
IN THE
INTERNATIONAL COURT OF JUSTICE AT THE PEACE PALACE
THE HAGUE, NETHERLANDS

THE PEOPLES ASTRAL UNION,
Applicant,

v.

THE FEDERATION OF CELESTIAL STATES
Respondent.

March Term
1980

On Submission to the
International Court of Justice

COUNTER- MEMORIAL FOR THE RESPONDENT

Agents for the Federation of Celestial States

James I. Collins
George Hatfield
Ronald R. Lamb
Joel Levy
Teresa Williams

TABLE OF CONTENTS

	PAGE
Index of Authorities.	v
Statements of Jurisdiction and Facts.	viii
Questions Presented	ix
Summary of Argument	x
Argument and Authorities.	1
I. FEDERATION COMPLIED WITH THE CONVENTION ON REGISTRATION OF OBJECTS LAUNCHED INTO OUTER SPACE.	1
A. THE CONVENTION ON REGISTRATION DOES NOT REQUIRE REGISTRATION AT THE TIME OF LAUNCH	1
B. FEDERATION HAS SURPASSED THE STATED GOAL OF THE CONVENTION ON REGISTRATION.	1
C. NO DAMAGES HAVE RESULTED FROM FEDERATION'S PROCEDURES	1
II. FEDERATION'S DIRECT BROADCASTING IS CONSISTENT WITH INTERNATIONAL LAW AND SHOULD BE ENCOURAGED.	2
A. FEDERATION HAS FURTHERED THE INTERNATIONAL COMMITMENT TO THE FREE EXCHANGE OF IDEAS	2
B. FEDERATION'S BROADCASTING COMPLIES WITH CUSTOMARY INTERNATIONAL LAW.	3
C. PAU'S ATTEMPTED PROHIBITION OF DIRECT BROADCASTING FROM OUTER SPACE VIOLATES INTERNATIONAL LAW.	3
III. FEDERATION'S LAUNCH AND OPERATION OF THE GEOSTATIONARY SATELLITE IS CONSISTENT WITH INTERNATIONAL LAW	4
A. FEDERATION'S LAUNCH AND OPERATION OF THE GEOSTATIONARY SATELLITE IS DISTINCT FROM THE JOINT VENTURE.	4
B. THE LAUNCH OF THE GEOSTATIONARY SATELLITE COMPLIES WITH THE TREATY BETWEEN THE PARTIES	4

	PAGE
C. FEDERATION'S USE OF THE GEOSTATIONARY ORBIT IS CONSISTENT WITH THE OUTER SPACE TREATY.	5
D. REMOTE SENSING OF A STATE DOES NOT REQUIRE PRIOR CONSENT.	5
E. FEDERATION'S COMMERCIAL USE OF WHEAT CROP DATA BENEFITED ALL MANKIND	6
IV. FEDERATION'S OPERATION OF THE MULTI-SPECTRAL SCANNER AND DISTRIBUTION OF THE INFORMATION DERIVED THEREFROM IS CONSISTENT WITH THE TREATY BETWEEN THE PARTIES.	7
A. FEDERATION'S USE OF THE MULTI-SPECTRAL SCANNER IS IN ACCORDANCE WITH THE TREATY BETWEEN THE PARTIES.	7
B. FEDERATION PROVIDED PAU WITH ALL DATA OBTAINED BY USE OF THE MULTI-SPECTRAL SCANNER AS REQUIRED BY THE TREATY BETWEEN THE PARTIES	7
V. PAU'S TESTING OF THE NUCLEAR POWERED SPACE OBJECT VIOLATED INTERNATIONAL LAW AND THE TREATY BETWEEN THE PARTIES.	8
A. PAU'S TESTING VIOLATED THE NUCLEAR TEST BAN TREATY AND THE OUTER SPACE TREATY.	8
B. PAU'S TESTING VIOLATED THE TREATY BETWEEN THE PARTIES.	9
VI. PAU IS LIABLE FOR ALL DAMAGES CAUSED BY THE NUCLEAR POWERED SPACE OBJECT	10
A. PAU INCURS LIABILITY FOR ALL DAMAGES RESULTING FROM ITS NEGLIGENCE IN CAUSING THE NUCLEAR POWERED SPACE OBJECT'S COLLISION WITH THE SPACE LABORATORY	10
B. AS A RESULT OF THIS COLLISION THE DECOUPLING DEVICE WAS DAMAGED	11
C. PAU IS ABSOLUTELY LIABLE FOR ALL DAMAGE CAUSED BY ITS NUCLEAR POWERED SPACE OBJECT ON EARTH	12
D. FEDERATION REASONABLY RELIED ON PAU'S ASSURANCES CONCERNING THE NUCLEAR POWERED SPACE OBJECT, AND AS A RESULT SUFFERED SEVERE DAMAGE	12

	PAGE
1. FEDERATION'S RELIANCE WAS REASONABLE	12
2. PAU IS SOLELY LIABLE FOR ALL DAMAGE CAUSED BY NUCLEAR RADIATION.	13
3. THE IRRADITATION OF FEDERATION'S NATIONALS WAS SEVERELY DAMAGING.	13
4. FORCE MAJEURE DOES NOT MITIGATE DAMAGES UNDER THE CONVENTION	14
VII. PAU IS LIABLE FOR ALL DAMAGE CAUSED BY THE UNCONTROLLED RE-ENTRY OF THE MANNED SPACE LABORATORY .	14
A. PAU NEGLIGENTLY DESIGNED AND APPLIED PROCEDURES FOR DECOUPLING THE MANNED SPACE LABORATORY	14
B. PAU IS LIABLE FOR ALL DAMAGE CAUSED BY BOTH PORTIONS OF ITS UNMANNED SPACE OBJECT	15
1. ABSOLUTE LIABILITY ARISES UNDER THE LIABILITY CONVENTION	15
2. PAU IS LIABLE DUE TO ITS NEGLIGENCE.	16
C. FEDERATION WAS REQUIRED TO ATTEMPT THE INTERCEPTION OF PAU'S UNMANNED AND UNCONTROLLED SPACE OBJECT.	17
D. PAU IS LIABLE FOR DAMAGE CAUSED BY BOTH PORTIONS OF ITS SPACE OBJECT	18
1. PAU IS LIABLE FOR THE DAMAGE CAUSED BY THE FIRST PORTION OF ITS SPACE OBJECT	18
2. PAU IS LIABLE FOR THE DAMAGE CAUSED BY THE SECOND PORTION OF ITS SPACE OBJECT	18
VIII. FEDERATION'S PASSAGE OVER PAU TERRITORY BELOW 110 KILOMETERS WAS JUSTIFIED	19
IX. UNDER THE TREATY BETWEEN THE PARTIES AND INTERNATIONAL LAW PAU SHOULD COMPENSATE FEDERATION FOR ALL LOSSES INCURRED, WITHOUT LIMIT	19
A. PAU MUST COMPENSATE FOR ALL DAMAGE ARISING FROM ITS DESTRUCTION OF THE SHOPPING CENTER IN FEDERATION TERRITORY	20

B. PAU MUST COMPENSATE FOR ALL DAMAGE ARISING FROM ITS DESTRUCTION OF THE COMMERCIAL AIRLINER OF FEDERATION AND FOR ANY PROPERTY DAMAGE RESULTING FROM THE CRASH OF THAT AIRCRAFT 20

C. PAU MUST COMPENSATE FOR ALL DAMAGES ARISING FROM THE DESCENT OF ITS NUCLEAR POWERED SPACE OBJECT 21

D. PAU SHOULD COMPENSATE FOR ALL ABOVE-MENTIONED DAMAGES WITHOUT LIMIT. 21

E. FEDERATION ASSERTS THAT DUE TO THE INSUFFICIENCY OF THE RECORD AT PRESENT THERE SHOULD BE A SUBSEQUENT HEARING TO DETERMINE SPECIFICS AMOUNTS OF DAMAGE. 22

INDEX OF AUTHORITIES

<u>TREATIES AND OTHER INTERNATIONAL AGREEMENTS</u>	PAGE
Convention on International Liability for Damage Caused by Space Objects, 29 March 1972, 24 U.S.T. 2389, T.I.A.S. 7762	
Preamble.	22
Article I	18
Article II.	12,18,19
Article III	10,12,15,18
Article IV.	18
Article V	18
Article VI.	11
Article VII	17,18
Article VIII.	20
Article XII	18
Convention on the Registration of Objects Launched into Outer Space, 14 January 1975 U.S.T. 697, T.I.A.S. 8480.	
Article IV.	1
Treaty Banning Nuclear Weapons Tests in the Atmosphere, in Outer Space and Under Water, 5 August 1963, 14 U.S.T. 1313, T.I.A.S. 5433	
Preamble.	8
Article I	8,9
Article II.	8
Treaty Between the Parties.	
Preamble.	9
Article I	4,5
Article II.	15
Article III	10,13,20
Article IV.	5,14
Article VI.	4,7,10,17
Article VII	10

Treaty on the Principles Governing the Activities of States in the Exploration of Outer Space, Including the Moon and Other Celestial Bodies, 27 January 1967, 24 U.S.T. 2389, T.I.A.S. 7762.	
Preamble	9
Article I	5
Article IV.	9
Article XIX	3
Universal Declaration of Human Rights U.N. Document A/811, 16 December 1948.	
Article XIX	2,3
U.N. G.A. Resolution 2200 (XXI). U.N. Document A/6546 16 December 1966	2
United Nations Committee on the Peaceful uses of Outer Space, Legal Subcommittee, Summary Record of Meeting,	
U.N. Document A/AC/.105/C.2/SR 118.	13
U.N. Document A/AC/.105/C.2/SR.91	14
U.N. Document A/AC/.105/C.2/L.59 (Argentina), /L.62 (Austria et al.), /L.10 (Hungary), /L.8 (U.S.). . .	22
Vienna Convention on the Law of Treaties, A/Conf. 39/27, 23 May 1969, UN Doc.	
Article XXVI.	19
Article XXXI.	19
 <u>TREATISES</u>	
Christol, Carl Q., The International Law of Outer Space - International Law Studies (1962).	6
Hondius, "International Control of Broadcasting Programs in Western Europe", in <u>The International Law of Communications</u> (E. McWhinney ed. 1971). . .	3
Gofman, John W. and Arthur R. Tamplin, <u>Poisoned Power</u> (1971)	14

	PAGE
Reijnen, "Remote Sensing by Satellite and Legality", in <u>Legal Implications of Remote Sensing from Outer Space</u> (Nicolas M. Matte ed. 1976)	5
McDougal, Myres S., Lasswell, Harold D. and Vlasic, Ivan A. <u>Law and Public Order in Space</u> (1963).	22
 <u>JOURNALS AND PERIODICALS</u>	
1976 Madrid Conference on the International Law Association: A Summary of the discussion of Space Law", 4 <u>Journal of Space Law</u> 169.	6
Stewart, "Radiation Dose Effects in Relation to Obstetric X-Rays and Childhood Cancer", <u>Lancet</u> , June 6, 1970.	14
Regional Conference on "Direct Broadcast Satellites and Space Law", 3 <u>Journal of Space Law</u> 111 (1975). Stowe, Ronald F., "The Development of International Law Relating to Remote Sensing of the Earth From Outer Space", <u>Journal of Space Law</u> , 101 (1977).	3,6
 <u>MISCELLANEOUS</u>	
<u>Handbook of Physics</u> , Ed. by E.U. Condon and Hugh Odishaw, 1958 .	11
Websters Third New International Dictionary, G. & C. Merriem Co (1971).	7
Sheldon and Luxenberg, "A comparison of UN Voluntary Registrations of Space Objects", <u>World Wide Space Activities Report</u> , U.S. House of Representatives, 95th Congress, 1st Session, September, 197	1
U.N. Yearbook, vol. 30 (1976).	

JURISDICTION

The Federation of Celestial States and the Peoples Astral Union, by agreement between the Parties, have submitted this controversy to the International Court of Justice for resolution in accordance with Article 38 of the Statute of the Court.

On February 15, 1980, the International Court of Justice entered a preliminary order disposing of all jurisdictional issues sua sponte.

STATEMENT OF FACTS

The Federation of Celestial States stipulates to the statement of facts which has been filed with the Court, and hereby expressly incorporates them by reference.

QUESTIONS PRESENTED

I

HAS FEDERATION COMPLIED WITH THE CONVENTION ON REGISTRATION OF OBJECTS LAUNCHED INTO OUTER SPACE?

II

WAS THE LAUNCHING, USE OF, AND DIRECT BROADCASTING FROM THE GEOSTATIONARY SPACE OBJECT IN VIOLATION OF THE TREATY BETWEEN THE PARTIES OR INTERNATIONAL LAW?

III

WAS FEDERATION'S OPERATION OF THE MULTI-SPECTRAL SCANNER AND DISTRIBUTION OF THE INFORMATION DERIVED THEREFROM CONSISTENT WITH THE TREATY BETWEEN THE PARTIES?

IV

DID PAU'S LAUNCHING OF THE NUCLEAR POWERED SPACE OBJECT VIOLATE INTERNATIONAL LAW OR THE TREATY BETWEEN THE PARTIES AND TO WHAT EXTENT SHOULD PAU BE HELD LIABLE FOR THE DAMAGE RESULTING THEREFROM?

V

IS PAU LIABLE FOR THE DAMAGE CAUSED BY ITS UNMANNED AND UNCONTROLLED SPACE LABORATORY'S DESCENT TO EARTH?

SUMMARY OF ARGUMENT

Federation complied with the Convention on Registration of Objects Launched into Outer Space. Registration at the time of launch is not required under this Convention. Federation's announcement procedures surpass the stated goal of the Convention on Registration. No damage has resulted from Federation's procedures.

Federation's direct broadcasting from the geostationary space object is consistent with international law and should be encouraged. Federation, by complying with customary international law, has furthered the international commitment to the free exchange of ideas. Thus, PAU's attempted prohibition of direct broadcasting from outer space violates international law.

Federation's launch and operation of the geostationary satellite is consistent with international law and the Treaty Between the Parties. Federation's launch and operation of the geostationary satellite has furthered the peaceful exploration of outer space, consistent with the Outer Space Treaty. The launch was separate from the manned space laboratory, and was a commercial rather than a scientific endeavor. The geostationary satellite was launched from a space shuttle, not an earth based pad. This was a unilateral activity unrelated to the Treaty between the Parties.

Remote sensing of a State does not require prior consent. A decade of international conduct confirms the general acceptance of unrestricted remote sensing of the earth's surface without prior consent.

Federation's operation of the multi-spectral scanner and distribution of the information derived therefrom is consistent with the Treaty Between the Parties. The Treaty Between the Parties did not limit the use of the multi-spectral scanner to PAU or asteroid scanning; thus, Federation's particular use is consistent with that Treaty. Further, Federation has provided PAU with all data obtained by use of the multi-spectral scanner as required by the Treaty Between the Parties.

PAU's testing of the nuclear powered space object violated international law and the Treaty Between the Parties. PAU violated the Test Ban Treaty by causing a nuclear explosion in outer space. PAU also violated the Outer Space Treaty by orbiting a nuclear weapon in space. PAU exposed the crew of the space laboratory to unnecessary danger by reconnaissance of the space laboratory, thereby violating the safety provision set forth in the Treaty Between the Parties.

PAU is liable for all damage caused by the nuclear powered space object. PAU incurs liability for all damage resulting from its negligence in causing the nuclear powered space object's collision with the space laboratory. This damage includes the impairment of the decoupling device, destruction of rural and industrial property, and the irradiation of 10,000 Federation nationals.

PAU is liable for all damage caused by the uncontrolled re-entry of the space laboratory. PAU as the "launching" state is absolutely liable for all damage caused by its space laboratory's crash to earth. PAU's negligent design and application of decoupling

procedures led directly to the unmanned descent of its space laboratory. PAU was also negligent in returning its object to earth knowing that it was out of control.

Federation's passage over PAU territory below 110 kilometers was justified and did not violate the Treaty Between the Parties. The substantial change in the decoupling procedures and the planned re-entry, brought about by PAU's negligence, nullified Federation's obligation not to violate the 110 kilometer limit established by the Treaty Between the Parties.

Joint and several liability does not attach under these facts. The activities which caused damage were unilateral acts performed by PAU; therefore, joint and several liability does not attach in this case.

PAU must indemnify Federation for any liability arising from the destruction caused by PAU's space objects.

PAU, under the Treaty Between the Parties and international law, must compensate the injured parties for all losses incurred, without limit. Limits upon the total amount of liability were excluded from the Liability Convention. Further limitations upon liability are inappropriate where, as in this case, the damage is caused by a State engaging in socially undesirable activity.

I. FEDERATION COMPLIED WITH THE CONVENTION ON REGISTRATION OF OBJECTS LAUNCHED INTO OUTER SPACE

A. THE CONVENTION ON REGISTRATION DOES NOT REQUIRE REGISTRATION AT THE TIME OF LAUNCH

Federation's sole requirement was to furnish full information to the United Nations "as soon as practicable."¹ A study of the prior voluntary registration system shows that registration has always lagged many months behind the actual launching.² Therefore, Federation's delay in registering the launch is not a violation of the Convention.

B. FEDERATION HAS SURPASSED THE STATED GOAL OF THE CONVENTION ON REGISTRATION

Registration assures that all states will have sufficient information regarding the space activities of other states so that they may safely conduct their own space activities.³ Federation's immediate release to the public media of all such required information expands, rather than limits, the availability of this essential information.

C. NO DAMAGE HAS RESULTED FROM FEDERATION'S PROCEDURES

Federation complied with its customary procedure and gave effective notice to the world community of its launching activities.

-
1. Convention on Registration of Objects Launched into Outer Space; 14 January 1975, 39 U.S.T. 697, T.I.A.S. 8480, Article IV (Hereinafter Registration Convention).
 2. Sheldon and Luxenberg, "A Comparison of UN Voluntary Registrations of Space Objects with Data from Other Sources as a Test of Registration Compliance: 1957-1974", U.S. House of Representatives World Wide Space Activities Report, H.R. DOC. No. 702, 95 Congress, 1st Sess. 528 (1977).
 3. Registration Convention, supra note 1, at Article IV.

Delay in completing the registration formalities resulted in neither injury nor damage.

II. FEDERATION'S DIRECT BROADCASTING IS CONSISTENT WITH INTERNATIONAL LAW AND SHOULD BE ENCOURAGED

A. FEDERATION HAS FURTHERED THE INTERNATIONAL COMMITMENT TO THE FREE EXCHANGE OF IDEAS

The Universal Declaration of Human Rights states, "Everyone has the right of freedom of opinion and expression; this right includes freedom to hold opinion without interference and to send, receive, and impart information and ideas through any media and regardless of frontiers."⁴ United Nations General Assembly Resolution 2200 A (XXI) proclaims that "[t]his right shall include freedom to seek, receive, and impart information of all kinds, regardless of frontiers, either orally, in writing or in print, in the form of art, or through any other media of his choice"⁵ (emphasis added). The broadcasting of television programs from Federation's geostationary satellite is in the best interest of mankind and is not only sanctioned but encouraged by the United Nations' view of international law.

-
4. Universal Declaration of Human Rights, Approved by the United Nations General Assembly at its plenary meeting on December 10, 1948, Department of State Publication Number 3381 (International Organizations and Conferences Series III, 20); U.N. Document A/811, December 16, 1948, Article 19.
 5. United Nations General Assembly Resolution 2200 (XXI). International Covenant on Economic, Social, and Cultural Rights, International Covenant on Civil and Political Rights and Optional Protocol to the International Covenant on Civil and Political Rights, U.N. Document A/6546, Article 19, adopted December 16, 1966.

B. FEDERATION'S BROADCASTING COMPLIES WITH CUSTOMARY INTERNATIONAL LAW

Direct Broadcasting, in the terrestrial sense, has been and continues to be carried out in many areas of the globe with little regard for national borders or political subdivisions.⁶ "The important point is that you can engage in this international practice on shortwave radio and terrestrial broadcast TV in Germany and all European countries without any problems and without any State protest."⁷ The customary acceptance of these broadcasts has established their legality, and the legality of all such broadcasts under customary international law.

C. PAU'S ATTEMPTED PROHIBITION OF DIRECT BROADCASTING FROM OUTER SPACE VIOLATES INTERNATIONAL LAW

The prohibition of Federation's direct broadcasting would violate the Declaration of Human Rights,⁸ established customary law,⁹ and the Outer Space Treaty¹⁰ which states "Outer Space...shall be free for exploration and use by all States without discrimination...[and] is not subject to national appropriation by claim of sovereignty"¹¹ Allowing one nation to prohibit another's activities in outer space is such an appropriation. Submission

-
6. Hondius, "International Control of Broadcasting Programs in Western Europe", in The International Law of Communications, 72, (E. McWhinney ed. 1971).
 7. Regional Conference on "Direct Broadcast Satellites and Space Law", 3 Journal of Space Law 111 (1975).
 8. Universal Declaration of Human Rights, supra n. 4.
 9. See part II, B, supra.
 10. Treaty on the Principles Governing the Activities of States in the Exploration of Outer Space, Including the Moon and Other Celestial Bodies; 27 January 1967, 18 UST 2410, TIAS 6347 (Hereinafter, Outer Space Treaty).
 11. Supra. n. 10, Article 19.

to PAU's restriction concerning Federation's legal activities would be an unlawful appropriation of outer space.

III. FEDERATION'S LAUNCH AND OPERATION OF THE GEOSTATIONARY SATELLITE IS CONSISTENT WITH INTERNATIONAL LAW

A. FEDERATION'S LAUNCH AND OPERATION OF THE GEOSTATIONARY SATELLITE IS DISTINCT FROM THE JOINT VENTURE

The geostationary satellite is not subject to the provisions of the Treaty Between the Parties as it is not a part of the joint venture.

First, the satellite was not launched from the manned space laboratory although the laboratory was equipped to perform such launches.¹²

Second, the satellite lacks the ability to communicate with the manned space laboratory and is controlled by Federation ground stations.¹³

Third, this activity furthered a commercial enterprise pertaining to the purchase and sale or exchange of goods and commodities as opposed to "experiments, tests and scientific work."¹⁴

Thus, Federation's geostationary satellite was a unilateral activity, and as such not controlled by the Treaty Between the Parties.¹⁵

B. THE LAUNCH OF THE GEOSTATIONARY SATELLITE IS CONSISTENT WITH THE TREATY BETWEEN THE PARTIES

"The Parties agree that they will not launch any earth based space objects until after the space laboratory has returned."¹⁶

12. Clarifications to the Record.

13. Record, pg. 2.

14. The Treaty Between the Parties, Article VI.

15. The Treaty Between the Parties, Article I.

Since the geostationary satellite "was launched from the space shuttle"¹⁷ as opposed to an earth based launching, there is no violation of the Treaty.¹⁸

C. FEDERATION'S USE OF THE GEOSTATIONARY ORBIT IS CONSISTENT WITH THE OUTER SPACE TREATY

As provided by the Outer Space Treaty, "Outer space...shall be free for exploration and use by all States without discrimination of any kind"¹⁹ The placing of satellites in geostationary orbits is an important technique in the exploration and use of outer space. Therefore, Federation's use of a satellite in geostationary orbit is consistent with the Outer Space Treaty.²⁰

D. REMOTE SENSING OF A STATE DOES NOT REQUIRE PRIOR CONSENT

G.C.M. Reijnen, writing on Remote Sensing by Satellites and Legality, concludes that remote sensing by satellites is a "use" of outer space and as such falls under the provisions of the Outer Space Treaty.²¹ Ronald F. Stowe, in his article on The Development of International Law Relating to Remote Sensing of the Earth from Outer Space, states that recent discussions of the Legal Subcommittee of the United Nations General Assembly have evinced virtually no support for the idea that remote sensing is an activity outside

16. The Treaty Between the Parties, Article III.

17. Clarifications to the Record.

18. The Treaty Between the Parties, Article III.

19. The Outer Space Treaty, supra n. 10, Article I.

20. The Outer Space Treaty, supra n. 10, Article I.

21. Reijnen, "Remote Sensing by Satellites and Legality", in Legal Implication of Remote Sensing From Outer Space, 24 (N. Matte, ed., 1976).

the scope of the Outer Space Treaty, or for the proposition that such sensing can be undertaken only with the prior consent of the sensed party.²²

A decade of international conduct confirms the general acceptance of unrestricted remote sensing of the earth's surface. More than forty states have participated in the United States remote sensing program undertaken by satellites Landsat I and Landsat II.²³ Further, those states actively involved in space exploration, such as the Soviet Union, the United States, France, and the United Kingdom, believe that consent prior to remote sensing is not necessary and that states must be free to conduct remote sensing from outer space.²⁴ Unconsented remote sensing of states has been a reality since the early 1960's and has occurred without significant international protest.²⁵

E. FEDERATION'S COMMERCIAL USE OF WHEAT CROP DATA BENEFITED ALL MANKIND

The information obtained by Federation's use of the geostationary satellite concerning the agricultural conditions within PAU was, of necessity, already known to PAU.²⁶ PAU was free to enter the world market and purchase adequate supplies of the

22. Stowe, "The Development of International Law Relating to Remote Sensing of the Earth From Outer Space", 5 Journal of Space Law 105 (1977).

23. "1976 Madrid Conference of the International Law Association: A Summary of the discussion of Space Law", 4 Journal of Space Law 169 (1976).

24. The 1976 U.N. Yearbook, Vol. 30, 64.

25. Christol, "The International Law of Outer Space" - International Law Studies 1962, 254, Naval War College, U.S. Government Printing Office, Washington, 1966.

26. Record, pg. 2.

endangered commodities. The inflation in PAU was caused by the crop failure and the resultant worldwide shortages, not by the participation of Federation in that market.

Federation's use of information concerning the crop failure enabled the world market to distribute more effectively the supplies of this scarce resource.

IV. FEDERATION'S OPERATION OF THE MULTI-SPECTRAL SCANNER AND DISTRIBUTION OF THE INFORMATION DERIVED THEREFROM IS CONSISTENT WITH THE TREATY BETWEEN THE PARTIES

A. FEDERATION'S USE OF THE MULTI-SPECTRAL SCANNER IS IN ACCORDANCE WITH THE TREATY BETWEEN THE PARTIES

The "multi-spectral scanner...shall be used, in particular, for asteroid scanning." (emphasis added).²⁷ The words "in particular" do not mean "exclusively."²⁸ Therefore, the Treaty Between the Parties anticipated other uses. Further, PAU's conduct in allowing earth scanning, an activity carried on in the close confines of the manned space laboratory, indicates either express or implied consent to such activities.

B. FEDERATION PROVIDED PAU WITH ALL DATA OBTAINED BY USE OF THE MULTI-SPECTRAL SCANNER AS REQUIRED BY THE TREATY BETWEEN THE PARTIES

The data obtained aboard the space laboratory was "openly disseminated at cost to all purchasers", including PAU, following necessary processing on earth.²⁹ This procedure achieves the goal established by Article VI, paragraph 3, of the Treaty Between

27. The Treaty Between the Parties, Article VI.

28. Websters Third New International Dictionary, G. & C. Merriem & Co. (1971) at 1647.

29. Record, pg. 2.

the Parties, to make such data available to all member States of the United Nations.

"The business directors of [PAU and Orbital] insisted on free and continuing access to the data of interest to them."³⁰ Inasmuch as PAU has not objected to its citizens business use of the data, and has profited from it, PAU must be estopped from objecting to Federation's use of the scanner to obtain such data.

V. PAU'S TESTING OF THE NUCLEAR POWERED SPACE OBJECT VIOLATED INTERNATIONAL LAW AND THE TREATY BETWEEN THE PARTIES.

A. PAU'S TESTING VIOLATED THE NUCLEAR TEST BAN TREATY AND THE OUTER SPACE TREATY

"Each of the Parties to this Treaty undertakes...not to carry out any other nuclear explosion"³¹ in outer space. PAU's nuclear test was an explosion and thus necessarily violated the Nuclear Test Ban Treaty.³² Further, a nuclear explosive device capable of being detonated at will while aboard a satellite having the ability to change altitude and course on command, is by its nature a nuclear weapon. Such nuclear weapons in space are expressly forbidden by the Outer Space Treaty.³³

Additionally, PAU assured Federation that "there was 'almost no nuclear material left.'"³⁴ This indicates that the nuclear material was left in outer space, contrary to the stated purpose of the Nuclear Test Ban Treaty.³⁵

30. Record, pg. 2.

31. Treaty Banning Nuclear Tests in the Atmosphere, in Outer Space and Under Water; 5 August 1963, 14 U.S.T. 1313, T.I.A.S. 5433, Article I, Section 2 (Hereinafter, Test Ban Treaty).

32. Clarifications to the Record.

33. Test Ban Treaty, supra n. 31, Article IV.

34. Record, pg. 4.

35. Test Ban Treaty, supra n. 31, Preamble.

PAU's experiments with the nuclear powered space object "produced data some of which was useful for weapons design."³⁶ It must be assumed that PAU intended to obtain such data. The use of outer space for weapons design is contrary to the recognition that "the exploration and use of outer space [should be] for peaceful purposes."³⁷

The Nuclear Test Ban Treaty prohibits all nuclear explosions in space, regardless of their purpose. "Each of the Parties to the Treaty undertakes...not to carry out...any other nuclear explosion."³⁸ Had the PAU self destruct device operated as planned it would have violated the Test Ban Treaty. In any event, merely placing such a weapon of mass destruction in orbit violated the Outer Space Treaty.³⁹

B. PAU'S TESTING VIOLATED THE TREATY BETWEEN THE PARTIES

All requirements of the Nuclear Test Ban Treaty and the Outer Space Treaty are expressly incorporated into the Treaty Between the Parties.⁴⁰ PAU'S violations of the Nuclear Test Ban Treaty and the Outer Space Treaty⁴¹ necessarily violate the Treaty Between the Parties.

PAU, knowing that the propulsion and guidance systems of the nuclear powered space object were experimental, that the space object contained a nuclear explosive device, and that there was grave risk of exposing the crew of the manned space laboratory to radiation, carried out experiments involving the space laboratory

36. Record, pg. 3.

37. Outer Space Treaty, supra n. 10, Preamble.

38. Test Ban Treaty, supra n. 31, Article I.

39. Outer Space Treaty, supra n. 10, Article IV.

40. The Treaty Between the Parties, Preamble.

41. See part V, A, supra.

and thereby exhibited a wanton and reckless disregard for human life. Assuming PAU's experiments were appropriate, it would have been more prudent to perform them at a safe distance from the manned space laboratory. PAU's failure to take reasonable measures to avoid these foreseeable risks violated the Treaty Between the Parties.⁴²

PAU's experiments and tests were not "discretionary" as contemplated by the Treaty Between the Parties⁴³ because they violated international law and the safety provision of the Treaty Between the Parties,⁴⁴ thereby failing "to conform to the requirements or obligations imposed under this Treaty."⁴⁵ PAU's unilateral experiments, carried out over the express objection of Federation,⁴⁶ were outside the contemplation of the Parties, and not subject to the indemnification provision of the Treaty Between the Parties.⁴⁷ PAU is solely liable for all damages resulting therefrom.

VI. PAU IS LIABLE FOR ALL DAMAGE CAUSED BY THE NUCLEAR POWERED SPACE OBJECT

A. PAU INCURS LIABILITY FOR ALL DAMAGE RESULTING FROM ITS NEGLIGENCE IN CAUSING THE NUCLEAR POWERED SPACE OBJECT'S COLLISION WITH THE SPACE LABORATORY

"In the event of damage being caused elsewhere than on the surface of the earth to a space object...by a space object of another launching state, the latter shall be liable only if the damage is due to its fault."⁴⁸ PAU's wanton and reckless reconnaissance

42. The Treaty Between the Parties, Article III.

43. The Treaty Between the Parties, Article VI.

44. The Treaty Between the Parties, Article IV.

45. Id.

46. Record, pg. 3.

47. The Treaty Between the Parties, Article VIII.

48. Convention on International Liability for Damage Caused by Space Objects, March 29, 1972, 24 U.S.T. 2389, T.I.A.S. 7762, Article II [Hereinafter cited as The Liability Convention].

of the manned space laboratory caused the collision between the nuclear powered space object and space laboratory.⁴⁹ Thus PAU is liable for all damages arising therefrom.⁵⁰

B. AS A RESULT OF THIS COLLISION THE DECOUPLING DEVICE WAS DAMAGED

"The coupling device, while workable during coupling, developed internal defects and failed to perform effectively during the decoupling in preparation for the separate landing of the two space objects."⁵¹ Federation asserts that the collision between the two objects was the only event which occurred between coupling and decoupling capable of causing "internal defects" in the decoupling device.

First, conservation of momentum requires that the energy imparted to the space laboratory by the collision was equal to that amount of energy necessary to force the nuclear powered space object out of its orbit.⁵²

Second, the collision "did not adversely affect the orbital operation"⁵³ of the space laboratory, thus the energy imparted to it during the collision must have been transferred as mechanical stress.

Finally, the decoupling mechanism, located at the juncture

49. See part V, B, supra.

50. Treaty Between the Parties, Article VIII and Liability Convention, supra n. 48, Article III.

51. Record, pg. 4.

52. Handbook of Physics, ed. by E.U. Condon and Hugh Odishaw, McGraw Hill Book Company, New York, 1958, page 2-14.

53. Record, pg. 3.

of the two portions of the space laboratory, was especially susceptible to the damaging torque which would have occurred when the nuclear powered space object transferred its energy as mechanical stress to the manned space laboratory.

The collision between the two space objects transformed an operating coupling device into one with "internal defects".

C. PAU IS ABSOLUTELY LIABLE FOR ALL DAMAGE CAUSED ON EARTH BY ITS NUCLEAR POWERED SPACE OBJECT

The Convention on International Liability for Damage Caused by Space Objects provides: "A launching State shall be absolutely liable to pay compensation for damages caused by its space object on the surface of the earth."⁵⁴ PAU's nuclear powered space object caused damage to rural farms and industrial property as well as a nuclear power plant in Federation territory.⁵⁵ PAU's activities concerning the nuclear powered space object were unilateral.⁵⁶ As such, PAU is a "launching State" as defined by the Liability Convention⁵⁷ and is therefore absolutely liable for all damages arising from this incident.⁵⁸

D. FEDERATION REASONABLY RELIED ON PAU'S ASSURANCES CONCERNING THE NUCLEAR POWERED SPACE OBJECT, AND AS A RESULT SUFFERED SEVERE DAMAGE

1. FEDERATION'S RELIANCE WAS REASONABLE

Federation relied on PAU's assurance "that the nuclear risks were very low because there was 'almost no nuclear material left,'

54. Liability Convention, supra n. 48, Article II.

55. Record, pg. 3.

56. See part V, B, supra.

57. Liability Convention, supra n. 48, Article I.

58. Id., Article II.

and also because the 'object had a self-destruct mechanism.'"⁵⁹
PAU was in the best position to know the extent of the danger presented by its space object, and had an affirmative duty under the Treaty Between the Parties to provide Federation "with prompt notice of any circumstances of which either is aware relating to risks, dangers and potential harm."⁶⁰

2. PAU IS SOLELY LIABLE FOR ALL DAMAGE CAUSED BY NUCLEAR RADIATION

No evidence is found in the Record to indicate that any portion of the radioactive cloud of debris came from Federation's nuclear power plant. The debris resulted from the remaining nuclear fuel and malfunctioning nuclear explosive device on board PAU's nuclear powered space object.

Furthermore, the Liability Convention was intended to cover nuclear damage whether it results from a nuclear space object, or the collision of a space object into a nuclear installation on earth, or both.⁶¹ The liability which attaches under the Liability Convention is absolute.⁶² Thus it is immaterial whether the nuclear radiation resulted from PAU's nuclear device or Federation's nuclear reactor.

3. THE IRRADIATION OF FEDERATION'S NATIONALS WAS SEVERELY DAMAGING

The Record stipulates that over 10,000 Federation nationals were exposed to 1,000 millirems of radiation. This is more than

59. Record, pg. 4.

60. Treaty Between the Parties, Article III, paragraph 3.

61. United Nations Committee on the Peaceful Uses of Outer Space, Legal Subcommittee, Summary record of meeting, U.N. Doc. A/AC/.105/C.2/SR.118.

62. Liability Convention, supra n. 48, Article II.

five times the exposure allowed by the Federal Radiation Council standard of the United States.⁶³ Although this is a recognized "practical" standard, established by a cost/benefit analysis for the nuclear power industry, this level does not insure that this exposure is safe. Indeed, no level of ionizing radiation is harmless.⁶⁴ Studies show that exposures of one fourth to one third of that caused by the PAU space object produce an increase in childhood cancer of twenty-five percent.⁶⁵

4. FORCE MAJEURE DOES NOT MITIGATE DAMAGES UNDER THE LIABILITY CONVENTION

A "Force Majeure" provision in the Liability Convention was intentionally and thoughtfully excluded by the drafters.⁶⁶ Thus, the compensation for which PAU is liable must include the damage which resulted from the unique weather conditions in Federation.

VII. PAU IS LIABLE FOR ALL DAMAGE CAUSED BY THE UNCONTROLLED RE-ENTRY OF THE ITS SPACE LABORATORY

A. PAU NEGLIGENTLY DESIGNED AND APPLIED PROCEDURES FOR DECOUPLING THE MANNED SPACE LABORATORY

The Treaty Between the Parties provides "All coupling and decoupling procedures and activities shall be under the sole direction and control of PAU and the designated PAU engineer shall be in charge of all such activities."⁶⁷ These procedures "were so inadequate that they proved unworkable in practice."⁶⁸ PAU was

63. J. Gofman and A. Tamplin, Poisoned Power, 96 (1971).

64. Id. at 123.

65. A. Stewart, "Radiation Dose Effects in Relation to Obstetric X-Rays and Childhood Cancer," Lancet, June 6, 1970, at 1185-8.

66. United Nations Committee on the Peaceful Uses of Outer Space, supra n. 61, /SR.91.

67. The Treaty Between the Parties, Article IV, paragraph 2.

68. Record, pg. 4.

negligent in carrying out its duties as required by the Treaty Between the Parties.

The Record also stipulates that "[a]n attempt to rectify the decoupling failure by the PAU engineer failed...[and that] notwithstanding the defective device, the decoupling, according to UTS engineers, could have been made to operate correctly through customary engineering procedures."⁶⁹ PAU was negligent during decoupling for the failure of its engineer, first, by making only a single attempt to rectify the problem, and second, by not following "customary" engineering procedures.

B. PAU IS LIABLE FOR ALL DAMAGE CAUSED BY BOTH PORTIONS OF ITS UNMANNED SPACE OBJECT

1. ABSOLUTE LIABILITY ARISES UNDER THE LIABILITY CONVENTION

"A launching State shall be absolutely liable to pay compensation for damage caused by its space object on the surface of the earth."⁷⁰ That the Parties intended to be "launching States" as defined in the Liability Convention⁷¹ with respect to their own space objects is evidenced by the Treaty Between the Parties which provides "Each Party shall be fully responsible for the design, performance, launching and operation of its own space object."⁷² Thus PAU as the launching state is absolutely liable for all damage caused by the unmanned space object.

69. Record, pg. 4.

70. Liability Convention, supra n. 48, Article II.

71. Id. Article I.

72. Treaty Between the Parties, Article II, paragraph 3.

2. PAU IS LIABLE DUE TO ITS NEGLIGENCE

PAU, negligently developed the decoupling procedures that proved unworkable in practice.⁷³ As a result, PAU's space object returned to earth unmanned. This "was important because it was intended to have personnel aboard both space objects to ensure a safe landing."⁷⁴ PAU's flight control center brought their space object out of orbit even though they "failed at the point of decoupling to maintain separate control over the PAU space object."⁷⁵

PAU, with knowledge of the inherent danger of an unmanned descent to earth, and with the knowledge that they did not have control over their space object, caused that object to return to earth, bringing about the damage both parties reasonably feared.

Federation asserts that PAU caused their unmanned and uncontrolled space object to return to earth on a flight path that resulted in impact upon Federation territory. PAU described its space object's re-entry path as a "planned descent path."⁷⁶ Federation, at the time PAU brought its space object out of orbit, calculated that the object's descent path would cause it to crash into Federation territory.⁷⁷ The fragment which in fact struck and downed a Federation aircraft in Federation territory did so while it descended undisturbed along the planned flight path.⁷⁸

Thus, PAU's negligent behavior gave rise to the uncontrolled and unmanned descent of its space object along a descent path leading

73. See part VII, A, supra.

74. Record, pg. 4.

75. Record, pg. 4.

76. Record, pg. 5.

77. Record, pg. 4.

78. Record, pg. 4.

to Federation territory.

C. FEDERATION WAS REQUIRED TO ATTEMPT INTERCEPTION OF PAU'S UNMANNED AND UNCONTROLLED SPACE OBJECT

Federation reasonably viewed the descent of PAU's space object as an immediate threat to its sovereignty and to the health and safety of its citizens.

Federation knew that PAU's space object was unmanned and uncontrolled, and that it was on a descent path leading to Federation territory.⁷⁹

Federation reasonably believed that consultation with PAU would have been ineffective because of PAU's previous bad faith. In a prior consultation PAU concealed the presence of nuclear material and a nuclear explosive device aboard its nuclear powered space object.⁸⁰

In view of the immediacy of the danger presented, and the magnitude of that danger, Federation had no time to consult PAU.

Federation, believing that failure to act promptly would result in a crash and widespread damage, had a duty to protect its territory and population by any reasonable means. Indeed, if the interceptor had not been fired and the crash and damage occurred, PAU could have defended against the resulting liability claims on the ground, as outlined in the Liability Convention, that Federation's failure to use its interceptor was grossly negligent, or an omission that could be expected to result in damage.⁸¹

79. See part VII, B, supra.

80. See part VI, D, supra.

81. Liability Convention, supra n. 48, Article VI.

D. PAU IS LIABLE FOR DAMAGE CAUSED BY BOTH PORTIONS OF ITS SPACE OBJECT

1. PAU IS LIABLE FOR THE DAMAGE CAUSED BY THE FIRST PORTION OF ITS SPACE OBJECT

The Record stipulates that this portion caused damage to a Federation shopping center as well as Federation nationals.⁸² Under the Liability Convention, PAU, as the launching State, is absolutely liable for that damage.⁸³

PAU is also liable for damage to the Federation satellite. PAU's negligence in returning its space object to earth⁸⁴ resulted in it striking and damaging Federation's satellite.⁸⁵ Under the Liability Convention, PAU is liable for such damage caused by its negligence.⁸⁶

2. PAU IS LIABLE FOR THE DAMAGE CAUSED BY THE SECOND PORTION OF ITS SPACE OBJECT

Absolute liability extends to damage caused to aircraft in flight.⁸⁷ The record stipulates that "the second large fragment that was broken from the PAU space object...caused a commercial airliner of Federation to crash in Federation territory."⁸⁸ Thus, PAU is absolutely liable for the loss of the airliner, the property damage to Federation's earth surface resulting from the crash of the airliner, and the loss of life and impairment of health of persons aboard the airliner⁸⁹, except those who were PAU nationals.⁹⁰

82. Record, pg. 5.

83. Liability Convention, supra n. 48, Article IV.

84. See part VII, B, 2., supra.

85. Record, pg. 5.

86. Liability Convention, supra n. 48, Article III.

87. Liability Convention, supra n. 48, Article II.

88. Record, pg. 5.

89. Liability Convention, supra n. 48, Articles I and XII.

90. Id. Article VII.

The fact that fragments of the space object caused the damage is immaterial since the term "space object" includes its components.⁹¹

VIII. FEDERATION'S PASSAGE OVER PAU TERRITORY BELOW 110 KILOMETERS WAS JUSTIFIED

The provisions by which the parties agreed not to pass less than 110 kilometers above each other's territory must be read in the context of the treaty as a whole.⁹² PAU's negligent acts resulted in a material alteration of the planned descent procedures.⁹³ The 110 kilometer provision was presumably based upon the original re-entry procedures. The forced abandonment of these procedures rendered moot the rationale of the 110 kilometer limit. The severity of these changed circumstances is attested to by the fact that Federation lacked "complete control" over its space object.⁹⁴ Federation acted responsibly under the unfavorable and dangerous circumstances caused by the negligent acts of PAU, and a safe return to earth of both crews was accomplished without damage.

IX. PAU UNDER THE TREATY BETWEEN THE PARTIES AND INTERNATIONAL LAW, SHOULD COMPENSATE THE INJURED PARTIES FOR ALL LOSSES INCURRED, WITHOUT LIMIT

PAU agreed that the "[p]arties undertake this joint venture with full cognizance of the risks, dangers, and potential harm from mishaps and the circumstances associated with activities in outer space...conforming to the fullest extent possible with standards imposed under international law and under the provisions of this

91. Id. Article II.

92. Vienna Convention on the Law of Treaties, Articles XXVI and XXXI, May 23, 1969, U.N. Doc. A/Conf. 39/27.

93. Record, pg. 4.

94. Record, pg. 5.

Treaty."⁹⁵ "A State which suffers damage, or whose natural or juridical persons suffer damage, may present to a launching State a claim for compensation for such damage."⁹⁶ Thus, under the Treaty Between the Parties and international law, Federation seeks the following damages for which PAU owes just compensation.

A. PAU MUST COMPENSATE FOR ALL DAMAGE ARISING FROM ITS DESTRUCTION OF THE SHOPPING CENTER IN FEDERATION TERRITORY

PAU must compensate for:

1. The cost to rebuild those shops destroyed.
2. The loss of life which resulted from the destruction of the shopping center.
3. All medical expenses and pain and suffering incurred by those persons injured.
4. The cost to the government in managing the emergency situation caused by the destruction of the shopping center.
5. Tax revenue lost due to the death of taxpayers, the destruction of tax paying enterprises, and taxable property.
6. The damage to Federation's satellite caused by PAU's space object before it hit the shopping center.

B. PAU MUST COMPENSATE FOR ALL DAMAGE ARISING FROM ITS DESTRUCTION OF THE COMMERCIAL AIRLINER OF FEDERATION AND FOR ANY PROPERTY DAMAGE RESULTING FROM THE CRASH OF THAT AIRCRAFT

PAU must compensate:

1. The commercial airline company for the replacement of their aircraft.

95. Treaty Between the Parties, Article III, paragraph 1.

96. Liability Convention, supra n. 48, Article VIII.

2. For the loss of life resulting from the crash of the commercial airliner.
 3. The injured parties for medical expenses and the pain and suffering they sustained.
 4. Federation for the loss of tax revenue incurred when Federation was forced to manage the emergency situation brought about by the crash of the commercial airliner.
 5. Federation for tax revenue lost due to the death of taxpayers, destruction of tax paying enterprises, and taxable property.
- C. PAU MUST COMPENSATE FOR ALL DAMAGE ARISING FROM THE DESCENT OF ITS NUCLEAR POWERED SPACE OBJECT

PAU must compensate for:

1. The cost of repairing the farms damaged.
 2. The damage done to the rural industrial property.
 3. Damage done to the nuclear power plant.
 4. All expenses associated with the irradiation of their nationals, including present and future medical expenses.
 5. The cost to Federation in managing the emergency situation caused by the crash of the PAU nuclear powered space object.
 6. Tax revenue lost due to the death of taxpayers, the destruction to tax paying enterprises, and taxable property.
- D. PAU SHOULD BE REQUIRED TO COMPENSATE FOR ALL ABOVE-MENTIONED DAMAGES WITHOUT LIMIT

Limits to the total amount of liability, present in several liability treaties in international law,⁹⁷ were discussed in

97. Convention on International Civil Aviation (1944); International Convention on Civil Liability for Nuclear Damage (1963); Brussels Convention on Liability of Operators of Nuclear Ships (1962).

drafting the Liability Convention,⁹⁸ but were not included in the final treaty. The express policy of the Liability Convention is "prompt payment...of a full and equitable measure of compensation to the victims of such damage."⁹⁹ PAU's reconnaissance of the space laboratory and the uncontrolled descent of its space object showed PAU's wanton and reckless disregard for human life. As one authority has forcefully argued, "limits on liability are not likely to be established if the activity giving rise to damage is not socially desirable."¹⁰⁰

Thus, PAU must fully compensate Federation for damage to persons and property which resulted from the crashes of PAU's space objects in Federation.

E. DUE TO THE INSUFFICIENCY OF THE RECORD AT PRESENT THERE SHOULD BE A SUBSEQUENT HEARING TO DETERMINE THE FOLLOWING

1. Replacement cost of structures and buildings;
2. Life expectancy and earning potential of deceased individuals;
3. The extent of individual injury, pain and suffering incurred and the amount of medical expenditures involved;
4. The amount of compensation due the state of Federation for its tax dollars expended in dealing with the crashes;

98. United Nations Committee on the Peaceful Uses of Outer Space, supra n. 61, L.59 (Argentina), /L.62 (Austria et al.), /L.10 (Hungary), /L.8 (U.S.).

99. Liability Convention, supra n. 48, Preamble.

100. McDougal, Lasswell and Vlasic, Law and Public Order in Space, Yale University Press, 1963, p. 618.

5. The amount of compensation due to the state of Federation for the tax revenue forgone as a result of the death of and injuries to individuals as well as the damage to income producing property.

All of which is respectfully submitted,

JAMES I. COLLINS

James I. Collins

GEORGE HATFIELD

George Hatfield

RONALD R. LAMB

Ron Lamb

JOEL LEVY

Joel Levy

TERESA WILLIAMS

Teresa Williams

CERTIFICATE

We certify this counter-memorial complies with the 1980 Rules of this competition.

JAMES I. COLLINS

James I. Collins

GEORGE HATFIELD

George Hatfield

RONALD R. LAMB

Ron Lamb

JOEL LEVY

Joel Levy

TERESA WILLIAMS

Teresa Williams