INTERNATIONAL INSTITUTE OF SPACE LAW

OF THE INTERNATIONAL ASTRONAUTICAL FEDERATION

INSTITUT INTERNATIONAL DE DROIT SPATIAL

DE LA FEDERATION ASTRONAUTIQUE INTERNATIONALE

3-5, RUE MARIO NIKIS 75015 PARIS - FRANCE Tél. 33-1-45.67.42.60

Telefax 33-1-42.73.21.20

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The Case Concerning a Nuclear Powered Satellite
(Homeria v. San Marcos)

STATEMENT OF FACTS

Maglandia, San Marcos and Homeria are neighboring states. Homeria is an island archipelago comprised of hundreds of small islands spread over an area of approximately 300 kilometers by 1,000 kilometers. The three nations share the same language and religious heritage, but developed distinct religious sects and linguistic dialects, as well as similar but distinct cultural traditions and practices. During the Cold War, Maglandia officially was neutral, but San Marcos and Homeria each received substantial technical and economic aid from the competing superpowers.

The relations between San Marcos and Homeria were characterized as "diplomatic brinkmanship." Both states have taken actions which have instigated diplomatic crises. However armed hostilities were averted, largely through the efforts of Maglandia acting as a neutral mediator. On occasion, the mediated resolution of a diplomatic crisis has included a program for cooperation between the states in various economic and technological areas. Nevertheless, San Marcos and Homeria have continued to be very suspicious of each other, and diplomatic incidents often have been accompanied by inflamed rhetoric.

Maglandia developed an independent space program, including an operational launch system, which competes on the open market as a launch services provider, offering launches of payloads into both low Earth orbit (LEO) and geostationary orbit (GSO). The launches are conducted from a facility located on a small island in the territory of Homeria, pursuant to a 99 year lease of land from the Homeria government. The tracking and control (T&C) center for the Maglandia launches, however, is located in the territory of San Marcos, also pursuant to a 99 year lease of government property from San Marcos. Both of these leases were executed as intergovernmental agreements on the same day in January, 1990, as part of a Maglandia-mediated resolution to a diplomatic incident between San Marcos and Homeria. The leases contain identical provisions except for the legal description of the leased premises and the specific purposes for which the premises can be used. Included among the lease terms is a provision prohibiting discrimination against or interference with the use of leased facilities for the launch or T&C of any payload. The two agreements were notified to the United Nations as treaties.

In 1992, the government of Homeria established a program for a geostationary telecommunications satellite named BARTSAT. The BARTSAT was launched using Maglandia's launch services in 1995. BARTSAT provides a full range of telephony services throughout the island archipelago, which otherwise lacks an effective and complete terrestrial communications infrastructure. The satellite had an intended useful life of 10 years, and cost US\$100 million, including launch costs. Maglandia's standard form of launch services contract was utilized for this launch, and provided that Homeria is the "launching State" of the payload, which was carried on the national registry of Homeria and filed with the United Nations pursuant to the Registration Convention. Furthermore, pursuant to the standard form of contract, Homeria agreed to be primarily responsible for the satellite commencing thirty days following its successful orbital insertion.

On December 15, 1999, pursuant to a standard form of launch services contract, Maglandia launched a telecommunications satellite, LISAT, into a GSO for SMT&T, an agency of the San Marcos government. LISAT was spaced one degree from BARTSAT on the GSO. LISAT was intended to provide commercial television and voice and data communications to customers

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throughout the geographic region, including customers in Maglandia, San Marcos and Homeria. On January 1, 2000, LISAT experienced a malfunction, which resulted in an intermittent loss of control over the physical positioning of the spacecraft. That is, the satellite developed a perturbation in its orbit and as a result, the satellite periodically intersected with the orbital slot occupied by BARTSAT. Nevertheless, LISAT remained capable of performing approximately 95% of its intended commercial telecommunications functions, and did not directly interfere with the functioning of BARTSAT.

Homeria government officials were concerned with the safety and security of BARTSAT, and engaged in close active monitoring of LISAT. This required the stationing of several additional personnel at the Maglandia tracking and control facility in San Marcos. Based upon such monitoring, the BARTSAT periodically was maneuvered, as deemed necessary as a preventative measure, to avoid either a collision with or harmful interference by LISAT. These maneuvers were very expensive, and interfered with the ability of BARTSAT to perform all its intended functions during the conduct of the maneuvers. These maneuvers also required the premature use of BARTSAT'S on-board attitude control and positioning propellants, thereby reducing the expected useful life of the satellite by an estimated two and one half years. Nevertheless, at no time did LISAT intersect the segment of the orbit where BARTSAT had been immediately prior to a preventative repositioning maneuver.

The perturbed orbit of LISAT slowly but inexorably extended further and further from the original orbital slot. Homeria held discussions with many other states and private satellite operators, but San Marcos was not invited and did not request to be included in these discussions. The consensus of the participants was that LISAT posed a substantial risk to other satellites. No other state or satellite operator, however, had engaged in active maneuvering of its satellite to avoid a collision with or harmful interference from LISAT.

On July 1, 2000, Homeria sent a diplomatic note to San Marcos requesting that LISAT be removed from the GSO as a safety precaution "for the benefit of the international community," by either de-orbiting the satellite or boosting it to a higher "parking" orbit. This diplomatic note stated that in the event San Marcos refused to remove LISAT from the GSO, Homeria reserved

the right to take whatever action it deemed necessary for the protection of its citizens and property. San Marcos responded through official channels, and declined to remove LISAT from the GSO. The San Marcos response claimed that the satellite remained "95% functional" and that the alleged danger was exaggerated.

Three days after San Marcos issued its response, the BARTSAT exploded. Fragments of the BARTSAT struck LISAT, rendering the satellite completely useless. In the first few days following the explosion of BARTSAT, the popular press reported that measurements by scientists from around the globe indicated the presence of an abnormally high degree of radiation on the portion of the orbital arc occupied by BARTSAT immediately preceding the explosion. San Marcos claimed that the explosion of BARTSAT was intentional by Homeria, and for the precise purpose of destroying LISAT. Officials of Homeria issued a statement claiming that the explosion was purely accidental, and denied any intent to destroy the property of another state. The official statement of Homeria further claimed that it could not account for the reports of abnormal radiation readings. Privately, Homerian government sources suggested that LISAT may secretly have had a nuclear power source.

The statement of Homeria inflamed the population of San Marcos, and massive demonstrations against Homeria took place in every major city in San Marcos. An angry mob descended on the Maglandia T&C facility, and removed Homeria's personnel from the building. In addition, the mob seized the computers and records of Homeria located within the facility, and turned the property over to the San Marcos national police. In an official public statement, San Marcos announced that a review of these records revealed that BARTSAT was powered by a nuclear power source. That information was not contained in either the national registry of Homeria nor disclosed in the U.N. registry. San Marcos and Homeria denounced each other for "flagrant and blatant violations of international law."

Following the disclosure of its own records, Homeria conceded publicly that BARTSAT did in fact contain a nuclear power source. Homeria claimed that the use of a nuclear power source was reasonable for the satellite, that disclosure was not required, and that it acted in conformity with international law. In addition, Homeria claimed that the nuclear power source was not the cause

of the explosion of BARTSAT. Tensions between Homeria and San Marcos reached an unprecedented intensity. Maglandia interceded, and offered to act as a mediator if both sides would agree to maintain the status quo. Through exhaustive diplomatic efforts, Maglandia was able to obtain agreement to a temporary cooling off period, and armed hostilities were averted.

Homeria and San Marcos each convened separate Boards of Inquiry to investigate the circumstances of the BARTSAT explosion. Officials of Homeria declined an invitation to participate in the San Marcos investigation, asserting that San Marcos already had all available information in the materials which were "improperly seized" at the Maglandian facility. Officials from San Marcos were not invited to participate in the Homerian investigation, for the stated reason that such persons could not add any "relevant" information. The San Marcos Board concluded that the BARTSAT explosion centered in the nuclear power source, but could not reach a conclusion as to the precise event which triggered the explosion or whether the explosion was caused intentionally. The Board of Homeria also concluded that the explosion centered in the nuclear power source. However, the precise cause was identified as a lack of sufficient coolant as a result of the premature depletion of the coolant by the maneuvers to avoid a collision with the LISAT. The report emphatically concluded that the explosion was an accident.

Maglandia was unable to mediate a resolution of the crisis. Both San Marcos and Homeria claimed damages against the other. Through the good offices of Maglandia, the parties agreed to submit the dispute to the International Court of Justice for resolution. The parties also agreed to the Compromis.

San Marcos and Homeria are members the United Nations and the ITU, and are parties to the Outer Space Treaty, the Return and Rescue Agreement, the Liability Convention, the Registration Convention, and the Moon Agreement. In addition, the delegation of San Marcos to the U.N. General Assembly favored adoption of the Principles Relevant to the Use of Nuclear Power Sources in Outer Space, but the delegation of Homeria was not present at the General Assembly on the day the principles were adopted. All parties to this dispute are self-insured. There has been compliance with all procedures of the ITU. There are no issues relating to the jurisdiction of the Court, the standing of the parties, or the monetary amount of damages being

sought by either party. In addition, the parties are conducting separate diplomatic discussions to resolve issues pertaining to the exclusion of Homerian personnel from the Maglandia T&C facility, and the seizure of Homeria's property.

ISSUES

The following issues are presented by the Compromis for decision by the Court:

- 1. Is San Marcos in breach of international law for failing and refusing to remove LISAT from the GSO?
- 2. Is San Marcos liable under international law for the premature loss of BARTSAT and the expenses of and lost revenues incurred during the monitoring and maneuvers to avoid a collision with LISAT?
- 3. Is Homeria in breach of international law for launching the BARTSAT with a nuclear power source without first disclosing its existence?
- 4. Is Homeria liable under international law for the damage to LISAT?
