

MANFRED LACHS SPACE LAW MOOT COURT COMPETITION 1994

Case Concerning the Use of a Space Station ALPHA V. GAMMA

1. INTRODUCTION

The finals of the 3rd Manfred Lachs Space Law Moot Court Competition were held in Jerusalem during the IISL Colloquium. Preliminary competitions had been organized in Europe by the European Centre of Space Law (ECSL) of ESA, and in the US by the Association of US Members of the IISL. The winners of these preliminaries were the University of Helsinki, Finland (Peter Iiskola, Craig Thompson and Kari Vallonen) for Europe, and the John Marshall University of Chicago (Daniel Groth and Jollene Kime) for the USA. They met in Jerusalem before a bench composed of Judge G. Guillaume, Judge G. Herczegh and Judge Chr. Weeramantry of the International Court of Justice. The John Marshall University won the competition. Financial and organizational support for the competition were granted by the Hebrew University of Jerusalem, KLM Royal Dutch Airlines and Martin Marietta Inc.. ECSL and AUSMISL sponsored the teams' travel to Jerusalem. Hereunder follow the case and the briefs of the winning teams.

2. THE PROBLEM

The GALACTICA Space Facility

GALACTICA is a space station consisting of a permanently occupied space facility in orbit 300 miles above the surface of the Earth. This space facility has been established and is operating for scientific purposes, by three States: Alpha, Beta and Gamma. For this purpose, a Treaty has been signed among the said States, and they all have fully implemented this Treaty as part of their respective municipal laws.

GALACTICA is composed of three parts:

- the core components, e.g., human habitation module, life support systems, and a space science laboratory module affixed to the central facility core. Both of these elements have been financed and constructed, and are owned, by Alpha. They all have been notified to the United Nations and are carried on the national registry of Alpha, as space objects of Alpha, pursuant to the Convention on the Registration of Objects Launched into Outer Space.

- a space science laboratory module, attached to the Alpha station core facility and serviced from and through the core facility. This module has been financed and constructed, and is owned by Beta. It has been notified to the United Nations and is carried on the national registry of Beta, as a space object of Beta, pursuant to the Convention on the Registration of Objects Launched into Outer Space.

- another space science laboratory module, with the same characteristics as the one of Beta, has been financed and constructed, and is owned by Gamma. It has been notified to the United Nations and is carried on the national registry of Gamma, as a space object of Gamma, pursuant to the Convention on the

Registration of Objects Launched into Outer Space.

The three parts of GALACTICA have been designed to be complementary and not supplementary, to certain major research objectives of the intergovernmental undertaking. Therefore, an effort has been made by the parties to avoid duplication of equipment in the modules and strengthen their cooperation in view to sharing the use of the said equipment.

The Crew and the Commander

The entire station complex is capable of supporting, at any given time, 12 people, the crew members. The three States have agreed to divide this capability equally among their nationals. Each national crew has a crew chief. A Space Facility Commander is the supreme authority aboard GALACTICA. Pursuant to the Treaty between the three States, the Space Facility Commander is entrusted with overall authority over the facility and its inhabitants. The prime objective of the commander is to ensure accomplishment of the overall facility mission consistent with crew safety within the terms of the Treaty. Pursuant to the provisions of this Treaty, Alpha is entitled to appoint the commander, and this has indeed been done.

Activities Aboard GALACTICA

Since the modules were designed to be complementary, each State has certain pre-agreed utilization rights to the laboratory modules of the other States. The utilization rights consist of time-slots during which the using State has exclusive use and control of the module facility as well as the responsibility to return control of the module facility to the owner State in the same condition as when control was assumed at the beginning of the time-slot. Jurisdiction, however, remains at all times in the State supplying the module. Under this arrangement, Alpha was given a series of time-slots including:

- in the Gamma module: September 1 - October 31, 2005

- in the Beta module: June 1 - July 31, 2007.

One of the main life sciences research project carried out on the station was directed at finding a remedy for a form of cancer prevalent throughout the populations of the Earth.

The discovery

On October 1, 2005, a national of State Alpha, Dr Zarkov, employed by a private research laboratory incorporated and headquartered in Alpha, while performing research in the Gamma module, discovered what has since become the medically-accepted remedy for this form of cancer. As a result, Dr Zarkov and his company have received worldwide acclaim and recognition, and receive substantial royalties based on patents obtained in a number of countries.

The circumstances of the discovery

Subsequently, it became known that the particular laboratory instrument, the use of which was essential in enabling Dr Zarkov to make his discovery in the Gamma module, was purchased by his employer

from a private company incorporated and headquartered in Gamma. The assembled instrument, as well as each of the three major components, incorporated inventions covered by the claims of valid patents issued by the government of Alpha during the year 2004 for a term of 17 years. These patents are owned by a company incorporated and headquartered in Gamma.

Two of the three major components comprising the instrument were air-shipped from Gamma to the space launch complex in Alpha and from there eventually transported to GALACTICA by an Alpha launch vehicle carried on the registry of Alpha.

The Alpha launch vehicle docked directly with the Alpha core component of GALACTICA, and from there the components were transferred via the core to the Gamma module.

The third component of the instrument was transported from the territory of Gamma directly to GALACTICA by a launch vehicle carried on the registry of Gamma, and which docked directly with the Gamma module. From that point, the component was transferred directly into the Gamma module where the three major components were assembled into the instrument.

After the cure was discovered, the instrument was disassembled and each of the three major components returned to Alpha by an Alpha space recovery vehicle and stored there at an Alpha Government Facility.

Controversies...

In view of the importance which the laboratory instrument had played in Dr Zarkov's discovery, and the fact that the Gamma company which owned the patents received no credit (or royalties), considerable political controversy developed between Alpha and Gamma as well as among their respective space science communities, including their respective crews. As tensions increased on GALACTICA, the Commander of the station, an Alpha civilian government employee, imposed summary restrictions on the movement within GALACTICA of the Alpha and Gamma crews, including the fact that neither was to go into the other's laboratory module. Although this restriction did not affect the use of the Beta module, it did prohibit Alpha crew members from entering the Beta module while being utilised by the Gamma crew and vice-versa. These restrictions in effect temporarily interrupted the schedule of rights of cross-utilisation of each other's laboratory module by Alpha and Gamma.

Despite this action, tensions continued to increase to the point where, on June 30, 2007, a Gamma crew member entered the Beta module and confronted the Alpha crew chief scientist. An argument developed and a physical scuffle ensued during which the Alpha scientist was shoved by the Gamma crew member with great force across the module and into some laboratory equipment. As a result, he was seriously injured and Alpha laboratory equipment and experiments temporarily in the Beta module sustained damage in the amount of \$10 million. Subsequent investigation showed that \$4 million dollars worth of this Alpha government equipment was not properly

secured in accordance with agreed procedures annexed to a Protocol to the Treaty for the securing and storage of laboratory equipment.

The Gamma perpetrator returned immediately to the Gamma module. The Gamma crew chief, on orders from the Government of Gamma, refused the demand by the GALACTICA commander that the perpetrator be turned over immediately to the custody of the Commander for interrogation and return by recovery vehicle to Alpha for possible criminal prosecution. The Gamma crew chief, instead, on orders from his government promptly returned the perpetrator in the Gamma return capsule. However, while flying over the territory of Delta, a neighbour State of Gamma, the Gamma capsule experienced trouble and crashed on the soil of Delta. The authorities of Delta found the capsule and the crew member who was severely injured but alive. The crew member was sent to a hospital and recovered. Delta being a party to the Agreement on Rescue of Astronauts, its government wished to ensure that no claim would be brought against Delta for violation of this Agreement. After lengthy negotiations, an exchange of letters was performed among the States Alpha, Gamma and Delta providing that, since the case would be brought to the International Court of Justice, the astronaut would be allowed to remain in the territory of Delta until the Court decides to which State Delta should return him. Then, Delta would perform its duty to return the astronaut.

CLAIMS

As a result of this series of incidents and accidents, the following claims were presented and demands made:

1) *by Gamma* on behalf of the owners of the patents for appropriate compensation based on infringement of the Gamma patents by Dr Zarkov, his employer and the Government of Alpha;

2) *by Alpha* for compensation from Gamma for damage to the Alpha equipment;

3) *by Alpha* for refusal of Gamma to surrender custody of the Gamma assailant for prosecution by Alpha for

a) ignoring the summary restriction imposed by the Alpha station commander and thereby endangering the lives of the station crew and

b) for the assault on the Alpha chief scientist; and

4) *by Gamma and Alpha*, which are seeking to determine their rights to the astronaut as between each other. Delta has already agreed, through an agreement signed with Alpha and Gamma, to be bound by the ICJ's decision as to who has the better right as between Alpha and Gamma.

Intergovernmental consultations to resolve these claims have been unsuccessful.

Alpha and Gamma have taken their claims to the International Court of Justice, and the Court has agreed to decide the issues of:

1) Jurisdiction with respect to making and use of inventions in outer space, i.e., to what extent may a State consistent with international law prescribe or otherwise extend his patent laws to activities occurring in outer space; in this case on GALACTICA;

2) The legality of the Alpha Station

Commander's restriction order, the demand of Alpha for the surrender to it of the custody of the Gamma perpetrator, the refusal of Gamma to surrender custody, and the subsequent events, including the accident of the return capsule.

3) The Alpha claim for damage.

INSTRUCTIONS

The participants will brief and argue the merits of these issues on behalf of Alpha and Gamma using the scenario as set forth above and the attached excerpts from the Treaty as well as other relevant sources of law as may appropriately be applied by the International Court of Justice. For the convenience of having municipal law frames for reference for purposes of the briefs and arguments, the participants may refer to any relevant municipal laws, provided those laws are as of 31 December 1992. Also, the participants should assume that Alpha, Beta and Gamma are members of the United Nations and parties to the Outer Space Treaty, the Liability Convention, the Registration Convention and the Astronaut Rescue and Return Convention. As noted, Delta is only a Party to the 1967 Outer Space Treaty. As regards the patent claim, the issues briefed and argued should be confined to ones of jurisdiction and not substantive patent law. The participants should assume that all patents are valid and their claimed inventions used where so stated in the scenario. Finally, participants should also assume that the code of conduct provided for by article XII of the Treaty between the governments of Alpha, Beta and Gamma, has not yet been developed.

Excerpts From The Treaty Between The Governments of Alpha, Beta, and Gamma for the Establishment, Operation and Utilization of a Permanently Inhabited Space Facility, done in Gamma, February 28, 1998.

Article V Registration, Jurisdiction and Control

1.- In accordance with Article II of the Registration Convention, each State Party shall register as space objects the flight elements including attached modules which it provides.

2.- Pursuant to Article VIII of the Outer Space Treaty and Article II of the Registration Convention, each State Party shall retain jurisdiction and control over the elements it registers in accordance with paragraph 1 above and over personnel in or on the Space Facility who are its nationals. The exercise of such jurisdiction and control shall be subject to any relevant provisions of this Treaty.

Article VI Ownership of Elements and Equipment

1.- Each State Party shall own the flight elements (including attached modules) that they respectively provide, except as otherwise provided for in this Treaty. The States Parties shall notify each other regarding the ownership of any equipment in or on the Space Facility.

2.- The transfer of ownership of the flight elements or of equipment in or on the Space Facility shall not affect the rights and obligations of the States Parties under this Agreement.

3.- The ownership of equipment or material provided by a user shall not be affected by the mere presence of such equipment or material in or on the Space Facility.

4.- The ownership or registration of elements or the ownership of equipment shall in no way be deemed to be an indication of ownership of material or data resulting from the conduct of activities in or on the Space Facility.

5.- The exercise of ownership of flight elements (including attached modules) and equipment shall be subject to any relevant provisions of this Treaty, including any mechanisms for sharing of utilization.

Article IX Utilization

1.- Alpha shall retain the use of the station core and user elements it provides, except as otherwise provided in this paragraph and paragraph 3 below. Alpha shall provide to Beta and Gamma resources derived from the Space Facility infrastructure it provides to operate and use the manned base. In exchange for Alpha providing such resources, Beta and Gamma shall provide to Alpha a fixed percentage of the use of their respective attached modules on an agreed time share basis.

2.- In addition, Alpha shall share the use of its laboratory module with Beta and Gamma pursuant to an agreed time sharing mechanism.

3.- Any utilization by one State Party of another's laboratory module shall be on an exclusive basis, and the module shall be under the control but not jurisdiction, of such using Party for the duration of its utilization by that Party.

4.- Each State Party may use and select users for its allocations for any purpose consistent with the object of this Treaty.

5.- In its use of the Space Facility, each State Party shall avoid causing serious adverse effects on the use of the Space Facility by any other State Party.

6.- Each State Party shall assure access to and use of its Space Facility elements to the other State Parties in accordance with their respective utilization allocations.

Article X Operation

The States Parties shall have the responsibilities in the operation of the flight elements (including attached modules) they respectively provide, in accordance with the relevant provisions of this Treaty, including Article IX (3). The States Parties shall develop and implement procedures for operating the Space Facility in a manner that is safe, efficient, and effective for Space Facility users and operators. Further, each State Party shall be responsible for sustaining the functional performance of the elements it provides.

Article XII Crew

Each State Party has the right to provide and equal number of qualified personnel to serve as Space Facility crew members, including scientific experimenters. Each crew shall have a crew chief. The Space Facility commander shall be designated by Alpha.

The Code of Conduct for the Space Facility

crew will be developed by the States Parties.

to prosecute its national or commensurate charges supported by the evidence.

Article XX Treatment of Data and Goods in Transit

Recognizing the importance of the continuing operation and full international utilization of the Space Facility, each State Party shall, to the extent its applicable laws and regulations permit, allow the expeditious transit of data and goods of another State Party and its users. This Article shall only apply to data and goods transferring to and from the Space Facility, including but not limited to transit between its national border and a launch or landing site within its territory, and between a launch or landing site and the Space Facility.

Article XXI Intellectual Property

1.- For the purposes of this Treaty, "intellectual property" is understood to have the meaning of Article 2 of the Convention Establishing the World Intellectual Property Organization, done at Stockholm on 14 July 1967.

2.- Subject to the provisions of this Article, for purposes of intellectual property law, an activity occurring in or on a Space Facility flight element (including attached modules) shall be deemed to have occurred only in the territory of the State Party of that element's registry. For avoidance of doubt, participation by a State Party or its users in an activity occurring in or on the other State Party's Space Facility flight element (including attached modules) shall not in and of itself alter or affect the jurisdiction over such activity provided for in the previous sentence.

3.- The temporary presence in the territory of a State Party of any articles, including the components of a flight element, in transit between any place on earth and any flight element (including attached modules) of the Space Facility registered by another State Party shall not in itself form the basis for any proceedings in the first State Party for patent infringement.

Article XXII Criminal Jurisdiction

In view of the unique and unprecedented nature of this particular international cooperation in space:

1.- Alpha, Beta, and Gamma may exercise criminal jurisdiction over the flight elements (including attached modules) they respectively provide and over personnel in or on any flight element who are their respective nationals, in accordance with Article V(2).

2.- In addition, Alpha may exercise criminal jurisdiction over misconduct committed by a non-Alpha national in or on a non-Alpha element of the manned base or attached to the manned base (e.g., laboratory module) which endangers the safety of the manned base or the crew members thereon; provided that, before proceeding to trial with such a prosecution, Alpha:

(a) shall consult with the State Party whose national is the alleged perpetrator concerning the prosecutorial interests of both States; and

(b) shall have either

(1) received the concurrence of such State Party in the continuation of the prosecution; or

(2) if such concurrence is not forthcoming, failed to receive assurances from such State Party that it intends

3. WINNING BRIEFS

MEMORIAL FOR STATE ALPHA

AGENTS

Peter Iiskola, Craig Thompson, Kari Vallonen

ARGUMENT

Part I: Request For Provisional Measures

1. Alpha's Sovereign Right To Exercise Criminal Jurisdiction Must Be Protected

Before this Court makes any decisions on jurisdiction, admissibility or the merits of the Case Concerning the Use of a Space Station ("Space Station Case"), Alpha submits a claim requiring provisional or interim measures¹ to safeguard its sovereign jurisdictional competence pursuant to the 1998 Treaty between the Governments of Alpha, Beta, and Gamma for the Establishment, Operation and Utilization of a Permanently Inhabited Space Facility ("1998 Treaty"), which these three States have signed.² This Court should have a *prima facie* title of jurisdiction upon which its power to decide the case is based.³ Gamma and Alpha have chosen in a *compromise*⁴ to submit the dispute to this Court. The intent and effect of this *compromise* demonstrate that this Court has a *prima facie* title of jurisdiction to decide on provisional measures.⁵

The remoteness and vastness of outer space does not create a lawless *regime* where States and their nationals may trespass on established legal rights when the need arises. The 1967 Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies ("Outer Space Treaty") has been ratified by the majority of States to reinforce these sentiments. Customary international law, treaties, general international law, *opinio juris*, State practice and declarations all establish that international law and the Charter of the United Nations ("UN Charter") have legal effect also in the vacuum of outer space.⁶ The 1998 Treaty further demonstrates that the void of outer space is not at least void of law. In Article XXII(2), Gamma, Beta and Alpha have agreed, in a choice of law provision, to apply Alpha's criminal jurisdiction when one or more States either choose or fail to initiate their own legal processes.⁷ It should be stressed that the Outer Space Treaty does not forbid Parties, like Gamma and Alpha, to conclude *inter partes* special provisions if the principles of the treaty are upheld.⁸ Additionally, State practice supports this view.⁹ This agreement vests in Alpha, when certain conditions are met, primary jurisdiction over any misconduct that endangers the manned base or the safety of the crew.¹⁰

A Gamma crew member trespassed in a laboratory module to which Alpha was entitled exclusive utilization rights pursuant to a time allotment agreement and Article IX(3) of the 1998 Treaty. This trespass violated primary obligations set forth by the

commander's summary restriction order and the general principles of space law.¹¹ Once inside the laboratory module the trespasser assaulted and battered the Alpha crew chief scientist, who, as a result of this attack, suffered serious injuries. In addition, ten million dollars worth of Alpha's equipment was severely damaged in the affray. To carry out a proper investigation of the incident and to exercise its criminal jurisdiction, the commander and Alpha requested that the Gamma perpetrator be turned over to their custody. Instead of complying with its treaty obligations and thus respecting both the commander's and Alpha's custody request, Gamma promptly sent the perpetrator back to earth without assuring Alpha of its intentions to prosecute [Art. XXII(2)]. Both Gamma's denial of the commander's and Alpha's rightful request of custody and its failure to give assurance of intent to prosecute demonstrate that Gamma flagrantly violated the commander's authority and the criminal jurisdiction provisions provided in the 1998 Treaty and hence Alpha's treaty-based sovereign rights.

During this earthward flight, the Gamma return capsule developed difficulties and crashed in the State of Delta. Delta presently has custody of the Gamma perpetrator and has agreed to be bound by this Court's decision as to which State, Gamma or Alpha, has the better right to this individual.

As a *supplementary argument*, Alpha points out that the victim of the perpetrator's crimes is an Alpha national, a fact that can only corroborate the exercise of Alpha's jurisdiction over these crimes.¹² The promotion of justice and peace would be facilitated if these crimes were properly investigated and their perpetrator tried in Alpha. The situation aboard the GALACTICA remains volatile, particularly when tensions between Gamma and Alpha have so far eluded a solution. Moreover, the predictability of law demands, not only for the continuation of the mission and the personnel presently aboard the GALACTICA but also for the international community, a concise, clear and prompt message that reflects the principle of *pacta sunt servanda*, the dominion of law in outer space and the criminal jurisdiction provisions prescribed in the 1998 Treaty.¹³ Any other message could sacrifice the peaceful development of outer space to a hegemony of anarchy.

Pursuant to the 1998 Treaty and international law, Alpha has a right to exercise its criminal jurisdiction over the wrongful conduct of the Gamma crew member. Additionally, the commander has the independent authority to request custody of the crew member in order to investigate the violation of a lawful order.¹⁴ *First*, the facts and international law establish that the commander's and Alpha's rights to the crew member arose first and supersede any competing rights claimed by Gamma that have subsequently arisen because of the crash. *Second*, Gamma has concurred with the nature of the dispute in an exchange of letters with Delta and Alpha. These letters must be interpreted to mean that Gamma has recognized that the primary dispute concerns *inter alia* criminal jurisdiction and the effect of the commander's authority. *Third*, pursuant to the 1968 Agreement on the Rescue of Astronauts, the Return of

Astronauts and the Return of Objects Launched into Outer Space ("Astronaut Agreement"), Gamma may require Delta to fulfil its active obligation to promptly return the crew member to Gamma. Instead, in the exchange of letters, Gamma has recognized the nature of the dispute, i.e. the commander's and Alpha's first right, and Gamma therefore is now estopped from claiming otherwise.¹⁵ Finally, Gamma breached its treaty obligations by sending the crew member back to earth, an act that usurped the commander's overall authority aboard the GALACTICA and Alpha's criminal jurisdiction. Gamma is now prohibited under the principle *ex injuria non oritur jus*¹⁶ from asserting any rights that might arise from the crash that resulted from this internationally wrongful act. This includes any rights arising from the Astronaut Agreement.

It must be stated that the more recent 1998 Treaty prevails in matters not prescribed in the Outer Space Treaty and the Astronaut Agreement. The principles of *lex specialis derogat legi generali* and *lex posterior derogat legi priori*¹⁷ are applicable, because the 1998 Treaty contains specific provisions regarding criminal jurisdiction that comply with the principles inherent in the multinational space treaties. The consequence of the matters covered above entitles the commander to rely on his or her authority and Alpha to rely on its jurisdiction rights provided by the 1998 Treaty.

Therefore, Alpha requests this Court to adjudge and declare that Alpha has the right to exercise its criminal jurisdiction, and that prompt action to extradite¹⁸ the perpetrator to Alpha is required in order to bring this alleged criminal to court in Alpha, as well as protect Alpha's sovereign right of jurisdiction from usurpation. As a secondary request, the perpetrator should be promptly handed over to the commander's custody.

Part II: Preliminary Objections

Respecting this Court's power to decide its own jurisdiction or *compétence de la compétence*,¹⁹ Alpha wishes, before the merits are considered, to raise Preliminary Objections to the jurisdiction and admissibility of any potential claims concerning intellectual property.²⁰ Alpha recognizes that these objections may involve questions that normally are dealt with in the merits, but these questions are closely linked and, what's more, have great bearing on the merits of this case.

2. This Court Lacks Jurisdiction Over Domestic Intellectual Property Matters

2.1. As the dispute regarding intellectual property falls under municipal jurisdiction.

Primary jurisdiction for disputes regarding intellectual property on the GALACTICA belongs to the State that has registered the flight element in which the disputed activity occurred. This exclusive jurisdiction is established in Article VIII of the Outer Space Treaty and Articles IX(3) and XXI(2) of the 1998 Treaty.²¹

First of all, in light that Dr. Zarkov made his discovery in a flight element registered by Gamma, Gamma

retains exclusive jurisdiction over any intellectual property rights. In anticipation of Gamma's claim regarding intellectual property, Alpha reiterates that essentially domestic jurisdictional matters are excluded from this Court's jurisdiction. This principle has been established in many cases of the World Court and is based on Article 2(7) of the UN Charter.²²

As a secondary argument, the proprietor of the intellectual property right, a company incorporated and headquartered in Gamma, may rightfully pursue remedies not only in Gamma but also in Alpha, though the grounds for remedy are different in each State. The disputed intellectual property rights concerning the instruments are registered in Alpha, entitling the proprietor of the rights to protection under Alpha's municipal laws. Even though Dr. Zarkov made his discovery in outer space, the commercial application of this discovery occurred here on earth. This temporal exploitation could also constitute an intellectual property violation, in nature, completely divorceable from any other violation that might have occurred in outer space.²³ If the patent proprietor wishes to claim damages based on the temporal exploitation of the cancer remedy, proceedings must be initiated in each State where the patents to the remedy are registered. Consequently, regardless of which State or States might have jurisdiction, it must be emphasized that this Court, *per* the above-cited principle, does not have the power to preside over matters essentially within municipal jurisdiction.

Furthermore, Alpha recognizes that States bear international responsibility for national activities in outer space, whether such activities are governmental or private, according to Article VI of the Outer Space Treaty.²⁴ However, in the 1998 Treaty, Gamma and Alpha have explicitly relegated jurisdiction in intellectual property matters to the domestic sphere. It is incontrovertible that the 1998 Treaty supersedes the Outer Space Treaty on intellectual property matters *lex specialis*.²⁵

Consequently, this Court lacks, according to the 1998 Treaty, jurisdiction in intellectual property disputes. Hence, any claims on this ground should be duly dismissed from the list.

2.2. As this Court lacks authority to issue a substantive decision on domestic intellectual property rights.

A State has exclusive authority to legislate and administer intellectual property matters and this authority may be not impeded by other States as it would violate State sovereignty.²⁶

Any possible dispute over the actions of Dr. Zarkov and his employer must be evaluated in accordance with international private law. There is no forum, international or municipal, that has the authority to render a judgement on matters deemed by international law as belonging exclusively to a State, except, of course, that State's own judicial system.²⁷

Hence, this Court has neither the authority or jurisdiction nor any legal sources in international law to issue a decision on domestic intellectual property matters. Consequently, this part of the dispute should

be removed from the list.

However, should this Court decide to extend its jurisdiction to the dispute over intellectual property rights, Alpha requests the Court to consider the following Preliminary Objection.

3. Any Claims Regarding Intellectual Property Rights Are Inadmissible.

3.1. As Gamma nationals have not exhausted effective local remedies.

It is an established principle of international law that local remedies must be exhausted prior to the exercise of diplomatic protection over a State's nationals in this Court.²⁸

Local remedies have not been exhausted, let alone tried, in either Gamma, Alpha or any other State. Additionally, Alpha has not denied Gamma nationals access to its legal system. Until domestic remedies are exhausted or a claim of obstruction of judiciary access is submitted, Gamma may not exercise diplomatic protection over its nationals in this Court.²⁹

Hence, until the intellectual property dispute acquires a legal nature that, according to international law, warrants diplomatic protection and thus the attention of this Court, this matter is inadmissible in this Court and should therefore be removed from the list.³⁰

3.2. As the actions of Alpha nationals are not yet attributable to Alpha.

Disputes brought before this Court should, in this case, be based on acts of a State that are attributable³¹ to a State and that constitute a breach of an international obligation.³²

Alpha has not breached an international obligation towards Gamma, because intellectual property rights do not impose any international obligations, whether to private individuals or to States. Alpha's only obligation is strictly domestic and its basis is a contractual promise to extend commercial protection to the proprietor of the intellectual property right within its own jurisdiction. This obligation, as of yet, has not been breached by Alpha, because the remedies prescribed by municipal laws have not been exhausted.

Hence, until the proprietor of the intellectual property right affords Alpha the opportunity to fulfil the contract, this matter is inadmissible in this Court and should therefore be removed from the list.

3.3 As the presence of the instruments aboard the GALACTICA and the discoveries were not breaches of international obligations.

According to Article VI(4) of the 1998 Treaty, ownership or registration of elements or equipment is not an indication of ownership of the results of activities conducted aboard the GALACTICA. States must, additionally, allow the expeditious transit of data and goods of another State and its users to and from the GALACTICA [Art. XX]. A State may also request that other States notify of any activities that may affect its use of outer space [Outer Space Treaty, Art. IX]. Article XXI(2)-(3) of the 1998 Treaty states that the temporary

presence in a State of any articles in transit between the GALACTICA and Earth does not form the basis for a patent infringement in that State.

The mere fact that the module in which Dr. Zarkov's activities occurred or that a Gamma national owned the equipment does not in any way imply that the results, i.e. the cancer remedy discovery, are owned by Gamma or its nationals. No municipal law of Gamma may change this matter. Upon receipt of two of the laboratory instruments, Alpha promptly and in accordance with its laws shipped the items to the GALACTICA. Additionally, the transit of instruments through Alpha's jurisdiction and their temporary storage in an Alpha storage facility do not in themselves invoke Alpha's intellectual property laws. This storage, after all, merely precedes shippage of the instruments to their final destination.

Gamma could have requested consultation with Alpha when it viewed that an activity could potentially cause harmful interference with its activities in outer space. Alpha had no indication that the activities of Dr. Zarkov and his employer were internationally wrongful because Gamma did not request consultation. Moreover, cooperation in outer space and aboard the GALACTICA requires notification or a protest by a State when it views that another State's activities are potentially wrongful.³³ Gamma, knowing full well that the patented instruments were aboard and that one of the primary purposes of the mission was to find a remedy for cancer, was best able to call attention to any wrongful conduct.

Hence, because Gamma did not draw Alpha's attention to this matter, Gamma is now estopped from claiming any wrongfulness on Alpha's part. It must be pointed out that Alpha has relied in *good faith* on the provisions of the 1998 Treaty and on the *good faith* of Gamma to implement these provisions.

Part III: Merits

4. Gamma Is Internationally Responsible For The Acts That Caused Serious Injuries To Alpha's Scientist And Damages To Alpha's Property. Hence, Gamma Is Liable To Pay Compensation.

The action committed by a Gamma national is attributable to Gamma and entails international State responsibility. Hence, Gamma has a duty to pay Alpha compensation for damages.

4.1. Gamma committed wrongful acts by four violations.

4.1.1. As to the violation of a lawful summary restriction order

The evidential fact that the commander is the supreme commander aboard the GALACTICA vests in the commander the sole authority to impose summary restrictions when she or he determines that the accomplishment of the overall facility mission consistent with crew safety according to facts given is endangered.³⁴ When a State recognizes the supreme treaty-based authority of the commander, that State has a primary obligation to comply with any orders issued

within the limits of that authority.

It follows from the hazardous nature of the working environment in outer space and the above-noted that the commander's summary restriction on movements of Gamma and Alpha crew members was legal pursuant to the 1998 Treaty. It must be emphasized that the commander's summary restriction order was only temporary, limited and non-discriminatory and thus did not exceed a reasonable exercise of authority. Gamma was not the only State affected by the order, Alpha also has an obligation to comply with this overall authority. Furthermore, the absence of a code of conduct governing crew members aboard the GALACTICA does not free the commander from making authoritative decisions in the event that the accomplishment of the mission or the safety of the crew is endangered.³⁵

Consequently, Gamma has violated the commander's lawful and dutiful order and thereby endangered the mission and the safety of the crew and circumvented the commander's vested authority.

4.1.2. As to the violation of sovereign rights.

By virtue of the 1998 Treaty, States are vested with extended sovereign rights, e.g. the right to exclusively utilize and control a flight element during its utilization time allotments [Art. V and IX]. It is recognized in international law that a violation of a State's territory or its use or control thereof entails also a violation of the State's sovereignty.³⁶ In addition to the above-cited rights based on the 1998 Treaty, States enjoy, according to the Outer Space Treaty and international space law, the freedom to pursue scientific investigation in outer space.³⁷

Through the acts of the perpetrator, Gamma has violated Alpha's rights to utilize and control the Beta flight element. Moreover, the assault and battery of the Alpha crew chief scientist also represents a breach of Alpha's rights to pursue scientific investigation in outer space.

Summarily, Gamma has violated Alpha's use of the flight element and thus Alpha's sovereign rights.

4.1.3. As to the violation of the principle of peaceful use.

Outer space has been declared a territory where the principle of peaceful use reigns. Peaceful use has been defined by State practice and *opinio juris* to denote the non-militarization of space.³⁸ As non-militarization also implies non-aggression, it may be concluded that activities in outer space must be conducted in a non-aggressive manner.³⁹

By attempting to confront an Alpha national, the Gamma perpetrator exacerbated the tensions already present aboard the GALACTICA. This action is in direct contention with the non-aggressive conduct prescribed by the Outer Space Treaty. The scuffle and the ensuing injury and damage would never have happened if the Gamma perpetrator had complied with the commander's order and not sought out confrontation.

Hence, Gamma has violated the principle of peaceful use by initiating forcible aggressive conduct.

4.1.4 As to the violation of the prohibition of use of force.

A state should refrain from the threat or use of force against the territorial integrity or political independence

of any State, or in any other manner inconsistent with the purposes of the United Nations.⁴⁰ This provision found in Article 2(4) of the UN Charter is a peremptory norm of international law and has attained *jus cogens* status, as this Court has stated.⁴¹ With regard to the spatial confines of a space station, the provision must be interpreted *lato sensu* because the activities are carried out in a highly developed, but vulnerable, limited and risky environment unparallel to Earth.⁴²

The assault and battery of Alpha's crew chief scientist endangered not only individual life and property, but also the vulnerable functions of the GALACTICA. Even if the conduct described did not involve the use of weapons, the mere vulnerability of the environment invites an interpretation that the intrusion into the laboratory module and the felonious nature of the assault and battery invoke the provision "threat or use of force...or in any other manner".

Consequently, by the assault, Gamma has violated the prohibition of threat or use of force.

4.2. The violations are attributable to Gamma as internationally wrongful acts.

States bear international responsibility for all national activity, whether governmental or non-governmental, in outer space pursuant to Article VI of the Outer Space Treaty. This same Article stipulates that a State has a duty to authorize and continuously supervise non-governmental activity.⁴³ All personnel of a space object are under the jurisdiction and control of the State on whose registry the space object is carried [Art. VIII].⁴⁴ The State of registry has, pursuant to the 1998 Treaty, control over all personnel in or on the GALACTICA who are its nationals [Art. V].

It follows, thus, that the perpetrator being of Gamma personnel or crew is subject to the responsibility and control of Gamma regardless of his or her nationality. As Gamma has responsibility and control over the perpetrator, the actions of this individual entail attribution to Gamma with relevant responsibility and liability as a consequence.⁴⁵

Hence, the perpetrator's actions are attributable to Gamma as internationally wrongful acts.⁴⁶

4.3. Gamma has breached its international obligations.

4.3.1. As to obligations in the 1998 Treaty, Gamma has breached four obligations enumerated in the 1998 Treaty.

First, Gamma is obligated to comply with a valid order issued by the commander.⁴⁷ As Gamma had not questioned the validity of the commander's overall authority aboard the GALACTICA, Gamma had a primary obligation to comply with the order. Gamma failed to control the perpetrator, an omission that resulted in serious injuries to the Alpha crew chief scientist and damage to Alpha property. If Gamma questioned the validity of the commander's authority, Gamma should have notified or protested to Alpha of this pursuant to its treaty obligations to co-operate. Thus, Gamma is estopped from claiming now that the commander's authority was invalid. Second, Gamma is

obligated to promote a safe, efficient and effective operating environment for the users and operators of the GALACTICA [Art. X]. By entering the Beta flight element, the perpetrator disobeyed a legal command, a command that should have been enforced by Gamma pursuant to its obligation to promote safety. *Third*, Gamma has an obligation while using the GALACTICA to avoid causing serious adverse effects to other's use [Art. IX(5)]. The injuries and damage resulting from these omissions represent an adverse effect on Alpha's use. *Finally*, Gamma is obligated to provide qualified personnel to serve as crew members [Art. XII]. The occurrence of these events demonstrates that Gamma has failed to provide, in the perpetrator, an individual who meets the requirements of qualified personnel.⁴⁸

Consequently, Gamma has, by breaching these obligations, committed internationally wrongful acts.

4.3.2. *As to obligations in the 1998 Treaty and to the general principles of space law by neglecting to give Alpha prior notice of visitation.*

Should this Court consider that the commander lacked or exceeded authority by issuing the summary restriction order, Alpha still maintains that Gamma is responsible for the illegal intrusion.

Article IX(3) of the 1998 Treaty establishes that a State has exclusive use and control over a module to which it has been assigned pursuant to the allocation agreement. Furthermore, Article XII of the Outer Space Treaty establishes reciprocal visitation rights to stations on the moon and other celestial bodies but this visitation requires prior notification.

Exclusive use and control of a module must be interpreted to imply that no other State may encroach on that area. Gamma should have given Alpha prior notice of its crew member's visit, particularly in light of the tense circumstances prevalent. Gamma, however, does not attain visitation rights merely on notification, rather Alpha may exercise its sovereign right to grant visitation or not. It is irrefutable that international courtesy as well as an analogy to Article XII of the Outer Space Treaty establish a legitimate framework for requesting visitation rights and abiding to another State's reply.⁴⁹ Gamma neglected to inform Alpha of the perpetrator's intention to visit the Alpha-controlled flight element.

Consequently, Gamma has breached an obligation to respect Alpha's sovereign rights and the visitation principle and thereby committed an internationally wrongful act.

4.3.3. *As to obligations in the Outer Space Treaty.*

Gamma has breached five provisions of the Outer Space Treaty. *First*, Gamma has an obligation to control all personnel of the flight element that is carried on its registry [Art. VIII]. As already established, Gamma omitted to control the perpetrator, an omission that resulted in injuries and damage. *Second*, Gamma has an obligation to fulfil the principle of mutual assistance and co-operation while pursuing activities in outer space, particularly in legal and scientific matters [Art. IX and Preamble Para. 4].⁵⁰ The irresponsible attempt to confront the Alpha crew chief scientist does not

represent a token of mutual assistance and co-operation in legal and scientific matters. Gamma should have pursued a more responsible approach to solving any disputes. *Third*, Gamma has a duty to respect Alpha's freedom to conduct scientific investigation in outer space [Art. I(3)]. The injuries suffered by the Alpha crew chief scientist and the interruption caused to Alpha's scientific investigation constitute an impediment to Alpha's freedom to pursue scientific research. *Fourth*, Gamma must ensure that its activities in outer space are conducted peacefully, i.e. in a non-aggressive manner [Preamble Para. 2]. The peaceful use of outer space constitutes not only non-militarization but also non-aggression in individual situations. The open confrontation by the perpetrator represents a direct violation of this principle. *Finally*, Gamma has an obligation to ensure that all its activities in outer space are in conformity with international law and the UN Charter [Art. III].⁵¹ Gamma has breached not only several treaty obligations covered by international law but also provisions of the UN Charter that are applicable in outer space, such as will be enumerated in the sections to follow.

Consequently, by breaching these obligations, Gamma has committed internationally wrongful acts.

4.3.4. *As to obligations in the UN Charter.*

As noted earlier, the UN Charter is applicable in outer space. Gamma has breached three basic obligations enumerated in Articles 1 and 2 of the UN Charter.⁵²

- 4.3.4.1. Breach of an obligation to respect Alpha's sovereign rights by intruding into an area under Alpha's control. The Member States of the United Nations have an obligation to respect the principle of sovereign equality of States [UN Charter, Art. 2(1)]. Additionally, the Friendly Relations Declaration elaborates on the equal rights and duties of States. Paramount of these elaborations to Alpha's position are the duty to respect the personality of another State, the inviolability of a State's integrity and independence, peaceful coexistence with other States and a State's duty to comply in *good faith* with its international obligations.⁵³

Gamma has breached its international obligation to respect Alpha's sovereignty by trespassing into an area that, pursuant to the 1998 Treaty, falls under the use and control of Alpha. Both the commander's summary restriction order and the agreement entitling Alpha utilization of and control over the Beta flight element are legally binding upon Gamma.

Gamma is responsible for the actions of its personnel. By the intrusion into the Alpha-controlled flight element, Gamma omitted its duty to respect Alpha's personality, integrity and independence. Furthermore, Gamma also breached its duty to fulfil its treaty obligations in *good faith* and to coexist peacefully with Alpha.

Consequently, by breaching obligations to respect Alpha's sovereignty, Gamma committed an internationally wrongful act.

- 4.3.4.2. Breach of an obligation to solve disputes on the GALACTICA by peaceful means. *One of the primary purposes of the United Nations is to achieve international co-operation in solving international*

problems [UN Charter, Art. 1(3)]. A State has a duty, according to Articles 2(3) and 33, to settle its international disputes through peaceful means.⁵⁴ It is paramount that international peace and security, as well as justice are not endangered; therefore, it follows, as declared in the Friendly Relations Declaration, that all States must refrain from aggravating already tense situations. States are free to choose any peaceful means pertinent to the dispute, but the sovereign rights of other nations must be respected. Additionally, States have a duty to co-operate with each other in the fields of *inter alia* economics, science and technology.⁵⁵

By neglecting its international obligations, Gamma's trespassing in an Alpha-controlled flight element is not characteristic of a peaceful settlement. On the contrary, the intrusion aggravated a situation that could have been resolved through dutiful co-operation and hence without violence, serious injury and extensive damage. Gamma neglected to avoid a non-peaceful settlement by not controlling its crew and, in the process, disregarded Alpha's sovereign rights.

Consequently, Gamma has breached its duty to pursue a peaceful settlement and therefore committed an internationally wrongful act.

- 4.3.4.3. Breach of an obligation not to use force. A State should refrain from the threat or use of force against another State [UN Charter, Art. 2(4)].

The perpetrator's intrusion and violence in the vulnerable environment of GALACTICA invokes the provision of "threat or use of force or in any other manner" as explained earlier in Chapter 4.1.4.

Consequently, by breaching its control duty over the perpetrator, Gamma committed a prohibited forcible act.

4.4. Gamma is liable to pay compensation for injury and damage.

Gamma is internationally responsible for the perpetrator's actions due to its treaty obligations to be responsible for national activities and to control its personnel. Hence, Gamma is responsible for the injuries and damages caused by this individual and must make reparations to the injured State. Reparation is a general term and can entail the cessation of the breach, the right to restitution in kind, the right to compensation for material damage, the right to receive satisfaction or the right to apply sanctions.

4.4.1. Gamma is liable to pay compensation because it has committed internationally wrongful acts. Responsibility for internationally wrongful acts and omissions is a general principle of international law.⁵⁶ Also, reparation for wrongful conduct must wipe out all the consequences for the wrongful act and reestablish the situation that would have existed had the act never been committed.⁵⁷

Due to its internationally wrongful acts, Gamma is liable to pay compensation for the serious injuries suffered by the Alpha scientist and for the damage to Alpha's property.

Therefore, Gamma is liable to pay compensation for the serious injuries suffered by the Alpha crew chief scientist and for the serious disruption in both Alpha's use of the GALACTICA and its scientific work. Gamma is

also liable to pay for damages to Alpha's laboratory equipment worth ten million dollars. Also, Alpha claims transportation costs to cover expenses of replacing damaged equipment.

4.4.2. Gamma is liable to pay compensation pursuant to space law.

Should this Court consider that Gamma did not commit any internationally wrongful acts, it must be pointed out that Gamma's liability is still effectuated by the rules of space law.⁵⁸

When Alpha incurred the injuries and damages in question, Gamma was bound by the Outer Space Treaty and the Convention on Registration of Objects Launched into Outer Space ("Registration Convention"). According to the Outer Space Treaty, States bear international responsibility for national activities in outer space, whether these activities are governmental or non-governmental. With reference to statements in Chapter 4.2., a State shall authorize and continuously supervise national activities, whether governmental or private, and a State of registry shall retain jurisdiction and control over both its registered space object and any personnel thereof.

Hence, Gamma is liable to pay compensation for the damage and injuries caused by its personnel, i.e. the perpetrator. If the perpetrator is a national of Gamma, State responsibility covers all national activity, whether governmental or private [Outer Space Treaty, Art. VI and 1998 Treaty, Art. V(2)]. If the perpetrator is not a national of Gamma, the basis for Gamma's responsibility is its breach of its duty to continuously supervise its crew member [Outer Space Treaty, Art. VI and VIII].

However, should this Court consider that the cited space treaties are void and therefore not applicable in this Case, Gamma's responsibility should be based on customary international law as well as the general principles of international law that are embodied *inter alia* in the Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space ("Legal Principles Declaration"), particularly in principles 5 and 7.⁵⁹

Furthermore, should this Court consider that Gamma has not committed any internationally wrongful acts, Gamma still has international State responsibility for internationally lawful conduct causing damage. The perpetrator, as a Gamma crew member, is the effective link to attribute responsibility to Gamma.⁶⁰ The unique environment aboard the GALACTICA establishes that all activity that adversely affects another State must be attributable to some State.

Consequently, as Gamma is internationally responsible for the acts of the perpetrator, it is liable to pay compensation for injuries and damages as claimed *supra*.

4.5. The commander has taken preventive actions to promote safety aboard the Galactica and Alpha has not contributed to the injuries and damages.

The space station commander has, as a prime objective, to ensure the accomplishment of the overall mission consistent with crew safety. The commander upon determining that events endanger this prime objective has an

obligation to act for the benefit of all States and crew, regardless of nationality.⁶¹ The tensions aboard the GALACTICA represented clearly a hazard of the highest nature.⁶² This increase in tensions imposed an obligation that superseded any other mission consideration, particularly when the GALACTICA was in orbit and technical risks were at a relative minimum.⁶³ For the accomplishment of the mission, every aspect of the GALACTICA, i.e. equipment, tasks and personnel, has been arranged to eliminate unpredictability. The increase in tensions aboard was unforeseen and the commander had to act promptly to eliminate its unpredictable course. If the commander had not acted promptly and effectively, he or she would have violated the duties of the position. Because of this prompt and competent action, Alpha has fulfilled its treaty obligation to appoint a qualified person to the post of commander. Gamma is now estopped from claiming otherwise, because it failed to notify or protest to the commander and to Alpha that it viewed that the commander had miscalculated the graveness of the situation.

However, should Gamma deny responsibility for the damage of Alpha's improperly secured government equipment worth four million dollars, Alpha stresses that the 1998 Treaty is not yet in force. The Protocol Annex regarding the securing of equipment aboard the GALACTICA is not reflective of the object and purpose of the 1998 Treaty. The fact that Alpha's equipment was only partially secured according to the Protocol Annex has no bearing on the principle articles of the 1998 Treaty, just as the lack of a Code of Conduct has no bearing on the States' obligations arising from the 1998 Treaty. It must be remembered as mentioned in Chapter 1. that the 1998 Treaty has only been signed and therefore States are bound only to the object and purpose conferred therein. Alpha recognizes that when the 1998 Treaty enters into force, as a rule, every detail of the Treaty, even annexes, are unconditionally binding. Additionally, regardless of the legal status of the treaty a State may not avoid international responsibility for damage arising from misconduct attributable to that State. Article IX(5) of the 1998 Treaty, which reflects the object and purpose of the Treaty, establishes that a State must avoid causing serious adverse effects on the use of the GALACTICA. This breach was not an accident and any precautionary actions Alpha could have taken regarding the damaged equipment would not have changed this fact.

5. Gamma Is Responsible For Internationally Wrongful Acts That Usurped The Commander's Authority And Alpha's Jurisdictional Rights. Hence, Gamma Must Make Reparation By Recognizing These.

Gamma committed several internationally wrongful acts by usurping the commander's overall authority, Alpha's right to exercise criminal jurisdiction and by failing to assure Alpha of its intent to prosecute the Gamma perpetrator. As this individual is still suspected of felonious conduct occurring under Alpha's criminal jurisdiction, Alpha still has the right to exercise this treaty-based jurisdiction and Gamma must recognize this

right.

5.1. Gamma has committed internationally wrongful acts through three violations.

5.1.1. As to the violation of the commander's right to exercise overall authority.

As discussed in Chapter 4.1., the commander has overall authority aboard the GALACTICA. As the commander has the authority to impose the summary restriction order, it follows that the commander has the authority to investigate any violation of that order, particularly when the results of this violation endangered the accomplishment of the mission and the safety of the crew.⁶⁴

Gamma violated the commander's authority to promptly investigate the violation of the summary restriction order and the circumstances surrounding the assault and battery by neglecting to communicate and co-operate with the commander.

Hence, this violation usurped the commander's treaty-based authority.

5.1.2. As to the usurpation of Alpha's criminal jurisdiction.

A State may, according to the 1998 Treaty, exercise criminal jurisdiction over its registered flight element and over any personnel aboard the GALACTICA who are its nationals [Art. XXII(1)]. Additionally, Alpha may exercise criminal jurisdiction over any misconduct that endangers the safety of the manned base or the crew [Art. XXII(2)].

Alpha, in accordance with Article XXII(2), demanded through the commander custody of the perpetrator in order to exercise criminal jurisdiction over the blatant misconduct that ignored a lawful order and affected the safety of the manned base or crew. Alpha consulted with Gamma pursuant to the 1998 Treaty, but Gamma refused to comply with Alpha's custody demand. No explanations were offered for the refusal. Instead of co-operating, Gamma promptly sent the perpetrator back to earth. This action denied Alpha the right to exercise its treaty-based criminal jurisdiction.

Therefore, by violating the 1998 Treaty, Gamma usurped Alpha's right of criminal jurisdiction.

5.1.3. As to the violation of Alpha's right to receive an assurance of prosecution.

A State may, according to the 1998 Treaty, deny Alpha the right to exercise its treaty-based criminal jurisdiction over misconduct affecting the safety of the manned base or crew. A State must, however, assure Alpha of its intention to prosecute on commensurate charges [Art. XXII(2)].

Gamma's refusal to surrender custody of the perpetrator was never followed by any indication that it intends to prosecute the perpetrator. Instead, Gamma removed the individual from the GALACTICA without consulting with Alpha and thereby effectively from the reach of Alpha's criminal jurisdiction.

Hence, Gamma violated Alpha's right to receive an assurance of prosecution.

5.2. These wrongful acts are all attributable to Gamma.

A wrongful act must be attributable to a State to give rise to international State responsibility. As stated

earlier, a State is responsible for both its national activities and personnel of its registered element.⁶⁵

The Gamma crew chief acted on direct orders from the Gamma government.

Thus, the chief's negligence to recognize the commander's overall authority, disregard for Alpha's criminal jurisdiction and failure to assure Alpha of Gamma's prosecution intentions are attributable to Gamma as it is responsible for its orders and personnel.

5.3. Gamma has breached its obligations towards the commander and Alpha

The internationally wrongful acts are attributable to Gamma as well as being breaches of its international obligations.

5.3.1. Gamma has breached its primary obligation to comply with treaty-based authority

Just as it is a State's duty, as stated in Chapter 4.3.1., to respect the commander's overall authority aboard the GALACTICA, so is it a State's primary duty to comply with lawful orders in *good faith* and to exercise *due diligence* in a manner that promotes the safe, efficient and effective operation of the facility pursuant to Article X of the 1998 Treaty.⁶⁶

Gamma and its crew chief blatantly omitted to aid in solving the problems arising from the assault and battery. The negligent behaviour of Gamma does not correspond with its duty to fulfil this obligation in *good faith*. Gamma also omitted to exercise *due diligence* with regard to treaty-based patterns of co-operation in the commander's efforts to ensure the accomplishment of the mission and the safety of the crew.

Hence, this omission by Gamma is a breach of its primary obligation to carry out, in *good faith*, orders that concern the mission and the crew and thereby constitutes an internationally wrongful act.⁶⁷

5.3.2. Gamma has breached its obligation to consult and co-operate with Alpha on criminal jurisdiction

In matters affecting the safety of the manned base or the crew, Gamma has an obligation to respond after Alpha has initiated consultations pursuant to Article XXII(2) of the 1998 Treaty if Gamma views that Alpha lacks criminal jurisdiction. This duty to respond arises from Gamma's obligation to effect procedures that promote a safe, efficient and effective environment for the accomplishment of the facility mission [Art. X].

After Alpha initiated consultations via the commander, Gamma refused to grant jurisdiction over the wrongful conduct to Alpha. This refusal does not represent an adequate response to Alpha's consultation, instead Gamma has the burden of proof if it deems that Alpha's jurisdiction claim under Article XXII(2) is unfounded. Instead, Gamma sent the perpetrator to Earth thereby effectively defeating the object and purpose of the treaty, i.e. the settlement of a conflict over criminal jurisdiction.

Hence, by failing its consultation and co-operation obligation pursuant to the 1998 Treaty, Gamma has committed an internationally wrongful act. Gamma is now estopped from denying that Alpha had primary criminal jurisdiction pursuant to Article XXII(2)

because Beta has silently waived its criminal jurisdiction and Gamma has neglected to respond accordingly.

5.3.3. Gamma has breached its obligation to either give assurance of prosecution or hand the perpetrator over to Alpha. When Alpha is entitled to exercise its criminal jurisdiction aboard the GALACTICA, other States have a duty to either permit Alpha to prosecute or issue Alpha an assurance that it will itself prosecute on commensurate charges [1998 Treaty, Art. XXII(2b.2)].

As established in Chapter 5.3.2., Alpha has primary criminal jurisdiction pursuant to Article XXII(2) and therefore Article XXII(1) is no longer applicable. After Alpha's request for concurrence for possible criminal prosecution in Alpha, Gamma was faced with two alternatives: 1) Gamma could have either concurred or 2) give an assurance of its intention to prosecute on commensurate charges in Gamma. Gamma's refusal of Alpha's request to prosecute must be interpreted that Gamma does not concur and therefore Gamma, pursuant to Article XXII(2.b.2), is obligated to issue an assurance to Alpha of its intention to prosecute on commensurate charges if Gamma wishes to avoid handing the perpetrator over to Alpha.

Hence, by sending the perpetrator back to Earth and not issuing an assurance of prosecution before doing so, Gamma has breached its obligation to recognize Alpha's criminal jurisdiction and as a result thereof hand the perpetrator over to Alpha. It must be pointed out that Gamma is estopped now from claiming a right to prosecute the perpetrator on commensurate charges because Gamma has removed the perpetrator from the GALACTICA before giving an assurance of prosecution.

5.4. Gamma must make reparations to Alpha for the wrongfulness.

The State that has committed a wrongful act discharges its responsibility by making reparation to the injured State as mentioned in Chapter 4.4.⁶⁸

As demonstrated earlier, Alpha is the injured State. Gamma's violations affected treaty-based rights that are vested in Alpha and the commander. *First and foremost*, Gamma can make reparation by recognizing both the commander's authority and Alpha's criminal jurisdiction over the perpetrator's misconduct. *Additionally*, Gamma still has a duty to surrender custody of the perpetrator to either Alpha for criminal prosecution or to the commander for investigation. *Finally*, a declaratory judgement on Gamma's breach of Article XXII of the 1998 Treaty is satisfaction for Alpha.

Consequently, this Court should give a declaratory judgement on these three aforementioned issues.

However, should this Court have rejected the provisional measures requested in Part I, Alpha renews these arguments in the following Chapter.

6. Gamma Has Violated Alpha's Rights By Internationally Wrongful Acts And Hence Has No Right To The Perpetrator.

Gamma severely wronged Alpha and as a result Gamma still has a duty to respect Alpha's right to exercise

criminal jurisdiction over the perpetrator. As established, Alpha has a primary right to exercise criminal jurisdiction over the perpetrator. *First*, Alpha's right arose first and supersedes Gamma's. *Second*, Gamma has recognized in an exchange of letters that the nature of the dispute is who has the first right. *Third*, Gamma is therefore now estopped to claim otherwise. *Fourth*, Gamma sent the perpetrator to Earth without issuing an assurance of prosecution. *Fifth*, the principle *ex injuria non oritur jus* prevents Gamma from claiming rights arising from its internationally wrongful acts. *Finally*, the 1998 Treaty prevails over the 1967 Outer Space Treaty and the 1968 Astronaut Agreement *lex specialis derogat legi generali* and *lex posterior derogat legi priori* because it contains specific provisions on criminal jurisdiction.

¹The Statute of the International Court of Justice ("Statute") and the Rules of the Court ("Rules") state that any provisional measures may be taken to preserve the rights of either party, even before a decision on jurisdiction. Article 74(1) of the Rules adds that a request shall have priority over all other cases and matters. See Art. 41 in the Statute and Art. 73-78 in the Rules; Rosenne 1983 pp. 149-157. In the Great Belt Case p. 112: "Whereas it is the purpose of provisional measures to preserve rights which are subject of dispute in judicial proceedings"; U.S. Staff in Teheran Case 1979 p. 19.; Frontier Dispute Burkina Faso/Mali 1986 p. 8.

²Jennings 1991 p. 138; Oppenheim II 1992 pp. 1225-1226; Starke 1989 pp. 452-453; 1969 Vienna Convention Art. 10, 12; Signature authenticates the text and may express consent to be bound by the treaty if (a) the treaty provides so, (b) the States have agreed so, (c) this intention appears from the full powers or negotiations. Otherwise, the consent to be bound has to be expressed by a second step, such as ratification, acceptance or approval. Until that step it would be contrary to *good faith* to act in a manner calculated to frustrate the objects of the treaty or prevent it from coming into force, or as in the 1969 Vienna Convention Art. 18: an "obligation not to defeat the object and purpose of the treaty prior to its entry into force"; Sinclair 1984 pp. 42-44: refers to the "grey period" preceding entry into force; Elias 1974 pp. 25-26, 29, 42: notes that rights and obligations do not arise for the parties unless and until the treaty is in force, but for a signatory State *pacta sunt servanda* and *good faith* connote abstention from acts calculated to defeat the objects and purposes of the treaty.

³Elias 1983 pp. 20-23, 74-77, 80; Morrison 1987 pp. 72-73; Oxman 1987 pp. 333-335; Rosenne 1989 p. 96; Sette-Camara 1991 pp. 536-537; Szafarz 1993 p. 16; Fisheries Jurisdiction Case 1972 p. 7; the Nuclear Tests Case 1973 p. 101; U.S. Staff in Teheran Case 1979 p. 10; Nicaragua Case 1984 pp. 179, 186.

⁴Article 36(1) of the Statute.

⁵Elkind 1981 p. 168, 178-179; Sztucki 1983 p. 86-88; Reparations Case 1949 p. 178; Nottebohm Case 1953 p. 122: an agreement or *compromise* is enough for the

consent to jurisdiction; Great Belt Case 1991 p. 122: *ad hoc* judge Broms: "Parties at the hearing did refer to some of the merits in order to justify their views on the provisional measures. This turned out to be necessary in order to estimate whether the claimant had a *prima facie* case"[cursor added].

⁶UNGA Res. 1348 (XIII); UNGA Res. 1472 (XIV); UNGA Res. 1721 (XVI): "...international law, including the Charter of the United Nations applies to outer space and celestial bodies."; UNGA Res. 1962 (XVIII) or the Legal Principles Declaration: "The activities of States in the exploration and use of outer space shall be carried on in accordance with international law, including the Charter of the United Nations in the interest of maintaining international peace and security."; Dutheil de la Rochère 1988 p. 20: "Les sources, les sujets, les finalités de droit de l'espace ne sont pas différents de ceux du droit international général."; Jenks 1965 pp. 203-209; Lachs 1972 pp. 7, 14-21: "...outer space must be submitted to the rule of law"; Matte 1989 p. 304; Ngyen Quoc & Daillier & Pellet 1992 pp. 1130-1131; O'Connell I 1970 pp. 538-539; Piradov 1976 pp. 44-45; Seidl-Hohenveldern 1987 p. 260: "...es grundsätzlich zulässig ist, das auf der Erde geltende Völkerrecht in den Weltraum zu erstrecken."; Sontag 1966 pp. 3-4; White & White Jr. 1988 pp. 242-243.

⁷Ogunbanwo 1975 p. 80, refers to Bin Cheng: "...joint registration, accompanied by satisfactory arrangements concerning the exercise of jurisdiction, is highly desirable..."; Farand 1992 p. 296: "The rules constituting the legal regime of the space station cooperation aim generally at recognizing the jurisdiction of the Partner's courts and to consequently allow for the applications of substantive national law in *criminal matters*, in civil matters such as liability, and in administrative matters such as intellectual property and exchange of data and goods. Therefore, these rules are concerned *primarily* by *establishing parameters for solving a conflict of law situation* between partner States." [cursor added]. Farand comments on the IGA-Agreement of 1988 between U.S.A., Japan, Canada and the Member States of the European Space Agency (ESA). This IGA-Agreement resembles the 1998 Treaty.

⁸Dembling 1979 p. 35.

⁹IGA-Agreement; Zwaan & de Vries 1990 pp. 445-450; INTELSAT; INTERSPUTNIK; INTERCOSMOS; ESA Convention; INMARSAT; ARABSAT.

¹⁰Lafferranderie 1988 p. 182-183; Reifarth 1989 pp. 49-52, U.S.A has criminal jurisdiction under certain conditions. In this respect the IGA-Agreement mirrors the 1998 Treaty in assigning Alpha with criminal jurisdiction; DeSaussure 1990 pp. 304-312, points out three crucial issues for jurisdiction in the IGA-Agreement: determining the forum, selecting the law, and enforcing the decision. In the Space Station Case the first two issues are completely left to Alpha, as Alpha has a right to exercise criminal jurisdiction according to the 1998 Treaty.

¹¹Vereshchetin 1985 pp. 112-115.

¹²Gorove 1972 pp. 313-321 and Bowett 1983 pp. 4-14, recognize four criminal jurisdiction principles: territoriality, nationality or personality, *protective or injured forum*, and universality.

¹³Gál 1969 pp. 44-45: the first general principle of international space law, that international law is applicable in space, is a direct consequence of the principle *pacta sunt servanda*. Gál refers to Lachs and Tunkin in discussions of the UN Space Law Committee on 28 May 1962.; The maxim *pacta sunt servanda* is pervasive through out the customary international law of treaties, Elias 1974 pp. 40-45, Jennings 1991 p. 143-146. As a rule, States are bound by the treaties they have entered into and must perform these treaties in *good faith*. This rule has been espoused axiomatically in several judgements issued by international courts and arbitrators as in North Atlantic Fisheries Case 1910 and Morocco Case 1952 p. 212; UN Charter Preamble and Art. 2(2); The maxim *pacta sunt servanda* also connotes that a State must refrain from acts calculated to defeat the objects and purposes of the treaty. Elias 1974 p. 72, in the interpretation of a treaty, three major factors are pertinent: a) the text of the treaty; b) the intention of the parties, and c) the object and purpose of the treaty. A general rule of interpretation is that a treaty shall be interpreted in *good faith* in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in light of the treaty's object and purpose; 1969 Vienna Convention, e.g. Preamble and Art. 26, 31; Namibia Case 1971 p. 47: most Articles of the 1969 Vienna Convention are declaratory of already existing customary law; Eek 1980 pp. 253-254: also *estoppel* principle may be used in interpretation.

¹⁴Wassenbergh 1991 p. 54, refers to "police powers" of the commander; Böckstiegel & Vereshchetin & Gorove 1991 p. 6 refer in their Draft for a Convention on Manned Space Flight that the commander shall have sole authority throughout the flight to use any reasonable and necessary means to achieve safety and wellbeing of all persons aboard. Art. IV(4): "Directions of the commander are subject to implicit execution by all persons participating in a space flight."; Art IV(5): "The commander may, when he/she deems such action to be necessary for the safety of the manned space flight elements and persons on board, subject any of the persons on board to such restraint as the circumstances require until such time as delivery of such individual or individuals to the proper authority is possible".

¹⁵Matte 1984 pp. 77-78; El Salvador - Honduras Case 1990 p. 118 as this Court regarded essential elements of estoppel as including "a statement of representation made by one party to another and reliance upon it by that other party"; Temple of Preah Vihear Case 1962 pp. 143-144; Schwarzenberger 1976 pp. 118-119, 141.

¹⁶Alternatively, *nemo ex sua injuria commodum capere potest*; Dahm I 1958 pp. 81, 91, 605, refers to Lauterpacht's statements 1948: "The principle *ex iniuria jus non oritur* is one of the fundamental maxims of justice. An illegality, cannot, as a rule (!), become a

source of legal right to the wrongdoer." and "International law acknowledges as a source of rights and obligations such facts and situations as are not the result of acts which it prohibits and stigmatizes as unlawful"; Jennings 1965 pp. 72-74; Oppenheim II 1992 pp. 183-184, 186: "The principle...is well established in international law and according to it acts which are contrary to international law cannot become a source of legal rights for a wrongdoer. Furthermore, where a situation is found to be illegal, states for whom that finding is binding have an obligation to bring that illegal situation to an end."; Fitzmaurice II 1986 pp. 679-682; Jurisdiction of the Danzig Courts Case 1928 pp. 1, 26; Namibia Case 1971 p. 54.

¹⁷Sinclair 1984 pp. 93-98, enumerates six principles to be applied to problems with incompatible or successive treaties: a) the hierarchical principle (UN Charter prevails); b) *lex prior*; c) *lex posterior*; d) *lex specialis*; e) autonomous operation; and f) legislative intent; Jennings 1991 pp. 143-144; Fitzmaurice I 1986 pp. 370-372; Fitzmaurice II 1986 pp. 626-627; Horn 1989 pp. 133-134; Mavrommatis Case 1924 p. 31: "...the Protocol, being a special and more recent agreement should prevail".

¹⁸Bassiouni 1974 p. 2: "In contemporary practice extradition means a formal process through which a person is surrendered by one State to another by virtue of a treaty, reciprocity or comity as between respective States."

¹⁹Art. 36(6) of the Statute; Rosenne 1985 pp. 301-302, 438-441; Nagendra Singh 1989 pp. 173-179; Corfu Channel Case 1949 p. 35, this Court described its function "...to ensure respect of the international law, of which it is the organ."; Northern Cameroons Case 1963 p.29: "...the Court itself must be the guardian of the Court's judicial integrity".

²⁰Art. 79 of the Rules; Rosenne 1983 pp. 158-170.

²¹Mosteshar 1993; Brownlie 1990 pp. 295-297, 719-720, 727-728; Thirlway 1981 pp. 179-183.

²²Brownlie 1990 p. 295; Conforti 1991 pp. 475-480: the definition of domestic jurisdiction as it appears in Article 2(7) of the Charter is roughly the same as was when established in a celebrated recommendation of the P.C.I.J. in The Case of Nationality Decrees in Tunisia and Morocco 1923 pp. 7, 24-26, where the Court stated that domestic jurisdiction includes the matters in which States are free of any international obligation, given that in these matters only they have exclusive control over their decisions; Schwarzenberger 1976 p. 72 reminds that as in Lotus Case 1927, "...all that can be required of a State is that it should not overstep the limits which international law places upon its jurisdiction; within these limits, its title to exercise jurisdiction rests upon its sovereignty.". Csabafi 1971 pp. 49-50, 124-125.

²³Farand 1990 pp. 320-328, 330-331: the legal regime applicable to the space station defines the legal consequences of acts committed (a) in or on the space

station, (b) either on Earth or in space, and (c) exclusively on Earth. The rules of this *regime* try to recognize the jurisdiction of the courts of the partners and to allow the application of substantive national law; Martin 1990 pp. 366-372; Qizhi 1990 pp. 337-339: an invention made in space is under national laws if the States have so agreed. Jurisdiction is then regulated by a choice of law provision in the treaty.

²⁴Cheng 1989 pp. 299-303; Vereshchetin & Vasilevskaya & Kamenetskaya 1987 pp. 118-120; Compare with Art. 14 of the Moon Agreement and Art. I, II, VI and VII in the Liability Convention.

²⁵See *supra* Chapter 1 and Sinclair 1984 p. 96.

²⁶Cornish 1993 pp. 47-49, 61-62, confirms the national character of intellectual property rights and that these rights exist as instruments without any legal effect over national borders. Even the Paris Convention and Berne Convention lack provisions for dispute settlement, and "...nor is intellectual property a field in which one country ventures to institute proceedings against another before the International Court in order to demand that a Convention be strictly observed."; European Patent Convention; Bowett 1983 p. 1, explains jurisdiction as a manifestation of State sovereignty, and it has been defined as "the capacity of a State under international law to prescribe or to enforce a rule of law."; See also second paragraph in 2.1. Lotus Case 1927 p. 19: a State's title to exercise jurisdiction rests in its sovereignty; In the Schooner Exchange v. McFaddon 1812 p. 136: "The jurisdiction of the nation within its own borders is necessarily exclusive and absolute."

²⁷Böckstiegel 1991 p. 7; Tatsuzawa 1991 pp. 255-257.

²⁸de Aréchaga & Tanzi 1991 pp. 373-375; Castrén 1962 pp. 37-48; Donner 1983 pp. 34-35; Verdross & Simma 1984 pp. 882-884; In the Mavrommatis Case 1924 p. 12: "C'est un principe élémentaire du droit international que celui qui autorise l'Etat à protéger ses nationaux lésés par des actes contraires au droit international...dont ils n'ont pu obtenir satisfaction *par les voies ordinaires*." [cursor added]; Interhandel Case 1959 pp. 27, 29: the Swiss application was inadmissible, because Interhandel had not exhausted the remedies available to it in the U.S. courts. The local remedies rule ensure "...that the State where the violation occurred should have an opportunity to redress it by its own means, within the framework of its own legal system." The Court stated also: "...any distinction so far as the rule of the exhaustion of local remedies is concerned *between the various claims or between the various tribunals is unfounded*." [cursor added]; In the Amatielos Arbitration Case 1956 pp. 678 or 120, the Commission of Arbitration concluded "...It is the whole system of legal protection, as provided by municipal law, which must have been put to the test before a State, as protector of its nationals, can prosecute a claim on the international plane."

²⁹Diplomatic protection is practiced, as a rule, by one State against another; Geck 1992 p. 1046; Broms 1990

p. 780: "It is to be noted that the Court [I.C.J.] is open only for the settlement of international disputes to States. Private individuals cannot become claimants before the Court and the Court cannot be used to present a claim against a private individual."

³⁰Mavrommatis Case 1924 p. 11: "A dispute is a disagreement on a point of law or fact, a conflict of legal views of interests between two persons."; There must be a *conflict of legal rights or interests* between the parties and the Court should not give abstract rulings to enable political decisions, if the basis for the dispute has no actual legal relationship, as in the Nuclear Tests Cases 1974 pp. 270-272: the existence of a dispute is "*a primary condition*" for the exercise by the Court of its judicial function; Northern Cameroons Case 1963 pp. 33-34, 37-38; South West Africa Cases 1966 pp. 18, 34, 51, moral principles can be taken into account only so far as they are manifested in legal form. The claimant States Ethiopia and Liberia failed to establish a legal right or interest.

³¹See "Act of the State" in ILC Draft Articles on State Responsibility, Art. 5-15.

³²Riphagen 1986 pp. 586-587; ILC Draft Articles on State Responsibility, Art. 3-4.

³³Skubiszewski 1991 pp. 226-227: "Notification is an act whereby one State informs officially another...of a fact, a situation, an action or an instrument. Having received the notification the addressee cannot invoke his ignorance of what has been notified. The protest is an act whereby the State expresses its opposition to a situation, a claim or, generally, a state of things and the ensuing legal consequences."

³⁴Christol 1984 p. 823: the member States of a Space Transportation System (STS), as a space station, may create a suitable international legal regime for the safe and effective operation of STS, including the assignment of powers to the commander.

³⁵Compare with the powers and obligations of aircraft and ship commanders faced with a similar situation here on earth; Diederiks-Verschoor 1988 pp. 22-24; Naveau & Godfroid 1988 pp. 148-150; Fernández-Brital 1991 p. 33; Vereshchetin 1978 pp. 552-553: Considering the flight's hard conditions, a space ship commander should possess no less powers than the commander of an air or sea vehicle. The central rights and powers are to ensure the personnel's safety and maintaining the discipline and order on board the space ship; Stockfish 1992 pp. 343-344: the space ship commander is suggested to have authority in: a) all activities and property on a spacecraft from launch to reentry; b) issuance of binding orders to all persons on board; c) taking of all measures incident to the safety of the mission; and d) administrative acts having legal consequences.

³⁶U.S. Staff in Teheran Case 1980 p. 31: "...the obligations of the Iranian Government here in question are not mere contractual...but also obligations under general international law."; Right of Passage Case 1960 pp. 44-45, it was within this right of *regulation and control* for India to refuse passage.

³⁷Art. I of the Outer Space Treaty; Compare with Art. 6 of the Moon Agreement; Singh 1987 pp. 50-52.

³⁸Andem 1992 pp. 212-214; Reijnen 1981 pp. 45-46.

³⁹Cheng 1991 p. 28; Lachs 1972 pp. 105-106.

⁴⁰Art. 2(4) of UN Charter; Broms 1990 pp. 55, 60-61; The principle is contained also in Friendly Relations Declaration, and Salmon 1991 pp. 415, 421, points out that General Assembly accepted by *consensus* the Declaration, which certifies the existence of such principles, irrespective of their formal source as binding *erga omnes*; Koskenniemi 1989 pp. 370-371; McWhinney 1991 pp. 426-427, 435: general principles of international law are confirmed in the Friendly Relations Declaration. Daoudi 1991 pp. 487-489;

⁴¹Nicaragua Case 1986 pp. 100-101; Hannikainen 1988 p. 6: Every State must be considered to have legal interest in the protection of the peremptory obligations, because States owe them to the world community; Barcelona Traction Case 1970 p. 32;

⁴²Heiskanen 1992 p. 365-370: "There is clear and convincing evidence that the prohibition of the use of force provides the normative premise not only for the law of force but also for the remaining fields of substantive international law - air and space law, the law of the sea, and the law of (other) areas beyond national jurisdiction."

⁴³Fawcett 1984 pp. 23-30, 41; Forkosch 1982 p. 47.

⁴⁴Bourély 1986 pp. 176-178, 182-185; Haanappel 1989 pp. 286-288; Diederiks-Verschoor 1989 pp. 263-265; Schwetje 1989 pp. 179-182.

⁴⁵Gorove 1983 pp. 373-374, 377-378. *Responsibility* means in space law usually international State responsibility for national activities in outer space, while *liability* deals with compensation for damage resulting from loss of life, personal injury, loss of or damage to property. Three entities may be liable: the launching State, the appropriate State party and non-governmental entities. As to the appropriate State party, responsibility entails liability in all situations. The appropriate State (not the State of nationality) is liable under the Outer Space Treaty or domestic law for damage caused by either a space object or an individual; Wassenbergh 1991 pp. 22-31.

⁴⁶ILC Draft Articles on State Responsibility, Articles 1-16; de Aréchaga & Tanzi 1991 pp. 358-367; Brownlie 1986 pp. 36-37, 132-158.

⁴⁷It is logical that as the commander has a right to issue orders, the States have a duty to comply with the orders; Hohfeld Ed. Cook 1978 pp. 36, 65; Hart 1983 pp. 186-187; See 4.1.1.

⁴⁸Stuster 1986: "The organizational structure which has evolved within NASA for STS [Space Transportation System] missions, a commander, pilot, mission specialist, and payload specialist, is consistent with the model at U.S. Antarctic stations. Though there may be occasional conflict between the groups...all participants seem to acknowledge the value of a hierarchical

command structure under both routine and emergency operations."

⁴⁹Gorove 1990 p. 29, a space station in orbit "...unlike in case of a station on the moon or another celestial body, would not be subject to a right of visitation."; Lukin & Rudev 1985 p. 100: the States of registry of MOSS [Manned Orbital Space Station] have no automatic right of access to space objects or facilities of other States of registry. A State of registry may for many reasons, e.g. if safety is threatened, refuse to grant permission to a visit; van Bogaert 1986 p. 49.

⁵⁰Zhukov & Kolosov 1984 pp. 75-83.

⁵¹Matte 1984 pp. 71-73; Zhukov & Kolosov 1984 pp. 48-53.

⁵²Salmon 1991 pp. 415-421. These obligations are echoed in the Friendly Relations Declaration, which contains basic principles of international law, and these interrelated principles should be construed within the context of one another; Müller & Wildhaber 1982 p. 48.

⁵³The rule of *good faith* (see footnote 13 in Chapter 1.) is also encompassed in the maxim of effectiveness, *ut res magis valeat quam pereat*. Jennings 1991 p. 145; Elias 1974 pp. 73-74; When two alternative interpretations may be gleaned from the text of a treaty, the interpretation that gives the treaty proper effect should prevail over the interpretation not giving such effect. The limits of this maxim are outlined cogently in the Case of Interpretation of Peace Treaties 1950 p. 229: effectiveness cannot justify a meaning that would be contrary to the letter and spirit of the provisions in a treaty; Compare with 1969 Vienna Convention.

⁵⁴Broms 1990 pp. 269-304; Starke 1989 pp. 485-486, 516; Manila Declaration 1984; Peaceful Settlement Resolution 1974.

⁵⁵Friendly Relations Declaration.

⁵⁶ILC Draft Articles on State Responsibility, Art. 1; Chorzów Factory Case p. 29.

⁵⁷Chorzów Factory Case p. 47; Cheng 1987 pp. 233-234; Oppenheim I 1992 p. 529; Shaw 1991 p. 496; Wolfrum 1987 p. 352.

⁵⁸1989 ILC Draft Articles Art. 1; Hurwitz 1992 p. 121; Tanzi 1987 pp. 20-28.

⁵⁹The declaration was adopted *unanimously* by the General Assembly in 1963. Even if the legally binding effect of this Declaration might be questioned, it espouses the same principles found in the Outer Space Treaty, which reflects customary international law and has been ratified by most States. It follows, that the Legal Principles Declaration at least mirrors the sentiment held by a majority of the world's States; Bakotic' 1980 p. 95.

⁶⁰Wassenbergh 1991 pp. 22-31; Diederiks-Verschoor 1993 p. 83.

⁶¹Tedeman 1990 pp. 3, 7-10; Messerschmid 1988 p. 595-598: The safety policy of ESA is defined: "addressing the protection of human life, investments and the

environment". In this evaluation protection of human life shall be given precedence. Messerschmid refers to a door-plate in Kennedy Space Center that reads: *safety first - man is the hardest item to replace*.

⁶²Tedeman 1990 pp. 3, 7-10; Messerschmid 1988 p. 595-598: The ESA definition of *hazard* is "a source of potential threat (danger) to safety". The severity categorization of hazard is (1) *catastrophic* (loss of life; life-threatening or permanently disabling injury or occupational illness); (2) *critical* (temporary disabling but not life-threatening injury or temporary occupational illness; loss or major damage to flight systems, elements, property; long-term detrimental environmental effects); (3) *marginal* (minor non-disabling injury or occupational illness; minor damage to hardware or property; temporary detrimental environmental effects); (4) *negligible* (not any above). The failure tolerance requirements are that no single failure (hardware, software or procedure) and no single human error shall result in a *catastrophic or critical hazard*.

⁶³Messerschmid 1988 pp. 595, 596 : *Risk* is associated with likelihood or possibility of harm. Spaceflight is risky as three crews out of 120 space missions (i.e. 2.5 % per mission) have perished. Until end of year 1987, a total of 14 out of 201 astronauts were killed. Figure p. 596: Risk of catastrophic failure as a function of time for a typical mission:

⁶⁴See Chapter 1., footnote 14.

⁶⁵See Chapter 4.2. and 4.4.2. including relevant footnotes there.

⁶⁶Blomeyer-Bartenstein 1992 pp. 1112-1114; Brownlie 1986 pp. 168-170: U.S. Secretary of State, Mr. Bayard, in a letter to the Government of Spain 1888: "The maxim is, that the diligence good governments are accustomed to exercise under the circumstances, must be exercised in each case; and every government is liable to foreign powers for injuries to them or their subjects from lack of such customary diligence in the preservation of order."; de Aréchaga & Tanzi p. 360: The State is only responsible when it has failed to take such measures as in the circumstances should normally have been taken to prevent, redress or inflict punishment for the acts causing the damage; U.S. Staff in Teheran Case 1980 pp.30; Schwarzenberger 1976 p. 181.

⁶⁷Brownlie 1986 pp. 241-271, as to obligations of result and obligations of means or conduct, the *primary content* of the obligation is decisive.

⁶⁸Brownlie 1986 pp. 199-240; de Aréchaga & Tanzi 1991 pp. 367-369.

MEMORIAL FOR STATE GAMMA

AGENTS

Daniel Groth, Jollene Kime

ARGUMENT

I. According to international law Gamma has jurisdiction over the Gamma module and over activities occurring therein.

The Statute of the International Court of Justice provides that this Court shall have jurisdiction to decide cases referred to it by parties concerning the interpretation of treaties and questions of international law.¹ The State of Gamma and the State of Alpha have both submitted to the jurisdiction of this Court for resolution of the controversies occurring concerning the space station Galactica.² The principles of international law govern this Court's decision.³ International law consists of principles demonstrated through custom and convention.⁴ The governments of Gamma and Alpha agreed to conduct their outer space activities in accordance with international law when they became parties to the Outer Space Treaty,⁵ the Liability Convention,⁶ the Astronaut Rescue and Return Convention,⁷ the Registration Convention,⁸ and the Space Station Treaty.⁹ These treaties are valid sources of international law that this Court may use in deciding these matters.¹⁰ In addition, this Court may use international custom,¹¹ the general principles of law recognized by civilized nations,¹² opinions of the highest decision making bodies,¹³ and the writings of the most highly qualified publicists.¹⁴ The principles of international law found in these sources indicate that Gamma is entitled to exercise intellectual property jurisdiction over the scientific research conducted in its module.

A. International Convention Confirms Gamma's Exercise of Jurisdiction Over the Gamma Module.

Conventions play a particularly important role in international space law.¹⁵ Alpha and Gamma are both parties to the Outer Space Treaty, the Registration Convention, and the Space Station Treaty. All three treaties use the word "jurisdiction" without defining it.¹⁶ Therefore, when this Court interprets what these treaties mean with respect to their "jurisdictional" provisions, it should give "jurisdiction" its ordinary meaning.¹⁷ Jurisdiction is the power to prescribe, adjudicate or enforce through legislative, executive or judicial measure.¹⁸ The same definition applies to jurisdiction on earth or jurisdiction in outer space.¹⁹ Accordingly, these provisions extend a State's domestic law to outer space.²⁰

1. The Space Station Treaty accords Gamma jurisdiction over the Gamma module.

The Space Station Treaty, in Article V, provides that "each State Party shall retain jurisdiction and control

over the elements it registers".²¹ Gamma registered the Gamma module just as Alpha registered the core facility and its module and Beta registered the Beta module.²² This method of allocating jurisdiction is in the best interests of all the parties involved given the multinational and cooperative aspects of the Galactica undertaking.²³ The modular approach to jurisdiction is predictable²⁴ and acknowledges each party's interests in the success of the undertaking as a whole while allowing each party some measure of control. Accordingly, this Court should allow Gamma to exercise jurisdiction over the intellectual property issues before this Court.

a. Gamma retained jurisdiction during Alpha's cross-utilization of the Gamma laboratory module.

After establishing the modular form of jurisdiction, the Space Station Treaty states that the modular form will not be affected by the cross-utilization of laboratory modules.²⁵ The Space Station Treaty provides that "any utilization by one State Party of another's laboratory module shall be on an exclusive basis, and the module shall be under the control but not jurisdiction of such using party for the duration of its utilization by that Party."²⁶ Accordingly, when Alpha used the Gamma module, Alpha acquired control but Gamma retained jurisdiction.

b. Gamma retains jurisdiction over the module it registered for all purposes including intellectual property disputes.

Not only is Gamma accorded jurisdiction over the Gamma module by Article V of the Space Station Treaty, it also has jurisdiction over all intellectual property²⁷ law issues relating to the making and use of inventions within the Gamma module.²⁸ In Article XXI, the Space Station Treaty states that jurisdiction remains in the State of registry even for intellectual property law. The treaty states:

Subject to the provisions of this Article, for purposes of intellectual property law, an activity occurring in or on a space facility flight element (including attached modules) shall be deemed to have occurred only in the territory of the State Party of that element's registry. For avoidance of doubt, participation by a State Party or its users in an activity occurring in or on the other State Party's Space Facility flight element (including attached modules) shall not in and of itself alter or affect the jurisdiction over such activity provided for in the previous sentence.²⁹

Accordingly, as Gamma is the state of registry for the Gamma module, all activities which occur in the Gamma module fall within Gamma's jurisdiction.

Alpha's claim that the language in Article XXI of the Space Station Treaty is ambiguous is without merit. A similar agreement has utilized this exact language before and the language has been the subject of comment and interpretation.³⁰ This interpretation states that the act of registration establishes primary jurisdiction for determination of intellectual property rights.³¹ With that interpretation, the Gamma module is essentially a

piece of Gamma territory for jurisdictional purposes while it is in orbit.³² Accordingly, Gamma may determine which substantive patent law should apply to all activities occurring within its module, as the module is at all times within Gamma jurisdiction.³³

2. The Outer Space Treaty confirms Gamma's claim of jurisdiction based on registration and nationality.

The Outer Space Treaty provides that the State "on whose registry an object launched into outer space is carried shall retain jurisdiction and control over such object, and over any personnel thereof, while in outer space"³⁴ Gamma carries the Gamma module on its national registration.³⁵ Accordingly, Gamma has jurisdiction over the Gamma module.

In addition, one learned publicist has said that jurisdiction depends largely on registration.³⁶ The idea that a State retains jurisdiction and control over its space objects is codified in the Outer Space Treaty.³⁷ In fact, this grant of jurisdiction is an expression of the nationality principle, giving the space object the nationality of the State of registration.³⁸ The nationality principle is a universally recognized basis for the extra-territorial exercise of jurisdiction.³⁹ Accordingly, Gamma is entitled to exercise intellectual property jurisdiction over the activities occurring within its module.

3. The Registration Convention gives Gamma jurisdiction over its registered elements and therefore over the Gamma module.

The Registration Convention expands on the registration provisions of the Outer Space Treaty.⁴⁰ The Registration Convention provides that a space object includes its component parts as well as its launch vehicle and the launch vehicle's parts.⁴¹ The Registration Convention also states that if there is more than one launching state for a given space object it is for the parties to determine who will register the object and have jurisdiction and control.⁴² The Gamma module, while attached and cooperative with the other modules of Galactica, is an entity unto itself for registration and jurisdictional purposes.⁴³ Therefore Gamma has jurisdiction over the Gamma module.⁴⁴ Here, each party has agreed to register the modules it furnishes, thereby treating each module as a space object for purposes of registration. Accordingly, Gamma has jurisdiction over the activities occurring within the module it has registered.

B. Gamma's Extra-Territorial Exercise of Jurisdiction in Outer Space is Lawful Under International Custom.

A practice may rise to the level of customary international law, if two conditions are met: (1) a widespread adherence to the practice and, (2) recognition that the practice is obligatory and not mere habit.⁴⁵ A State may claim jurisdiction under five principles of customary international law that recognize the exercise of extra-territorial jurisdiction. The justifications for Gamma's claim of jurisdiction over the scientific research occurring in its module are in harmony with

customary international law. Accordingly, this Court should find that Gamma is entitled to exercise jurisdiction over these matters.

1. Gamma's extension of its laws to the Gamma module based on registration is analogous to a State's extension of laws to a flag ship on the high seas.

The concept of jurisdiction on the high seas is, according to a noted publicist, significantly analogous to an examination of jurisdiction in outer space.⁴⁶ Outer space, like the high seas, is not subject to claims of sovereignty.⁴⁷ On the high seas, the State under whose flag a ship sails, the flag state, has exclusive jurisdiction over that ship under customary international law.⁴⁸ This is in accord with custom and convention.⁴⁹ A ship has the nationality of the flag it flies,⁵⁰ it is a floating piece of the flag state's territory.⁵¹ States have applied their domestic laws to incidents occurring aboard their ships while on the high seas.⁵² In outer space, the act of registration serves as the flag. By analogy Gamma, as the state of registration, has exclusive jurisdiction over the Gamma module while it is in outer space. Gamma has jurisdiction by virtue of the Outer Space Treaty, the Registration Convention, and the Space Station Treaty. This situation is analogous to jurisdiction granted to a state whose flag ships are on the high seas. Accordingly, Gamma may exercise jurisdiction and thereby prescribe, adjudicate, and enforce the relevant law for activities occurring in the Gamma module.

2. Gamma's jurisdiction over the Gamma module based on registration is analogous to a State's jurisdiction over aircraft.

In another analogous area of law, jurisdiction over aircraft while outside the territory of its state of registration, as a matter of international law, remains with the state of registration.⁵³ The Chicago Convention provides that an aircraft has the nationality of the territory in which it is registered.⁵⁴ The Tokyo Convention provides that the state of registration of an aircraft is competent to exercise jurisdiction over that aircraft with respect to offenses and acts committed on board that aircraft.⁵⁵ The Gamma module has the nationality of Gamma, its state of registry. Accordingly, Gamma is entitled to exercise jurisdiction over the acts occurring within the Gamma module.

II. The Alpha Commander's Summary Restrictions Were Unreasonable and Fell Outside the Legal Scope Of His Authority According to the Space Station Treaty and Conventional and Customary International Law.

The Alpha Commander's order restricting movement aboard the Galactica exceeded his authority under the Space Station Treaty. In addition, the restrictive order was contrary to the Outer Space Treaty which governs the exploration and use of outer space. Further, the order denying the Gamma crew member's access to the scientific modules violated customary international law. As a result, the Commander's order was a nullity under international law. Accordingly, Gamma should not be responsible for any violation of an unlawful order.

A. The Alpha Commander's Summary Restrictions were Contrary to the Terms of the Space Station Treaty. The Commander's "prime objective" was "to ensure accomplishment of the overall facility mission consistent with crew safety within the terms of the treaty."⁵⁶ The modules of the Galactica were designed to be complementary.⁵⁷ The parties did not duplicate laboratory equipment because they planned on sharing and cross-utilizing each other's laboratories.⁵⁸ Article IX of the Space Station Treaty provides that "each State Party shall assure access to and use of its Space Facility elements to the other State Parties in accordance with their respective utilization allocations."⁵⁹ The Alpha Commander thwarted the accomplishment of the goal of the research project by summarily blocking the cross-utilization of the modules.⁶⁰ Accordingly, the Commander's restrictive order was inconsistent with and violated the terms of the Space Station Treaty.

B. The Commander's Restrictive Order Violated the Terms of the Outer Space Treaty.

The principles and terms of the Outer Space Treaty are instructive in defining the parameters of permissible activities aboard the Galactica.⁶¹ Both Gamma and Alpha are parties to the Outer Space Treaty.⁶² As a result, the Commander's exercise of authority by the Commander must be consistent with the terms of the Outer Space Treaty. Article IX of the Outer Space Treaty states that:

› If a State Party to the Treaty has reason to believe that an activity or experiment planned by it or its nationals in outer space . . . would cause potentially harmful interference with activities of other States parties in the peaceful exploration and use of outer space . . . it shall undertake appropriate international consultations before proceeding with any such activity or experiment.⁶³

This passage indicates the concern the drafters of the Outer Space Treaty had in protecting the rights of States to freely use outer space. The scientific experiments carried out aboard the Galactica qualify as "use" of outer space.⁶⁴ However, the Galactica Commander unilaterally issued orders preventing scientific experimentation and use of outer space.⁶⁵ Accordingly, the Commander's order violated the provision of the Outer Space Treaty which mandates that such actions occur only after international consultations.

C. The Commander's Order Restricting Movement was Contrary to Customary International Law.

One learned publicist has characterized a permanently manned space station, like the Galactica, as a confined, alien, and synthetic life-support system⁶⁶ with a great potential for dissension among a crew living together over an extended period of time.⁶⁷ This Court should consider the effects of this unique environment on the crew members when determining the invalidity of the Commander's restrictive order. Customary international law applicable to similarly confined environments and the writings of learned publicists on this subject

substantiate Gamma's claim that the Alpha Commander's order violated international law.

1. The summary restrictions were unreasonable in substance and scope.

The Statute of the International Court of Justice allows this Court to base its decisions on general principles of law recognized by civilized nations.⁶⁸ The regulations governing the outer space missions of the United States, for example, are instructive here. Under United States municipal law, the commander of a space craft is limited to the use of "reasonable and necessary means" to safeguard the crew and craft and to maintain order and discipline.⁶⁹ An application of this principle to the facts here should lead this Court to the conclusion that the Commander's restrictive order was unreasonable and not necessary to accomplish the Galactica's mission. The necessity of the order is belied by the fact that the order applied only to the science modules.⁷⁰ Presumably, the crew was still permitted to mingle freely in the life support module. The conditions of the restriction and the time span of the order demonstrate the unreasonableness of the order. Accordingly, this Court should consider the order invalid.

2. The writings of highly qualified publicists urge that astronauts should not be subject to unduly restrictive orders.

Carl Q. Christol has observed that "unreasonable sanctions should not be imposed on [astronauts]."⁷¹ Given the confining environment of a space station, it is unreasonable to indefinitely prevent crew members from exercising the cross-utilization rights accorded them by the Space Station Treaty.⁷² The stated purpose of the order was to relieve tension between crew members,⁷³ however, the necessity of the order is questionable as the crew members were allowed to associate in the core facility.⁷⁴ Accordingly, the Commander's order restricting movement aboard the Galactica was invalid.

3. The restrictive order rendered the Galactica "uninhabitable" for its crew.

Due to the similar nature of the high seas and outer space, principles of law which govern the high seas should apply, by analogy, to outer space.⁷⁵ By denying the crew members access to key areas aboard the Galactica, the Commander adversely affected the habitability of the Galactica.⁷⁶ If a sea captain had issued an order creating confined living conditions aboard a sea going vessel, the vessel would be considered unseaworthy.⁷⁷ Unseaworthiness would allow the crew to disobey the captain's orders.⁷⁸ Similarly, the Alpha Commander's order rendered the Galactica uninhabitable.

When the Alpha Commander issued the restrictive order, the cross-utilization provisions of the Space Station Treaty were in force.⁷⁹ This provision of the Space Station Treaty states that "any utilization by one State Party of another's laboratory module shall be on an exclusive basis . . ."⁸⁰ Therefore, the State in control of the module during a designated time slot would have the lawful authority to deny entry by another State's

nationals.⁸¹ Under normal operating conditions, a crew member's freedom of movement would be limited to the life support module and the laboratory controlled by his State under the cross-utilization agreement. After the Commander issued the restrictive order, however, the access of the crew members was restricted even further.⁸² As a result of the Commander's order, the Gamma crew members were denied access to the Alpha module when they were normally entitled to use it.⁸³ Further, the cross-utilization provision denied Gamma crew members access to the other modules because of the exclusivity provision.⁸⁴ The Gamma crew members would be confined to the life support module. Accordingly, the Gamma crew member should be excused for violating the Commander's order which restricted the Gamma crew members to the life support module for two months⁸⁵ because the order rendered the Galactica uninhabitable.

III. Gamma Is Not Liable To Alpha For Any Damages That Occurred To Alpha Equipment In The Beta Module.

Gamma is not liable to Alpha for the damage to Alpha's equipment for two reasons. First, the Gamma crew member was engaged in an unauthorized act when the scuffle had occurred. Second, neither conventional law nor customary law would hold Gamma responsible for the personal act of its crew member. However, if this Court does find that Gamma should be held liable for the crew member's personal conduct, Gamma should not be fully responsible for all damages because Alpha negligently failed to secure its equipment.

A. Gamma did not Authorize the Crew Member's Acts and is Absolved from Any Financial Responsibility For These Acts.

As a matter of customary international law, States are not responsible for the acts of their nationals.⁸⁶ Responsibility can only arise if a State has failed to fulfill a duty to prevent an injury or failed to seize the perpetrator.⁸⁷ Further, States are only responsible for the acts of organs of the State that are acts of the State.⁸⁸ Here, however, the facts show that Gamma did not authorize the crew member's acts in any way.⁸⁹ Accordingly, Gamma should not be held responsible for the unauthorized acts of its national.⁹⁰

1. The acts of the Gamma crew member are not official acts, but rather an incident of interpersonal conflict for which Gamma should not be found liable.

The only violation attributable to the Gamma crew member is the breach of the summary restriction order. The Gamma crew member entered the Beta module while it was in use by Alpha. After entering the Beta module, the Gamma crew member confronted the Alpha scientist and an argument and a physical scuffle ensued.⁹¹ However, the *Compromis* does not indicate who started the physical scuffle.⁹² The Gamma and Alpha crew members' actions, while not to be taken lightly, are more akin to a squabble among coworkers

or between seamen. If a similar incident occurred on a sea vessel, the ship owner would not be liable for the private act of a crew member.⁹³ In fact, as a general principle of international law, a State is not responsible for the delinquencies of its flag ships.⁹⁴ As stated earlier, the field of maritime law is analogous to outer space law.⁹⁵ Accordingly, an application of maritime law principles to this controversy supports Gamma's claim that it should not be held responsible for the unauthorized acts of its crew member in outer space.

2. Under Customary International Law, Gamma is not responsible for the acts of private persons.

It is a general principle of customary international law that a State is not responsible for the acts of private persons absent a lack of diligence in preventing the incident and apprehending the wrongdoer.⁹⁶ Lassa Oppenheim has stated that it would be "impossible for a State to prevent all injurious acts which a private person might commit against a foreign State."⁹⁷ The acts were neither authorized nor foreseen, and there is no evidence that they were premeditated.⁹⁸ Presumably until June 30, 2007, the Gamma crew member had obeyed the summary restriction despite its unauthorized nature. Accordingly, as there was no reason to anticipate the crew member's conduct, there is no reason to hold Gamma accountable for these acts.

B. An Application of the Principles of Comparative Fault Reduces Any Responsibility Gamma May Have.

If this Court should find merit in Alpha's claim for damages, then any award granted to Alpha should reflect the damage which Alpha's negligence caused. This Court should apply principles of comparative fault for three reasons. First, the Space Station Treaty itself indicates a preference for comparative fault. Second, the Liability Convention speaks of the applicability of the principles of comparative fault to resolving damage claims arising from outer space activities. Finally, in the analogous area of the law of the sea, courts will apply comparative fault principles.

1. Alpha was responsible for securing its own equipment according to the terms of the Space Station Treaty.

The Space Station Treaty provides that "each State Party shall be responsible for sustaining the functional performance of the elements it provides."⁹⁹ Each State is responsible for its own laboratory equipment.¹⁰⁰ A Protocol annexed to the Space Station Treaty details this responsibility.¹⁰¹ However, Alpha failed to meet this obligation.¹⁰² Accordingly, any damages award this Court grants to Alpha should be offset to reflect Alpha's own negligence.

2. The Liability Convention states that the method of comparative fault is a proper method of measuring liability for controversies arising in outer space.

The Liability Convention sets forth principles for assessing liability for damages space objects cause, but it does not directly address the legal controversy raised in this case.¹⁰³ However, the Liability Convention does distinguish between damages caused on earth or to

aircraft and damages caused in space.¹⁰⁴ The Liability Convention provides for absolute liability for damages occurring on earth or to aircraft in flight,¹⁰⁵ but a fault system is used for damage to space objects in operation.¹⁰⁶ Based on this distinction, this Court should apply principles of comparative negligence to measure damages.¹⁰⁷ Here, four million dollars of the damage resulted from the negligence of Alpha in failing to properly secure its equipment.¹⁰⁸ The agreement between the parties established the proper method of securing equipment.¹⁰⁹ Accordingly, if Alpha is entitled to any damages at all, any award it receives should be reduced to reflect the \$4 million dollars in damage attributable to its failure to properly secure its equipment.

3. The analogous area of maritime law provides for a system of comparative fault for damages caused on the high seas.

As previously stated, the law of the sea is highly instructive for space law.¹¹⁰ The system of comparative fault was first used to assess liability in cases involving damage to ships and this practice continues to this day.¹¹¹ Accordingly, this Court should apply the principle of comparative fault to reduce any damages awarded to Alpha in light of Alpha's failure to secure its equipment.

IV. According To International Law Gamma Has Jurisdiction Over, And A Right To Custody Of, The Gamma Crew Member.

The principles of international law found in custom and convention confirm that Gamma acted properly when it refused to surrender its crew member to the Commander and is entitled to receive its crew member from the State of Delta. The terms of the Space Station Treaty, the Outer Space Treaty, and the Registration Convention all provide Gamma with the strongest basis for claiming the right to custody of its crew member. Further, the generally accepted principles of customary international law granting a State the right to exercise jurisdiction over an individual authorize this Court to order Delta to return the Gamma crew member to Gamma. Accordingly, this Court should grant Gamma the right to physical custody of its national.

A. The Space Station Treaty Allows Gamma's Claim to Jurisdiction Over the Gamma Crew Member.

In two separate articles, the Space Station Treaty sets forth principles governing issues of jurisdiction over crew members aboard the Galactica.¹¹² Both articles specifically set forth provisions that grant Gamma jurisdiction over its national. Further, Article XXII establishes a procedure for Alpha to utilize to claim jurisdiction which it has not done to this date. Accordingly, this Court should find that Gamma had the right to physical custody of its national aboard the Galactica and is entitled to receive the crew member from Delta.

1. Articles V and XXII of the Space Station Treaty grants Gamma jurisdiction over its national.

Article V provides that each State Party shall retain jurisdiction and control "over personnel in or on the Space Facility who are its nationals."¹¹³ Furthermore, Article XXII of the Space Station Treaty provides that a State Party may exercise criminal jurisdiction over "personnel in or on any flight element who are their respective nationals."¹¹⁴ The Gamma crew member is a Gamma national.¹¹⁵ Accordingly, Gamma acted in accordance with the Space Station Treaty and has the right to receive custody of its crew member from Delta.

2. Alpha has not followed the procedures set forth in Article XXII and therefore cannot claim custody of the Gamma crew member.

Article XXII, paragraph 2, of the Space Station Treaty contains procedures that Alpha must follow to exercise criminal jurisdiction over Gamma or Beta crew members.¹¹⁶ First, Alpha is to consult with the State Party whose national is accused.¹¹⁷ Second, the Space Station Treaty states that Alpha shall either "receive[] the concurrence of [Gamma] in the continuation of prosecution; or . . . if such concurrence is not forthcoming, failed to receive assurances from such State Party that it intends to prosecute its national or commensurate charges supported by the evidence."¹¹⁸ Alpha did not consult with Gamma regarding its interest in prosecuting the Gamma crew member.¹¹⁹ Nor did Alpha ask for or receive any concurrence to its demand for custody.¹²⁰ Alpha merely demanded that the Gamma crew chief turn over the Gamma crew member.¹²¹ This demand did not follow the prescribed procedures of the Space Station Treaty.¹²² Further, the demand was contrary to the principle of customary international law that allows a State to retain custody over its own nationals.¹²³ Accordingly, Gamma acted properly when it refused the Commander's improper demand for custody.

B. Gamma's Claim to Jurisdiction over the Gamma Crew Member is Further Provided for by the Outer Space Treaty.

The Outer Space Treaty provides that States retain jurisdiction over the personnel on board their registered space objects.¹²⁴ The Gamma crew member is among the personnel of the Gamma module¹²⁵ which is registered to the State of Gamma.¹²⁶ Accordingly, Gamma has jurisdiction over the Gamma crew member while on the Galactica and should be given custody over him.

C. Gamma is Entitled to Custody of the Gamma Crew Member Currently in Delta According to the Rescue Agreement.

Gamma and Delta are both parties to the Rescue Agreement and the Outer Space Treaty.¹²⁷ The Rescue Agreement provides that States shall return astronauts to "representatives of the launching authority."¹²⁸ In addition, the Outer Space Treaty provides that astronauts be returned "to the State of registry of their space vehicle."¹²⁹ It follows therefore that jurisdictional preference should be accorded the State of registry.¹³⁰

Gamma is the State of registry of the Gamma return capsule which crashed with the Gamma crew member on board. Accordingly, Delta should return the Gamma crew member to Gamma.

D. Gamma's Claim to Jurisdiction Over the Gamma Crew Member is Based Upon the Nationality Principle of Customary International Law.

The nationality principle is a universally accepted basis for jurisdiction.¹³¹ The nationality principle provides that a State has jurisdiction over its own nationals even if their conduct occurs within another State's territory.¹³² In fact, this Court has stated that nationality constitutes

the juridical expression of the fact that the individual upon whom it is conferred, either directly by the law or as the result of an act of the authorities, is in fact more closely connected with the population of the State conferring nationality than with that of any other state.¹³³

Accordingly, as Gamma is the most closely connected state to the Gamma crew member, it is entitled to receive physical custody of the crew member from Delta.

E. Alpha's claim to jurisdiction over the Gamma national does not rest on any generally accepted principle of international law.

Gamma's claims to receive custody and exercise jurisdiction over its national are based on the applicable conventions and generally accepted principles of customary international law. In contrast, Alpha's claim to jurisdiction must rest on rarely utilized principles of jurisdiction. Accordingly, this Court should grant Gamma custody of its crew member because of the stronger basis for its claim.

1. Alpha's utilization of the passive personality Principle cannot overcome Gamma's basis for claiming the right to custody.

The passive personality principle allows a State to claim jurisdiction over events occurring outside its territory solely because the harm is to its nationals even though they are outside its territory.¹³⁴ Alpha claims jurisdiction because the Alpha crew member was pushed while in the Beta module. There is very little authority for this claim of jurisdiction.¹³⁵ In fact, the conventions on the law of the sea specifically refute this basis of criminal jurisdiction.¹³⁶ Accordingly, Alpha should not be awarded custody of the Gamma crew member based on a tenuous theory when Gamma's claims rest on more widely accepted principles.

2. The protective principle is not an appropriate basis for jurisdiction in this case.

Alpha may assert the protective principle in claiming jurisdiction over the Gamma crew member. The protective principle is used to reach extra-territorial acts of non-nationals that threaten the security, territorial integrity or political independence of the State.¹³⁷ The acts involved here, the violation of a summary restriction order and involvement in a scuffle, do not endanger any such vital national security interests of Alpha to justify an exercise of jurisdiction.

Accordingly, Alpha may not claim the right to exercise jurisdiction over the Gamma crew member based on the protective principle.

3. The universality principle is inapplicable to the controversy before this Court.

Alpha may attempt to claim that the universality principle entitles it to exercise jurisdiction over the Gamma crew member. However, the universality principle is unsuited to the facts of this case. The universality principle allows for jurisdiction over crimes considered so heinous as to be against the entire community of nations.¹³⁸ The number of such crimes is quite limited¹³⁹ and includes piracy, officially sanctioned torture, hijacking, apartheid, genocide, and war crimes.¹⁴⁰ The wrongdoing involved here, a mere infraction of a summary restriction and involvement in a scuffle, does not rise to such a standard of culpable and heinous conduct. Accordingly, the universality principle does not apply and could not, in any event, justify withholding from Gamma jurisdiction over its own national.

CONCLUSION

The State of Gamma respectfully requests that this Honorable Court declare that Gamma is the proper State to exercise intellectual property law jurisdiction over its module at all times. Further, Gamma requests that this Court find the Commander's order invalid. In addition, Gamma asks that it not be held financially liable to the State of Alpha for the damage to Alpha's equipment. However, if this Court finds that Gamma is responsible, any award granted to Alpha should be lessened by four million dollars to offset the damages caused by Alpha's negligent acts. Finally, Gamma respectfully requests that this Court order the State of Delta to return the crew member to Gamma.

¹ Stat. I.C.J. art. 36.

² Compromis at 4, 5.

³ Stat. I.C.J. art 38, para. 1.

⁴ Ian Brownlie, Principles of Public International Law 1-2 (2d ed. 1973); Niccolò Matteosco Matte, Space Activities and Emerging International Law 73 (1984) (stating that space law relies most on convention).

⁵ Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies, entered into force October 10, 1967, 18 U.S.T. 2410, T.I.A.S. No. 6347, 610 U.N.T.S. 205 [hereinafter Outer Space Treaty].

⁶ Convention on International Liability for Damage Caused by Space Objects, entered into force October 9, 1973, 24 U.S.T. 2389, T.I.A.S. No. 7762 [hereinafter Liability Convention].

⁷ Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space, entered into force December 3, 1968, 19 U.S.T. 7570, 672 U.N.T.S. 119, T.I.A.S. No. 6599 [hereinafter Rescue Agreement].

8 Convention on the Registration of Objects Launched into Outer Space, opened for signature, January 14, 1975, 28 U.S.T. 695, T.I.A.S. No. 7762 [hereinafter Registration Convention].

9 Treaty Between the Governments of Alpha, Beta, and Gamma for the Establishment, Operation and Utilization of a Permanently Inhabited Space Facility, done in Gamma, February 28, 1998, Compromis at 6 [hereinafter Space Station Treaty].

10 Stat. I.C.J. art. 38(1)(a).

11 Stat. I.C.J. art. 38, para. 1(b).

12 Stat. I.C.J. art. 38, para. 1(c).

13 Stat. I.C.J. art. 38, para. 1(d).

14 Stat. I.C.J. art. 38, para. 1(d).

15 Vladlen S. Vereshchetin & Gennady M. Danilenko, Custom as a Source of International Law of Outer Space, 13 J. Space L. 22 (1985).

16 See, e.g., Outer Space Treaty, supra note 5, art. VIII; Registration Convention, supra note 8, art. II, para. 2; Space Station Treaty, supra note 9, arts. IX, para. 3, XXII.

17 Vienna Convention on the Law of Treaties, art. 31, para. 1, U.N.Doc. A/CONF 39/27 (1969).

18 Restatement (Third) of the Foreign Relations Law of the United States § 401 (1987) [hereinafter Foreign Relations Restatement]; Prosper Weil, International Law Limitations on State Jurisdiction, in, Extra-territorial Application of Laws and Responses Thereto 34 (Cecil J. Olmstead ed., 1984).

19 See generally I. A. Csabafi, The Concept of State Jurisdiction in International Space Law (1971); compare Weil supra note 9.

20 Vladlen S. Vereshchetin, International Space Law & Domestic Law: Problems of Interrelations, 9 J. Space L. 31, 32 (1981).

21 Space Station Treaty, supra note 9, art. V.

22 Compromis at 1-2.

23 Hanneke Louise van Traa-Engelman, Commercial Utilization of Outer Space 266-69 (1993) (referring to the space station agreement between the European Space Agency, Canada, Japan, and the United States).

24 See Dr. Pierre M. Martin, The Legal Regime of Inventions in Outer Space, in Proceedings of the Thirty-second Colloquium on the Law of Outer Space (1989) (noting that certainty of jurisdiction is of the utmost importance to scientific research in outer space).

25 Space Station Treaty, supra note 9, art. IX.

26 Space Station Treaty, supra note 9, art. IX.

27 See Convention Establishing the World Intellectual Property Organization, opened for signature July 14, 1967, art. 3(viii), 21 U.S.T. 1749, T.I.A.S. No.6932, 828 U.S.T. 3 (defining intellectual property as "scientific discoveries" and "industrial designs").

28 Space Station Treaty, supra note 9, art. XXI.

29 Space Station Treaty, supra note 9, art. XXI

(emphasis added).

30 See Agreement on Cooperation in the Detailed Design, Development, Operation and Utilization of the Permanently Manned Civil Space Station, art. XXI, Sept 29, 1988, 1992 WL 466295 (Treaty) [hereinafter Multilateral Space Station Treaty]; commented on by David C. Stewart, Resolution of Legal Issues Confronting the International Space Station Project: A Step Forward in the Development of Space Law, 29 Va.J.Int'l.L. 745, 756 (1989); see also Hughes Aircraft Company v. United States, 534 F.2d 889, 897-906 (Fed. Cir. 1976) (asserting United States jurisdiction over patent infringement claim for an invention used in outer space based on United States involvement in the venture); Hughes Aircraft Company v. United States, 29 Fed. Cl. 197 (Cl. Ct. 1993) (finding that the United States courts could award damages for patent infringements in outer space).

31 Stewart, supra note 30, at 756; Mary B. McCord, Responding to the Space Station Agreement: The Extension of United States Law into Space, 77 Geo.L.J. 1933, 1939 (1989).

32 Gerald J. Mossinghoff, Intellectual Property Rights in Space Venture, 10 J. Space L. 107, 109 (1982).

33 See Id.

34 Outer Space Treaty, supra note 5, art. VIII.

35 Compromis at 2.

36 Carl Q. Christol, The Modern International Law of Outer Space 819 (1982).

37 Vereshchetin & Danilenko, supra note 15, at 25.

38 Carl Q. Christol, The International Law of Outer Space 21 (1962).

39 William R. Slomanson, Fundamental Perspectives on International Law 127 (1984).

40 See generally, Registration Convention, supra note 8; Outer Space Treaty, supra note 5, art. VIII.

41 Registration Convention, supra note 8, art. I.b.

42 Registration Convention, supra note 8; art. II., para. 2.

43 Compromis at 2.

44 Outer Space Treaty, supra note 5, art. VIII.

45 James L. Brierly, The Law of Nations: An Introduction to the International Law of Peace 59 (1963).

46 Carl Q. Christol, supra note 36, at 417.

47 Haanappel, Comparisons Between the Sea and Outer Space Law Exploration and Exploitation, in Proceedings of the Twenty-eighth Colloquium on the Law of Outer Space 145 (1986).

48 Lassa Oppenheim, International Law, A Treatise 597 (Lauterpecht ed. 1952).

49 Helen Shin, Oh I have Slipped the Surly Bonds of Earth": Multinational Space Stations and Choice of Law, 78 Cal.L.Rev. 1375, 1381; Law of the Sea:

Convention on the High Seas, entered into force September 30, 1962, art. IX, 13 U.S.T. 2312, T.I.A.S. No. 5200 [hereinafter High Seas Convention]; United Nations Convention on the Law of the Sea, done Dec. 10, 1982, art. 96, reprinted in 21 I.L.M. 1261 [hereinafter Law of the Sea Convention].

50 Brierly, supra note 37, at 310.

51 Oppenheim, supra note 61, at 597.

52 See, e.g., Death on the High Seas Act, 46 U.S.C. § 7, 1-768 (1920); D'Aleman v. Pan American World Airways, 259 F.2d 493 (1958) (extending act to incidents occurring in airplanes above the high seas).

53 Gerhard von Glahn, Law Among Nations: An Introduction to Public International Law 415 (4th ed. 1981).

54 Convention on International Civil Aviation Art. 17, done at Chicago, December 7 1944, 15 U.N.T.S. 295, T.I.A.S. No. 1591.

55 Convention on Offenses and Certain Other Acts Committed on Board Aircraft, done at Tokyo, September 14, 1963, 20 U.S.T. 2941, T.I.A.S. No. 6768.

56 Compromis at 2 (emphasis added).

57 Compromis at 2.

58 Compromis at 2.

59 Space Station Treaty, supra note 9, art. IX.

60 Compromis at 3.

61 Delbert D. Smith, Space Stations: International Law and Policy 90 (1980).

62 Compromis at 5.

63 Outer Space Treaty, supra note 5, at art. IX.

64 Hanneke Louise van Traa-Engelmann, Commercial Utilization of Outer Space 20-23 (1993).

65 Compromis at 3.

66 George S. Robinson, Psychoanalytic Techniques Supporting Bio-Juridics in Space, 2 J. Space L. 95, 104 (1974).

67 Hamilton DeSaussure, Astronauts and Seamen-A Legal Comparison, 10 J. Space L. 165, 179 (1982); Scott F. March, Authority of the Space Station Commander: The Need for Delegation, 6 Glendale Law Review 73, 84 (1984) (noting that the mixture of culturally diverse crew members aboard a space station would probably lead to conflict).

68 Stat. I.C.J. art 38, para. 1(c).

69 14 C.F.R. 1214.702 (1993).

70 Compromis at 3.

71 Christol, supra note 38, at 826.

72 Space Station Treaty, supra note 9, art. IX.

73 Compromis at 3.

74 See Compromis at 3.

75 See, e.g., Alex Haley, Space Law and Government 10 (1963); DeSaussure, supra note 67, at

166.

76 Compare Boboricken v. United States, 76 F. Supp. 70 (W.D. Wash. 1947) (finding that the cramped working conditions contributed to the libellant's claim of unseaworthiness); Crador v. Louisiana Dept. of Highways, 625 F.2d 1227 (5th Cir. 1980) (holding that the "confined" working areas were a legitimate basis for a claim of unseaworthiness).

77 See DeSaussure, supra note 49, at 100; Mitchell v. Trawler Racer, Inc., 362 U.S. 539 (1960).

78 Martin J. Norris, 1 The Law of Seamen § 10:16, 378 (4th ed. 1985).

79 Compromis at 3.

80 Space Station Treaty, supra note 9, art. IX, para. 3; see also Compromis at 2, 3 (explaining the mechanics of the cross-utilization agreement).

81 Space Station Treaty, supra note 9, art. IX.

82 Compromis at 3.

83 Compromis at 3.

84 Space Station Treaty, supra note 9, art. IX, para. 3.

85 Compromis at 2.

86 Levi, supra note 30, at 244; see also I.L.C. Draft Articles on State Responsibility, arts. 8, 11, reprinted in United Nations Codification of State Responsibility 326 (Marina Spinedi & Bruno Simma eds. 1987).

87 Levi, supra note 30, at 225; see, e.g., The Corfu Channel Case, 1949 I.C.J. 4 (holding Albania responsible for mine-laying, done with the knowledge of Albania, in Albania's territorial waters, that caused damage to British ships).

88 Levi, supra note 30, at 224.

89 See generally Compromis.

90 Home Missionary Society Claim, 6 R.I.A.A. 42 (U.S. v. G.B. 1920) (holding that a State cannot be held responsible for the unforeseeable and "rebellious" acts committed in violation of its authority); compare United Nations Secretary General Ruling on the Rainbow Warrior Affair between France and New Zealand, 26 I.L.M. 1346 (ruling of July 6, 1986) (granting New Zealand's demand that French agents be imprisoned for illegal actions committed with knowledge and assistance of French government on New Zealand soil); Caire Claim, 5 R.I.A.A. 516 (France v. Mexico 1929) (holding Mexico responsible for the murder of a French national by soldiers acting within their "competence").

91 Compromis at 4.

92 Compromis at 4.

93 Paul S. Edelman, Maritime Injury and Death 160 (1960) (stating that there is no liability for the "expected" types of rows between crew members); see also Scott F. March, Authority of the Space Station Commander: The Need for Delegation, 6 Glendale Law Review 73, 84 (1984) (stating that conflict is almost

inevitable aboard a space station like Galactica).

94 Brownlie, supra note 4, at 165.

95 See, e.g., Hamilton DeSaussure, Maritime and Space Law, Comparisons and Contrasts (An Oceanic View of Space Transport), 9 J. Space L. 93 (1981); H.A. Wassenberg, Parallels and Differences in the Development of Air, Sea and Space Law in the light of Grotius' Heritage, IX Annals of Air & Space L. 163, 172 (1984).

96 Levi, supra note 30, at 225; see also Martin J. Norris, 1 The Law of Maritime Personal Injuries § 9:6, 454-55 (4th ed. 1990) (stating that in claims based on negligence, the defendant cannot be held liable for acts occurring without its knowledge).

97 Oppenheim, supra note 73, at 365.

98 See generally Compromis.

99 Space Station Treaty, supra note 9, art. X.

100 Space Station Treaty, supra note 9, art. X; see also Multilateral Space Station Treaty, supra note 30, art. X.

101 Compromis at 4.

102 Id.

103 See generally Liability Convention, supra note 6.

104 Liability Convention, supra note 6, arts. II-IV.

105 Liability Convention, supra note 6, art. II.

106 Liability Convention, supra note 6, art. III.

107 Stat. I.C.J. art. 38.

108 Compromis at 4.

109 Compromis at 4.

110 See, e.g., Haley, supra note 75, at 10); Helen Shin, 'Oh, I have slipped the surly bonds of earth': Multinational Space Stations and the Choice of Law, 78 Cal. L. Rev. 1375, 1379-82 (1990).

111 Norris, supra note 96, at § 9:9, 458-63; Edith Brown Clement and Robert T. Lemon II, Current Status of Defenses to Reduce or Mitigate Damages in Jones Act, Longshoreman and General Maritime Law Personal Injury Claims, in Damages Recoverable in Maritime Matters 80 (1984).

112 Space Station Treaty, supra note 9, arts. V, XXII.

113 Space Station Treaty, supra note 9, art. V.

114 Space Station Treaty, supra note 9, art. XXII, para. 1.

115 Compromis at 3.

116 Space Station Treaty, supra note 9, art. XXII, para. 2.

117 Space Station Treaty, supra note 9, art. XXII, para. 2.

118 Id.

119 Id.

120 Compromis at 4.

121 Compromis at 4.

122 See Space Station Treaty, supra note 9, art. XXII.

123 Slomanson, supra note 39, at 129.

124 Outer Space Treaty, supra note 5, art. VIII.

125 Compromis at 2.

126 Compromis at 2.

127 Compromis at 4-5.

128 Rescue Agreement, supra note 7, art. IV.

129 Outer Space Treaty, supra note 5, art. V.

130 Vereshchetin, supra note 20, at 34.

131 Id. at 127.

132 David H.N. Johnson, Rights in Air Space 75 (1965); see also Case Concerning Questions of Interpretation and Application of the 1971 Montreal Convention Arising from the Aerial Incident at Lockerbie, 1992 I.C.J. 3 (libya v. U.K.) (april 14, 1992) (Joint Declaration of Evenson, Tarassov, Guillaume and Aguillar Mawdsley) (noting that "extradition is a sovereign decision of the requested state...").

133 Nottebohm Case (Liechtenstein v. Guatemala) 1955 I.C.J. 4, 23.

134 Rosalyn Higgins, The Legal Bases of Jurisdiction, in, Extra-territorial Application of Laws and Responses Thereto 1 (Cecil J. Olmstead ed. 1984).

135 Id. at 13.

136 Law of the Sea Convention, supra note 49, art. 97; High Seas Convention, supra note 46, art. XI; see also U.S. Congress, Office of Technology Assessment, "Space Stations and the Law: Selected Legal Issues -- Background Paper," OTA-BP-ISC-41, 42 (August 1986) (noting that absent a specific agreement to the contrary, a State whose national was injured by the act would be unable to exercise jurisdiction over the national of another State).

137 Slomanson, supra note 39, at 127.

138 Myres S. McDougal & William Michael Reisman, supra note 7, at 1419; M. Cherif Bassiouni, International Criminal Law: A Draft Criminal Code, arts. II, IV, VIII (1981) (establishing torture, piracy, war crimes and genocide as crimes against humanity and providing for international jurisdiction to punish these crimes); Cases Concerning Application of the Convention on the Prevention and Punishment of the Crime of Genocide (Bosnia and Herzegovina v. Yugoslavia (Serbia and Montenegro)), 1993 I.C.J. 3, No. 45 (Order for Provisional Measures of April 8, 1993) (identifying genocide as a crime against humanity); Foreign Relations Restatement, supra note 34, §404 (recognizing universal jurisdiction to punish certain offenses such as terrorism and hijacking); see also Tokyo Convention, supra note 55.

139 Slomanson, supra note 39, at 128; von Glahn, supra note 53, at 286-312 (discussing international crimes).

140 Levi, supra note 86, at 147.