to be consulted in deciding which state has "the greatest prosecutorial interest in proceeding with the prosecution".62

Further, with respect to the charge of manslaughter, the implication of Aspirantia's application of its penal laws to acts occurring in outer space is tantamount to an appropriation of outer space. This is because outer space, a res extra commercium, is not subject to the exercise of sovereignty, which application of criminal jurisdiction entails, <sup>63</sup> of any state.

Consequently, Aspirantia's exercise of criminal jurisdiction is contrary to the nationality principle.<sup>64</sup>

Statute of the International Court of Justice: A Commentary (2006) 751; C.f. Fisheries (United Kingdom v Norway) [1951] ICJ Rep 116, 131.

c. Aspirantia's exercise of criminal jurisdiction breached the rule of reasonableness in general international law because it hurts Republica's justified expectation to be consulted.

The exercise of jurisdiction is unreasonable when justified expectations might be hurt by such an exercise. 65 This rule of 'reasonableness' in the exercise of criminal jurisdiction is also supported by international jurisprudence. In the Barcelona Traction Case, Judge Fitzmaurice opined that there is an obligation for every state "to exercise moderation and restraint as to the extent of the jurisdiction... in cases having a foreign element, and to avoid undue encroachment on a jurisdiction... more appropriately exercisable by another state".66 In the Arrest Warrant Case, this Honourable Court held that any exercise of criminal jurisdiction should be legitimate and reasonable.67

A spacefaring nation has a justified expectation to be consulted in any proposed prosecution of its national by a foreign spacefaring nation. This rule in customary international law is embodied in Art 22 of the 1998 ISSA (as explained Part. I.B.2(b)). The policy reason behind this consultative mechanism is to give states an equal opportunity to decide which state has the greatest prosecutorial interest in proceeding with the prosecution.<sup>68</sup> This is consistent with the

<sup>&</sup>lt;sup>59</sup> *ISSA*, 29 January 1998, 2001 WL 679938, art 22(2)(1) (entered into force 27 March 2001).

<sup>&</sup>lt;sup>60</sup> ISSA, 29 January 1998, 2001 WL 679938, art 22(2)(2) (entered into force 27 March 2001).

<sup>&</sup>lt;sup>61</sup> Sinha, above, 120.

<sup>&</sup>lt;sup>62</sup> Ibid.

<sup>&</sup>lt;sup>63</sup> Bin Cheng, above, 440-1.

G4 Preamble to the Outer Space Treaty, 27 January 1967, 610 U.N.T.S. 205 (entered into force 10 October 1967); see also Julia Neumann, 'An Interpretation of the Outer Space Treaty After 40 Years' (2007) Proceedings of the Fiftieth Colloquium on the Law of Outer Space 431.

<sup>65</sup> The American Law Institute, Restatement (Third) of the Foreign Relations Law of the US (1987), §403(2)(d).

<sup>66</sup> See Barcelona Traction, Light and Power Company, Limited (2<sup>nd</sup> Phase) (Spain v Belgium), [1970] ICJ Rep 3 ('Barcelona Traction'), 105; see also A F Lowenfeld, 'International Litigation and the Quest for Reasonableness' (1994-I) 245 Recueil des Cours de l'Academie de droit internatinal de La Haye 9, 77.

<sup>&</sup>lt;sup>67</sup> Arrest Warrant of 11 April 2000 (Democratic Republic of Congo v Belgium) [2002] ICJ Rep 3; see also Attorney-General of Israel v Eichmann (1962) 36 ILR 277, [35].

<sup>&</sup>lt;sup>68</sup> Sinha, above, 120.

principle of sovereign equality and fairness in general international law.<sup>69</sup>

Republica, as the state of Stationferry's registry as well the state of Captain Linke's and Dr Vienet's nationality, has a justified expectation that it be consulted before Aspirantia exercised its criminal jurisdiction on its nationals. Aspirantia's failure to consult Republica hurts this justified expectation as Aspirantia denied Republica the opportunity to decide which state has the greater prosecutorial interest in prosecuting Republica's nationals.

Therefore, Aspirantia's exercise of criminal jurisdiction is unreasonable.

II. REPUBLICA IS NOT LIABLE FOR THE CLEANUP COSTS OF THE POLLUTION CAUSED TO ASPIRANTIA'S LAKE DURING STATIONFERRY'S EMERGENCY LANDING.

To claim in international space law, Aspirantia has to prove that the pollution caused to the lake falls within the meaning of 'damage' under Art 1(a) of the Convention on International Liability for Damage Caused by Space Objects ('Liability Convention'). This definition is relevant to both claims under Art VII of the OST and Arts II and III of the Liability Convention. This fundamental requirement is not fulfilled.

Before Republica can be internationally responsible and liable under general international law for the pollution, Aspirantia is required to show fault by Republica which is not precluded by any legally established defences in international law.<sup>71</sup> Republica is also not liable because the defence of distress applies to this case.

A. Environmental damage is only recoverable under the Liability Convention if there is a reduction in value of the property.

1. The Liability Convention must be interpreted in its context.

The *Liability Convention* must be interpreted in light of international law as it existed at the time of the drafting, and not as it exists today.

Art 31 of the *VCLT* states that the terms of a treaty must be interpreted "in their context". Paragraph 3(c) of Art 31 includes "relevant rules of international law applicable in the relations between the parties" as part of the context of a treaty. This interpretation of Art 31(3)(c) of the VCLT is confirmed by the commentaries to the VCLT, where it states "the opening phrase of paragraph 3...is designed to incorporate in the word 'context' in paragraph 1 the elements set out in paragraph 3." This means that "relevant rules of international law applicable in the relations between the parties" makes up the "context" in which a treaty provision has to be interpreted. This principle has to be further clarified as applying international law as it existed at the time of the drafting of the treaty, and not at the time of the dispute. Judge Fitzmaurice stated in [to confirm] that "it is an established principle of international law that...the treaty [must] be interpreted, in light of rules of international law as they existed at the time, and not as they exist today." This means that the provisions of the *Liability Convention* must be interpreted in the context of international law as it existed at the time of the drafting.

2. The context of the Liability
Convention only allows for recovery
of environmental damage if there is
a reduction in value of the property.
International law at the time of the

drafting of the Liability Convention regarding recovery for transboundary environmental damage is represented by the Trail Smelter Arbitration. The tribunal stated that the principle of international law regarding recovery for environmental damage was that such recovery is only limited to the diminution in value of the

<sup>&</sup>lt;sup>69</sup> Ibid, 121.

Convention on International Liability for Damage Caused by Space Objects, 29 March 1972, 1023 U.N.T.S. 187, art 1(a) (entered into force 1 September 1972) ('Liability Convention').

<sup>71</sup> See generally Ch V, Draft Articles.

property. Furthermore, the tribunal specifically rejected claims by the US for damage to urban property surrounding the farm land damaged by the smelter fumes because "the US had not shown proof of diminution in value of use or rental value of such property."

Applied here, if Aspirantia wants to show that the damage it suffered can be recovered under the *Liability Convention* as "damage to property of States", it must show a diminution in value of that property. It must show a diminution in value of the lake. It has not done this.

### 3. Aspirantia has not suffered a reduction in value of the lake.

There is neither evidence on the facts of diminution of value of the lake nor evidence that Aspirantia or any other party had suffered any damage or losses as the result of this diminution of value. Hence, If Aspirantia wishes to claim for cleanup costs, it must claim under general international law, not the *Liability Convention*.

# B. Republica is not liable under general international law for the cleanup costs because any wrongfulness is precluded by distress.

Republica is entitled to the defence of distress under general international law. This defence precludes any wrongfulness by Republica for the damage caused to Aspirantia's lake because *Stationferry* landed under circumstances of distress.

## 1. The emergency landing in Aspirantia is the result of a distress situation onboard Stationferry.

As explained above in Part. I.A.1, Stationferry was forced to land in Aspirantia because of the loss of engine power, and malfunctioning navigation and guidance systems.<sup>72</sup> This gave rise to a situation of distress and Stationferry was forced to declare an emergency situation.<sup>73</sup> Accordingly, Captain Linke, in order to preserve life onboard, had no choice but to land Stationferry in the nearest

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possible facility which happened to be in Aspirantia. 74

## 2. The distress of the situation precludes any wrongfulness by Republica.

The grave situation onboard Stationferry absolves Republica of any wrongfulness for the damage caused to the lake.

Customary international law,<sup>75</sup> embodied in Art 24 of the *Draft Articles*<sup>76</sup>, recognizes that the immediate interest in such a defence of distress is that of saving people's lives.<sup>77</sup> Accordingly, this rule has been accepted in other international treaties relating to transportation. For example, Art IV para 1(a) of the *International Convention for the Prevention of Pollution of the Sea by Oil* provides that the prohibition against the discharge of oil into the sea does not apply if the discharge takes place "for the purpose of securing the safety of the ship, preventing damage to the ship or cargo, or saving life at sea."<sup>78</sup>

Due to the distress onboard *Stationferry*, Captain Linke was forced to undertake an emergency landing in order to save the lives of crew and passengers onboard. Captain Linke had no other reasonable way of saving the lives onboard *Stationferry*.

Art 24 of the *Draft Articles* is fulfilled because Captain Linke had no other way in the situation of distress but to release the fuel into the lake in order to save the lives of the passengers onboard the *Stationferry*. Although Captain Linke is an employee of a private commercial entity, his actions are attributable to Republica as an agent of state. This is because the mission to resupply Republica's space

<sup>&</sup>lt;sup>72</sup> Compromis ¶15.

<sup>&</sup>lt;sup>73</sup> Compromis ¶15.

<sup>&</sup>lt;sup>74</sup> Compromis ¶15.

<sup>&</sup>lt;sup>75</sup> See, eg, British Statement in UN SCOR, *Thirtieth Year*, 1866<sup>th</sup> meeting, 16 December 1974, para. 24.

<sup>&</sup>lt;sup>76</sup> Draft Articles, Art 24.

<sup>77</sup> Commentary to Draft Articles, commentary (1) to Art 24.

<sup>&</sup>lt;sup>78</sup> International Convention for the Prevention of Pollution of the Sea by Oil, 1954, 12 May 1954, 327 U.N.T.S. 3, art IV (entered into force 26 July 1958).

station was under Republica's direction.<sup>79</sup> Further, the act of releasing the excess fuel into Aspirantia's lake did not create a comparable or greater peril than that faced by the crew and passengers onboard *Stationferry*. While the harm caused to the lake's ecology is regrettable, the benefit of having prevented the loss of human lives onboard *Stationferry* clearly outweighs this.

Therefore, the distress caused by the emergency onboard *Stationferry* operates as a defence to preclude any wrongfulness by Republica.

# III. REPUBLICA IS NOT LIABLE FOR THE DAMAGE SUSTAINED BY STARFLIGHT-1 UNDER BOTH ART II AND ART III OF THE LIABILITY CONVENTION.

Republica is not liable under Arts II and III of the *Liability Convention*. First, Republica is not liable under Art II because it is inapplicable to *Starflight-1*. Even if it applies, any liability will be wholly exonerated by Aspirantia's gross negligence under Art VI. Second, Republica is not liable under Art III because the damage caused to *Starflight-1* and the loss of lives onboard *Starflight-1* was not due to Republica's fault.

## A. Absolute liability under Art II is inapplicable to Republica because Starflight-1 is a space object.

Although the definition of a space object in the *Liability Convention* is non-exhaustive, a 'space object' is a 'space object' within the meaning of the *Liability Convention* according to its intended function rather than its locus.<sup>80</sup>

This functional definition of a 'space object' is accepted by learned publicists such as Professor Gorove and Professor Wassenberg.<sup>81</sup>

This view is supported by Professor Bin Cheng who states that a 'space object' is within the meaning of the Liability Convention when it is in its operational state, and this includes during its attempted launching.82 This approach was preferred because the formal definitions proposed during the Liability Convention's drafting involved difficulties in delimiting the boundaries of outer space.<sup>83</sup> Despite the development of new types of space vehicles and objects such as the space-plane, which can traverse through both airspace and outer space, a great majority of states who responded to the 1995 Ouestionnaire on Possible Legal Issues with Regard to Aerospace **Objects** ("Questionnaire")<sup>84</sup> continue to advocate a functional approach towards the definition of space objects.<sup>85</sup> State and commercial practice also supports the conclusion that suborbital vehicles like Starflight-1 is considered a 'space object'. For example, the world's first suborbital flight vehicle, SpaceShipOne, was operated by Scaled Composites Inc. on the basis of a license issued by the US Office of Commercial Space Transportation (OCST).86 The US OCST was established by the 1984 US Commercial Space Launch Act which was enacted to ensure that the US private space companies conform to the provisions of the OST. 87 Thus state practice

Wassenburg, Principles of Outer Space Law in Hindsight (1991) at 52.

166 and 1671

<sup>&</sup>lt;sup>79</sup> Draft Articles, Art 8.

<sup>&</sup>lt;sup>80</sup> Report of the Ad Hoc Committee on the Peaceful Uses of Outer Space, UN GAOR, 14<sup>th</sup> sess, pt 3, UN Doc A/4141 (1959).

<sup>&</sup>lt;sup>81</sup> Stephen Gorove, Developments in Space Law: Issues and Policies (1991) at 317; Henri A

<sup>&</sup>lt;sup>82</sup> Bin Cheng, *Studies in International Space Law* (1997) 325-326.

<sup>&</sup>lt;sup>83</sup> Carl Q Christol, *The Modern International Law of Outer Space* (1982) 108.

Regard to Aerospace Objects, UN Doc A/AC.105/C.2/1995/CRP.3/Rev.3 (1995).

<sup>&</sup>lt;sup>85</sup> Katherine M Gorove, 'Delimitation of Outer Space and the Aerospace Object – Where is the Law?' (2000) 28 *Journal of Space Law* 11, 19. <sup>86</sup> FAA Office of Commercial Space

Transportation, Historical Launch Data of Recently Completed Launches (2009) [No. 164,

<sup>&</sup>lt;a href="http://www.faa.gov/about/office\_org/headquarters\_offices/ast/launch\_data/historical\_launch/">http://www.faa.gov/about/office\_org/headquarters\_offices/ast/launch\_data/historical\_launch/</a> at 1 March 2010.

<sup>&</sup>lt;sup>87</sup> H L van Traa- Engelman, Commercial Utilization of outer Space (1993) 283.

shows that sub-orbital vehicles and space-planes like *Starflight-1* are considered space objects instead of aircrafts because of the intended use of the vehicle.

Starflight-1 is a space object and not an aircraft because it was intended to conduct suborbital flights.<sup>88</sup> The fact that it reached an altitude of 93 km instead of 112 km is inconsequential because there is no fixed spatial boundary in international space law which prefers a functional approach to the definition of 'space object'.

Consequently, Republica is not absolutely liable under Art II because Art II only applies where an aircraft in flight has been damaged.

# B. Even if Republica is liable under Art II of the Liability Convention it is wholly exonerated under Art VI by Aspirantia's gross negligence.

Even if Republica is found to be absolutely liable under Art II of the *Liability Convention*, such liability is wholly exonerated under Art VI(1) of the *Liability Convention* by Aspirantia's gross negligence. Aspirantia was grossly negligent because it failed to enact the legislation necessary to regulate its space activities.

### 1. "Gross negligence" is willful misconduct.

In international law, "gross negligence" has been equated with "willful misconduct" under Art 25 of the Warsaw Convention. The travaux préparatoires of the Liability Convention show that states had intended the standard of "willful misconduct" to apply to exoneration of liability under Art VI. The phrasing "gross negligence" was only adopted because it was seen as more flexible and

adaptable.<sup>91</sup> The *travaux préparatoires* show that states understood "willful or reckless acts or omissions" to be "tantamount to 'gross negligence".<sup>92</sup> In turn, "willful misconduct" under Art 25 of the *Warsaw Convention* has also been interpreted by states to mean "gross negligence".<sup>93</sup>

In KLM Royal Dutch Airlines Holland v Tuller, 94 a case involving the interpretation of Art 25 of the Warsaw Convention, the court defined "willful misconduct" as "the intentional performance of an act with knowledge that the...act will probably result in injury or damage, or...in some manner as to imply reckless disregard of the consequences of its performance, and likewise, it also means failure to act [in such circumstances]." The Court in Tug Ocean Prince, Inc. v. United States, the court citing aviation cases under the Warsaw Convention similarly held that misconduct" means an intentional omission which the actor either knew would result in the damage, or circumstances surrounding the failure to act implied a reckless disregard of the probable consequences.<sup>95</sup> This objective test for gross negligence was consistently applied by courts in other jurisdictions. 96 [So what? In

<sup>&</sup>lt;sup>88</sup> Compromis ¶5.

<sup>&</sup>lt;sup>89</sup> See, eg, Xia Chen, Limitation of Liability for Maritime Claims: A Study of US Law, Chinese Law and International Conventions (2001) 75.

<sup>&</sup>lt;sup>90</sup> Convention for the Unification of Certain Rules Relating to International Carriage by Air, 12 October 1929, 137 L.N.T.S. 3, art 25 (entered into force 13 February 1933).

Omments of Mr Riha (Czechoslovakia), Legal Sub-Committee of the United Nations Committee on the Peaceful Uses of Outer Space, Draft Agreement on Liability for Damage Caused by Objects Launched into Outer Space (agenda item 2) UN Doc A/AC.105/29; A/AC.105/37.

<sup>&</sup>lt;sup>92</sup> Comments of Mr Sohier (United States of America), Legal Sub-Committee of the United Nations Committee on the Peaceful Uses of Outer Space, Consideration of the Draft Agreement on Liability for Damage Caused by Objects Launched into Outer Space UN Doc A/AC.105/21.

<sup>93</sup> Chen, above, 75.

<sup>&</sup>lt;sup>94</sup> KLM Royal Dutch Airlines Holland v Tuller, 292 F.2d 775 (D.C. Cir.).

 <sup>95</sup> Tug Ocean Prince, Inc. v United States, 584
 F.2d 1151, 1163.

 <sup>&</sup>lt;sup>96</sup> See, eg, Morand v Air Centre, [1976] RFDA
 138 (Cour d'Appel, Rion, 24<sup>th</sup> Jan 1973); Ste Lanugedoc v Ste Hernu Peron, [1976] RFDA
 109 (CA Paris, 17 Nov 1975); Moinot v Air

relation to sources of law, what do these domestic cases represent and why is this court entitled to look at these decisions? I think we will be better off looking into the policy reasons in the adoption of these standards instead of employing the common law rule of applying precedents]

Thus "gross negligence" under Art VI of the *Liability Convention* can be equated with the intentional performance of an act or omission in circumstances in which the actor should have known that the act will probably result in injury or damage.

### 2. <u>Aspirantia was grossly negligent for not regulating its space activities.</u>

Spacefaring states have recognized the ultra-hazardous nature of space activities<sup>97</sup> and have promulgated the necessary regulations to mitigate this risk by allocating risks and ensuring launch safety.<sup>98</sup> For example, the USA has enacted the *Commercial Space Launch Act*<sup>99</sup> which puts in place a "very detailed framework" implementing various mandatory regulations pertaining to the safety of launches.

Such regulations are particularly important for a nascent space tourism industry as more commercial entities participate in this industry. <sup>101</sup> As a matter of policy, if states follow Aspirantia's non-regulation of its space sector, it will not only hinder the growth of space tourism but will endanger the lives of astronauts and space tourists.

France [1974] RFDA 188 (CA Paris, 26 May 1973).

Aspirantia "paid no attention" to the launch of Starflight-1. 102 Aspirantia's failure to regulate its own space activities, particularly with regards to safety, constitutes gross negligence not only to its own nationals but also to other states engaged in space activities. This negligence must be contextualized against a backdrop that space activities are universally recognized as "extremely dangerous". The danger of space activity places a greater burden on Aspirantia, who wishes to participate in this activity, to implement necessary and reasonable safety measures as evidenced by the practice of other spacefaring nations. Had Aspirantia promulgated regulations to provide authority to Starflight-1's pilot to compel its passengers to wear safety helmets, it is very reasonable to conclude that lives would not have been lost.

Therefore, Aspirantia's failure to regulate its space activities amounts to gross negligence that exonerates Republica under Art VI(1) of the *Liability Convention*.

## C. Republica is not liable for the damage sustained by Starflight-1 under Art III of the Liability Convention.

Under Art III of the Liability Convention, Aspirantia must show that the damage sustained by Starflight-1 was due to Republica's fault, or that Republica is responsible for the individuals whose fault caused the damage before Republica can be found liable.

## 1. Republica is not liable under Art III of the Liability Convention because it is not at fault.

a. A state is at fault when it breaches its international obligations.

Fault at international law means any voluntary act or inaction which unlawfully breaches an obligation. <sup>103</sup> In the *Prats Case*, <sup>104</sup> it

<sup>&</sup>lt;sup>97</sup> Valérie Kayser, Launching Space Objects: Issues of Liability and Future Prospects (2001),
8; Columbia Accident Investigation Board,
Columbia Accident Investigation Board Report:
Volume 1 (2003) 19; see also Macauley, above,
132

 $<sup>^{98}</sup>$  Kayser, above, 11 - 2.

<sup>&</sup>lt;sup>99</sup> Commercial Space Launch Act, 49 USC Ch 701 (1984).

<sup>100</sup> Kayser, above, 12.

Framework for Space Tourism Regulation' (2000) 28 *Journal of Space Law* 1, 6.

<sup>&</sup>lt;sup>102</sup> Compromis ¶7.

<sup>&</sup>lt;sup>103</sup> Bin Cheng, General Principles of Law as Applied by International Courts and Tribunals (1987) 225.

<sup>&</sup>lt;sup>104</sup> Salvador Prats (Mexico v United States of America) (1868) 3 Int. Arb. 2886, 2893.

was held that fault is dependent on the voluntary character of the act. In *The Jamaica Case*<sup>105</sup>, the tribunal held that fault is a failure to observe one's obligations equivalent to an unlawful act. This definition of fault was affirmed by the Permanent Court of Arbitration in the *Russian Indemnity Case*.<sup>106</sup>

b. Republica fulfilled its obligation to authorize and supervise under Art VI of the OST.

A state is responsible under Art VI of the OST to authorize and supervise space activities of its non-governmental entities. <sup>107</sup> This interpretation is consistent with a plain and ordinary reading <sup>108</sup> of Art VI of the OST. The first sentence of Art VI states the principle of responsibility under Art VI. The second sentence describes the manner in which states are to carry out this responsibility. This structure suggests that the interpretation proposed above is the correct one.

This obligation of 'authorization and continuing supervision' is fulfilled by the enactment of legislation. State practice subsequent to the signing of the OST shows that states believe that their obligation for 'authorization and continuing supervision' under Art VI of the OST is fulfilled by enacting legislation regulating space activities within their territory. For example, the Australian

Space Activities Act 1998 states, among others, as its object to implement Australia's obligations under the UN Space Treaties. This is also the case with South Africa, the United Kingdom and the United States. Such state practice is instructive in interpreting Art VI of the OST.

As a matter of policy, this interpretation of Art VI is also necessary to accommodate the growth of the private space tourism industry which is essential for the beneficial development of space technology. 116 A wide reading of Art VI would place unfair burden of unlimited liability on states and this would hinder the development of the private space tourism industry. 117 Further, such a reading would disincentivize states from facilitating private space activities which would otherwise bring economic benefits and advancement of peaceful space technology. 118

Republica has fulfilled its obligation to authorize and supervise by the enactment of the Republican *Space Activities Act* 2000<sup>119</sup> which provides for a licensing regime covering nongovernmental entities conducting space activities. Republica's enactment of such legislation is in conformity with uniform state practice as shown above.

<sup>&</sup>lt;sup>105</sup> *The Jamaica Case* (1798) 4 Int. Arb. 489, 497-99.

<sup>106</sup> Russian Indemnity (Russia v Turkey) (Award)(1912) 1 H.C.R. 532, 543.

<sup>107</sup> See generally Ricky J Lee, 'Liability Arising from Article VI of the Outer Space Treaty: States, Domestic law and Private Operators' (2005) Proceedings of the Forty-Eighth Colloquium on the Law of Outer Space 216.; see also Luis F Castillo Arganaras, 'Some Thoughts on State Responsibility and Commercial Space Activities' (2001) Proceedings of the Forty-Fourth Colloquium on the Law of Outer Space 65, 69.

<sup>&</sup>lt;sup>108</sup> *VCLT*, 23 May 1969, 1155 U.N.T.S. 331, art 31 (entered into force 27 January 1980).

<sup>&</sup>lt;sup>109</sup> Lee, above, 220.

Gyula Gal, 'State Responsibility, Jurisdiction and Private Space Activities' (2001)

Proceedings of the Forty-Fourth Colloquium on the Law of Outer Space 61.

<sup>111</sup> Space Activities Act 1998 (Cth).

Space Affairs Act No. 84 of 1993 (South Africa) s2(2)(a).

See long title to *Outer Space Act 1986* (UK) c38.

Announcement of United Sates Government Support for Private Commercial Operations of Expendable Launch Vehicles, (1983) 19 Weekly Comp. Pres. Doc. 721.

<sup>&</sup>lt;sup>115</sup> *VCLT*, 23 May 1969, 1155 U.N.T.S. 331, art 31(1)(b) (entered into force 27 January 1980).

<sup>&</sup>lt;sup>116</sup> A Bukley, 'Dreams and Realities: The Challenges Facing the Development of Space Tourism (2001) 17 Space Policy 133-140.

<sup>117</sup> Ospina Sylvia, 'Lessons from the "The Little Prince" on Space Flight', Proceedings of the Forty-Eighth Colloquium on the Law of Outer Space 190, 192.

<sup>118</sup> Bukley, above, 139.

<sup>&</sup>lt;sup>119</sup> Compromis ¶9-10.

Therefore, Republica did not breach its international law obligations under the *OST* as it had fulfilled its responsibility and obligation under Art VI of the *OST* to authorize and supervise its non-governmental entities, by way of its domestic licensing regime and regulations.

c. Republica did not breach its obligation to undertake appropriate international consultations under Art IX of the OST.

Under Art IX of the OST, the obligation on a state to undertake international consultations arises where it has "reason to believe" that space activities planned by it or its nationals would cause potentially harmful interference.

Republica did not breach its obligation undertake appropriate international to consultations under Art VI of the OST because it had no reason to believe that the proper release of the cremains capsules into low 'graveyard orbit' as intended would cause potentially harmful interference. This is because the atmospheric drag at that altitude would cause the capsules to disintegrate in the atmosphere, causing no harm to the space activities of other Although there were protests from scientists, astronomers space and environmentalists, it should be noted that no state requested consultation as is provided for under Art IX. 121 It is common practice for states to release satellites and space objects into low graveyard orbit at the end of their operational life as it is commonly understood that it will pose no harmful interference at this altitude.

Therefore, although Republica did not undertake international consultation before permitting the release of the cremains capsules it nevertheless was not breach of its obligation under Art IX and is consequently not at fault.

- 2. Republica is not liable under Art III because it is not responsible for Captain Linke and Ash.
  - a. The ultra vires actions of Captain Linke are not attributable to Republica because he is not an agent of the state.

Ultra vires acts are only attributable to the state if it is committed by state agents. The rationale behind this rule is that it is necessary because state agents, by virtue of their official capacity, had the authority to bind the state. Accordingly such a rule was needed in order to provide certainty and security in the realm of international relations.

Captain Linke is not an agent of Republica. Captain Linke is merely the pilot of the Stationferry which in turn is owned by Startours, a non-governmental entity. His ultra vires action which may have indirectly caused the subsequent damage to Starflight-1 was the acceptance of a bribe and allowing the release of the cremains capsule during a spacewalk. This was committed in his capacity as an employee of a private corporation, and not as an agent of Republica. Although Art VI of the OST makes Republica responsible for the activities of nongovernmental entities in outer space, this responsibility does not extend to ultra vires acts. After all, non-governmental entities have no authority to bind the state and consequently, the rationale for attributing responsibility to the state for the ultra vires actions of state agents does not apply.

Accordingly, even if Captain Linke is found to be at fault for the damage sustained by *Starflight-1*, Republica is not responsible for his ultra vires actions because he is not an agent of the state.

b. Republica is not responsible for Ash because private space tourists are not within the ambit of Art VI of the Outer Space Treaty.

The term "non-governmental entities" in Art VI of the *OST* refers to outsourced non-governmental entities and does not include space tourists. According to the

<sup>&</sup>lt;sup>120</sup> Compromis, ¶12.

<sup>121</sup> Compromis ¶12.

travaux préparatoires, the drafters of the OST did not intend for the term to include purely private entities. The intention of the drafters must be taken into account in determining whether or not space tourists fall within a states responsibility under Art VI because Art 31(1) of the Vienna Convention on the Law of Treaties states that the terms of a treaty must be interpreted in its context. 122

Space tourism was not contemplated by the drafters in 1967. Accordingly, although arguably Mr Ash is at fault for releasing the cremains capsule during his spacewalk which impacted *Starflight-1*, Republica is not responsible for Mr Ash under Art VI of the *OST*.

Consequently, Republica is not liable under Art III of the *Liability Convention*.

# IV. REPUBLICA IS NOT LIABLE TO COMPENSATE ASPIRANTIA FOR THE COST RELATING TO THE RESCUE AND RETURN OF STATIONFERRY'S CREW AND PASSENGERS.

States are not entitled to be compensated for the costs relating to the rescue and return of personnel of spacecrafts. The *travaux* préparatoires of the Rescue Agreement show that states thought it would be inappropriate to require the reimbursement of such expenses since the obligation to rescue and return "is a humanitarian one". 123 The fourth recital of the

preamble affirms that the *Rescue Agreement* is "prompted by sentiments of humanity" 124.

As mentioned above in Part I.A., Aspirantia is under an absolute and unconditional obligation to rescue and return the passengers and crew of *Stationferry* in accordance with the ethos and humanitarian spirit of the *Rescue Agreement*. It is for the same reason that Aspirantia has to bear the cost of rescuing and returning the passengers and crew.

Thus, Republica is not liable to compensate Aspirantia for the cost relating to the rescue and return of the remaining crew and passengers.

#### V. PRAYER FOR RELIEF

For the foregoing reasons, the Respondent, Republica, respectfully requests this Honourable Court to:

**DECLARE** that the Applicant has contravened international law by exercising criminal jurisdiction over Captain Linke and Dr. Vienet:

**DECLARE** that the Applicant has contravened international law by refusing to promptly return Captain Linke and Dr. Vienet to the Respondent;

**DECLARE** that the Respondent is not liable under international law to compensate the Applicant for the environmental pollution caused to the Applicant's lake; and

**DECLARE** that the Respondent is not liable to the Applicant under international law for the damage caused to *Starflight-1* and the loss of lives of the three passengers.

Respectfully submitted

Agent for Respondent

Vienna Convention on the Law of Treaties, 23 May 1969, 1155 U.N.T.S. 331, art 31 (entered into force 27 January 1980) ('VCLT'); see also Richard K Gardiner, Treaty Interpretation (2008) 141.

Sub-Comments of Miss Gutteridge (UK), Legal Sub-Committee of the United Nations Committee on the Peaceful Uses of Outer Space, Draft International Agreements on Liability for Damage Caused by Objects Launched into Outer Space and on Assistance to and Return of Astronauts and Space Vehicles, 33<sup>rd</sup> mtg, UN Doc A/AC.105/C.2/L.2/Rev.1.

<sup>&</sup>lt;sup>124</sup> Rescue Agreement, opened for signature 22 April 1968, 672 UNTS 119, 4<sup>th</sup> recital (entered into force 3 December 1968).