

1980 PHILIP C. JESSUP INTERNATIONAL LAW MOOT COURT COMPETITION

MEMORANDUM FOR JUDGES

INTRODUCTION

This problem is designed to have law students gain familiarity with the new fast-developing field of law to govern space activities commonly referred to as "Space Law". The hypothetical problem will require research of all presently existing Space Law Treaties and of current organization and efforts within the United Nations to formulate additional governing principles. The participants must also draw on general principles of law and on customary international law. It will give participants an awareness of the role and inherent limitations of the United Nations as the springboard to international agreements and domestic legislation to govern space activities.

In a single decade after "Sputnik I", the far-reaching "1967 Space Law Treaty" (Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies, effective October 10, 1967) was adopted. (18 UST 1410, TIAS 6347, 610 UNTS 105). This treaty set forth general principles of law and legal guidelines to govern space activities. Within only eight (8) years thereafter, three (3) additional treaties became effective, viz:

1968 - Agreement on the rescue of astronauts, the return of astronauts and the return of objects launched into outer space, effective December 3, 1968. (19 UST 7570, TIAS 6592, 675 UNTS 119);

1972 - Convention on international liability for damage caused by space objects, effective September 1, 1972. (14 UST 2389, TIAS 7762); and

1975 - Convention on registration of objects launched into outer space, effective September 15, 1976. (28 UST 645, TIAS 8480).

In November 1979, the General Assembly of the United Nations approved and opened for signature the text of a treaty on the moon. (See Annex II, Report of COPUOS, UNGA Official Records: 34th Session, Supp. No. 20/A/34/20) on which a consensus had been reached by the United Nations Committee on the Peaceful Uses of Outer Space (UN COPUOS). Article I of the treaty expressly recited that the provisions therein relating to the moon shall also apply to (1) other celestial bodies within the solar system, other than the earth, and (2) to "orbits around or other trajectories to or around it."

Article I of the 1967 Space Law Treaty begins with the recital: "The exploration and use of outer space, including the moon and other celestial bodies...shall be the province of all mankind". The Moon Treaty repeats this recital (Art. IV), but adds the new concept -- "The Moon and its natural resources are the common heritage of mankind..." (Art. XI).

The "General Setting of the Problem" in its present exercise further extends the above recited concepts in a purported UN General Assembly Resolution of December 13, 1979, which declares that outer space activities 'shall be in accordance...

with the fundamental principles of law, in particular with the principle that outer space is the province of mankind and the celestial bodies are a part of the common heritage of mankind, and their exploration and use shall be for the benefit of all mankind.'

This Resolution calls upon the United Nations Secretary-General to assure compliance. It labels any non-compliance practice, prima facie, an act of aggression to be referred to the Security Council for action under Chapter VII of U.N. Charter.

The term, "Aggression", has been defined by the U.N. General Assembly, on December 14, 1974 in the Resolution 3314 (XXIX) as...

"The use of armed force by a State against the sovereignty, territorial integrity or political independence of another State, or in any manner inconsistent with the Charter of the United Nations, as set out in this definition."

The "definition" consists of eight (8) articles, the applicable one is Article 4 reciting that the acts enumerated as examples of aggression are not exhaustive and the Security Council may determine that other acts constitute aggression under the provisions of the U.N. Charter. Query: Whether the use of armed force is a prerequisite to a finding of aggression, in light of the above recital of Article I?

As the U.N. General Assembly is not a legislature, its resolutions of themselves do not amount to binding legislation; they frequently serve, however, as a catalyst for treaties subsequently formally signed and accepted by States. Thus, argument may be made that the December 13, 1979 purported Resolution not yet adopted in treaty form is not binding law. However, argument may be forthcoming that as there was no recorded negative vote, such adoption was a true reflection of accepted international practice, and as such, amounts to customary international law binding on all States. Article 38 of the Statute of the International Court of Justice, recites, "The Court, whose function is to decide in accordance with international law...shall apply ...

International custom, as evidence of a general practice accepted as law." Such "customary international law" was urged

by some States following a similar absence of negative vote in the adoption on December 13, 1963 by the U.N. General Assembly of its Resolution 1962 (XVIII) of the Declaration of Legal Principles Governing Activities of States in the Exploration and Use of Outer Space. Such a view was not concurred in by many States, but became academic when the recited principles were incorporated into the 1967 Space Law Treaty.

The foregoing, however, may be compared to U.N. action relating to the high-seas. In December 1970, the U.N. General Assembly unanimously accepted a Resolution declaring the oceans beyond States, territorial seas to be "the common heritage of mankind." An earlier U.N. Resolution passed (although with some negative votes) calling for a moratorium on sea-bed mining until an international treaty was agreed upon. A Law of the Sea Conference was subsequently convened, among other purposes to establish an international governing body to regulate exploration of "the common heritage area", and to determine the outer limits of the Continental Shelf, in order to define "the common heritage area." As is well known, the Law of the Sea Conference sessions to-date have failed to obtain an agreed text.

The participants in handling customary international law should show evidence of their familiarity with the application of that law in outer space. Under the questioning of the judges they can advise (with appropriate authorities from the general sources) that they are drawing upon such law (a) because the general principles and guidelines in the Outer Space Treaties are of such generality that the parties to those treaties had contemplated the gradual development of further, more precise law that would arise out of

the practice of States in exploring and exploiting outer space; and (b) that they are distinguishing the "practice" of States by showing the greater weight to be given to the conduct, or action, of States in the actual use of outer space from the statements or polemics that might be made in such declarations as the Bogota Declaration, or in the "debates" in the United Nations, or in the resolutions adopted in the United Nations; and (c) that there is even the possibility that through their "practice" the outer space activities of States may show a gradual revision, modification or "gloss" upon the general principles of the Outer Space Treaties. By pursuing this approach, the judges can establish whether the participants are looking to a law in action - law arising from practice - or are really just being philosophical and speculative concerning the law they are referring to.

Secondly, the judges can pursue the same approach with the "general principles of law" recognized by nations. The Soviet Union, for example, tends to recognize only the "general principles of international law" and this is a major distinction. It would mean for those, who espouse this view, a severe limitation on reaching into the domestic practice of States, with great stress on shared principles among States with widely differing views as to what international law is all about. The participants here may also get into speculative argumentation that will indicate weaknesses in their presentation, and can be given short shrift by the judges for failing to move sharply into the treaties themselves. The treaties contain the general principles of law - or the general principles of "international law" - because they have

been agreed to by the Parties. The judges are therefore enabled to push student-participants into weaknesses in argumentation if they get badly caught on the notion that the Statute of the International Court of Justice is limited to "general principles," rather than "general international principles."

The participants may also be asked to explore into the meaning of the "common heritage of mankind," to establish whether it is a "principle" and if so a "legal principle," and if so how it has reached that stage among nations. If the judges seek to pursue this, they can examine into the use of this notion in the law of the sea and in the moon treaty, whether the principle is a general principle of law, or limited to the content and context of those treaties, or whether so ambiguous as to have no real meaning shared among States, notwithstanding a wide number of claims by individual States. The 1980 Jessup does not range deeply into these issues, and therefore the judges can indicate that participants too deeply concerned are showing weak argumentation by devoting too much of their limited time to their discussion. However, it will be noted that the exploitation of outer space includes the exploitation of energy, the right to geostationary orbits and broadcast spectrum, as well as resources so that some use of this "principle" and some discussion can be pursued. The able participants will quickly dispose of the "common heritage of mankind," in any event, because of its ambiguity. (See Annex)

THE FEDERATION-PAU TREATY

Argument may be made as to the binding effect of the May 1, 1979 Treaty (hereinafter referred to as the "Agreement") between FEDERATION OF CELESTIAL STATES ("Federation") and PEOPLES ASTRAL

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UNION ("PAU"). The Agreement recited that FEDERATION and PAU are parties thereto, and is presumed to have been signed by authorized representatives of the two parties. Unlike the Moon Treaty, which recites in Article XIX that it is subject to ratification by the signatory states, the Agreement recites that it enters into force upon signature pursuant to the constitutional practices of each party. This appears to effect a binding agreement in accord with Paragraph 1(b) of Article 7 of the Vienna Convention on the Law of Treaties, which provides: "A person is considered as representing a State ... for the purpose of expressing the consent to be bound by a Treaty if:

(b) It appears from the practice of the States concerned or from other circumstances that their intent was to consider that persons representing the State for such purposes and to dispense with full powers."

In addition the Vienna Convention on the Law of Treaties should be consulted by the judges as a general source of questions and background, because we are primarily concerned with interpretation of treaties and international agreements in this problem. That Convention indicates the customary international law with respect to treaties - and even though it is not in force (it is in force for the Parties to this Jessup Problem), it would apply as customary international law. The provisions in the Convention with respect to the definition of treaties, authorized parties, interpretation and application, breach, termination and suspension cannot be repeated or discussed in detail here. However, they go to the essence of dealing with a number of issues of this problem.

Copies of the Convention should, if possible, be procured by the judges for their careful review prior to undertaking their assignments for this Jessup.

THE ISSUES

ISSUE NO. 1 - Whether PAU or FEDERATION have violated any treaty obligations they might have had, including that of May 1, 1979.

(A list of the treaties to which both are parties to, is set forth in App. "A" to the general setting of the problem).

REGISTRATION REQUIREMENTS

The 1975 Convention on Registration of Objects Launched Into Outer Space requires a launching State to maintain a registry on which it records its launching of space objects into earth orbit or beyond (Art. II, Paragraph 1). In addition, such State of Registry is directed to furnish to the U.N. Secretary-General "as soon as practicable", described information pertaining to the object launched, including "basic orbital parameters" and "general function of the space object". The Secretary-General is required to maintain a Register in which this information furnished is recorded; "full and open access" is to be provided to such information. (Article III).

The General Setting of the Problem, states that FEDERATION had not complied with the requirements of the Registration Convention, which it was also obligated to do under Article V of the Agreement. This is a serious violation of the Registration Convention. Both the scientific and legal aspects of registration call for accurate and prompt reporting. This should include data as to the launch of the space-shuttle and the subsequent launch therefrom of the space object which joined PAU's space object to become a space

laboratory. The launching of additional objects from the space laboratory should also have been registered as should space objects returning to earth. Additionally, the joinder and subsequent separation of the objects comprising the laboratory could have been subsequently entered as well as data on the space object partially shattered in space. Scientific research requires freedom from error and timely information. Accurate information may assist in fixing liability for damage from space objects. Knowledge of objects and debris in orbit is necessary in charting the flight-path of space-craft, particularly manned craft, and is helpful in locating astronauts who may have emergency landings, and in their return and the return of space vehicles to State of origin under the Return of Astronauts and Space Objects Agreement.

The participants might be questioned whether the violations of the registration convention might have some form of substantive impact, or procedural impact. The latter might be implied if it be argued that there is a presumption against a Party who has failed to register in a liability incident, i.e., that such a Party cannot deny responsibility for damage that was apparently the result of his space object. Registration would then serve to establish a Party's objects, and therefore, indirectly his responsibility.

THE LAUNCHING FROM FEDERATION'S SHUTTLE

The Agreement provided that both parties thereto "will launch their two separate space objects ... from their respective territories ... However, FEDERATION launched its space object from its space shuttle. While this was not a material breach incurring legal consequence in view of the successful joinder with PAU's

space object, it nevertheless created a risk that may have (but fortunately did not) adversely affect PAU's rendezvous ability.

THE MULTI-SPECTRAL SCANNER OPERATION

Under the 1967 Space Law Treaty, the activities of non-governmental entities in outer space "require authorization and continuing supervision by the State concerned." States party to the treaty "bear international responsibility for national activities in outer space...whether...carried on by governmental agencies or non-governmental entities, and for assuring that national activities are carried out in conformity with the provisions set forth in the...Treaty." FEDERATION is thus responsible for UTS personnel's operation of the multi-scanner. The failure to reveal to PAU the test data and parts of other data obtained from the SCANNER tests was a violation of the Agreement (Article VI). FEDERATION may contend that the data collected regarding surface features and earth resources was not an experiment or test and hence, not within Article VI. PAU would argue that all remote sensing is yet regarded as experimental and/or "scientific work" under Article VI. Again, the question of compliance with the fundamental principles may be raised, particularly the "province of mankind" and the common heritage of mankind".

THE NUCLEAR TEST AND USE OF NUCLEAR POWER IN OUTER SPACE

Was the conducting of nuclear tests in violation of the Agreement? PAU's contention that the test was a permissible "discretionary" test under the Agreement and not subject to FEDERATION's veto may be countered by FEDERATION's observing that under Article VI of the Agreement, the word, "discretion" is used in conjunction with any "experiment" contemplated by either party.

In the initial sentence of the article it recites that "all experiments, tests and scientific work shall be conducted as follows: Each experiment shall be conducted...as the head of the space teams ... agree, such experiment then to be conducted jointly, or separately pursuant to that understanding..." (under-scoring supplied).

FEDERATION may contend that the use of nuclear fissionable material as a power source was in violation of the 1967 Space Law Treaty provision prohibiting placing a nuclear weapon or weapon of mass destruction in outer space. The nuclear material was aboard for purposes of nuclear tests as well as for use as fuel and therefore the material under certain circumstances could detonate. PAU may be expected to respond that such nuclear material by itself cannot detonate and that at worst, if the container for the nuclear materials burst, there would be some radiation seepage. Depending upon the circumstances damage might be compensable under the 1972 Liability Convention. The Russian Cosmos 954 crash into Canada on January 24, 1978, which matter has not yet been resolved, may be cited. The U.N. General Assembly has charged the COPUOS Scientific and Technical Sub-Committee to consider the technical and safety measures relating to the use of nuclear power sources in outer space (UNGA Res. 33/16, p.8). The Working Group established by the Sub-Committee reported its belief that nuclear power sources can be safely used in outer space, provided safety considerations outlined in its report are complied with "in full." The working group also concluded, and COPUOS has concurred, that it continue with further studies on nuclear power sources. COPUOS has also determined that its Legal Subcommittee should include in the agenda of its next meeting, an item entitled, "Review of existing international law

relevant to our space activities with a view to determining the appropriateness of supplementing such law with provisions relating to the uses of nuclear power sources in outer space". (UN COPUOS Report, 1979; UNGA Official Records - 34th Session, Supp. No. 20 (A/34/20)). The U.N. General Assembly in its November 1979 Resolution on COPUOS activities directed the undertaking of the desired studies by the COPUOS subcommittee.

ISSUE No. 2 - Whether FEDERATION violated international law in regard to direct broadcasting, remote sensing or air-space sovereignty?

SOVEREIGNTY OVER THE GEOSTATIONERY ORBIT?

FEDERATION launched from the space shuttle and raised to geostationery orbit (an altitude of about 22,300 miles), a satellite that collected data relating to the weather and resources of PAU. This satellite being in such orbit would travel at a speed synchronous to the earth's rotation speed, which would keep the satellite always above the same territory. This "hovering" clearly is in outer space. However, some equatorial states have asserted, and the U.N. General Assembly has charged the COPUOS Legal Subcommittee to consider, the claim to sovereignty over the geostationery space above their territories. The genesis of such claim is the declaration signed in Bogota, Colombia on December 4, 1976 and known as the Bogota Declaration. It states in pertinent part, that...

"the geostationery synchronous orbit is a physical fact linked to the reality of our planet because its existence depends exclusively on its relation to gravitational phenomena generated by the earth, and that is why it must not be considered part of the outer space. Therefore, the segments of geostationery

synchronous orbit are part of the territory over which Equatorial states exercise their national sovereignty."

While the above position may be raised by PAU, FEDERATION's position would probably be that the satellite being in outer space is not infringing on the subjacent States' sovereignty. Further they may argue that under the 1967 Space Law Treaty "Outer Space... is not subject to national appropriation by claim of sovereignty..." (Art. III), and that "Outer Space...shall be free for exploration and use by all States" (Art. I).

The participants should be queried about the legally binding force of the Bogota Declaration. This Declaration appears in practice to be a declaration of intention. There is no practice showing that the signatory States fully expected it to be legally binding. They recognized that it was limited to the States involved, and could not necessarily apply to all States. They must have intended the declaration as a proclamation of their future claims. The participants can also allude to the reaction of other States i.e., whether those States took the declaration as binding them (which in the case of the United States and Soviet Union they did not).

The participants can compare the Declaration to a Resolution of the United Nations General Assembly and show that it is of the same genus. Or they might want to compare it with the Monroe Doctrine, and the way in which that instrument was treated by the United States, the Latin American States, and other States in Europe. The appropriate use of authorities for undertaking this comparison is essential.

(Note: Other features relating to the geostationary orbits

might be raised by students, but this can become a "backwater" in the argumentation, particularly if the participants show a tendency to get lost in their authorities or unclear about using them. However, the judges can use the exercise as a measure of the participant's skill in argumentation or in fending off excessive concentration on irrelevant issues).

THE WHEAT CROP FAILURE

PAU may contend that FEDERATION's acquiring of economic data about PAU was an infringement upon its sovereignty. Having done so PAU claims that FEDERATION also failed in its responsibilities to apprise PAU of the information it had obtained by remote sensing of the condition of its wheat and other crops and of using such information to its economic advantage and to the economic detriment of PAU (see para. 3,5, Art. III, Art, VI and VII of the Agreement; Declaration on Principles of International Law Concerning Friendly Relations and Co-operation Among States in Accordance with the Charter of the United Nations (UNGA Res. 2625 (XXV) Oct. 24, 1970, U.N. Official Records of the General Assembly, 25th Sess., Supp. No. 18 (A/8018), and the "Helsinki Accords", 1975). U.N. Resolution 2625 in relation to the principle of noninterference in matters within the domestic jurisdiction of another State, in part recites "...all forms of interference or attempted threats against the personality of a State or against its political, economic and cultural elements, are in violation of international law." The Helsinki Accords, Final Art., in its section on "Cooperation in the Field of Economics, of Science and Transportation "recites" that the growing economic interdependence...emphasizes the need for promoting stable and equitable international economic relations..."

and that "promoting further development of their economic relations... should take place in full respect for the principles set forth..."

The subsection on "Commercial Exchanges" in its "General Provisions" recites:

"The participating States...[will] consider that their trade in various products should be conducted in such a way as not to cause or threaten to cause injury - and should the situation arise, market disruption - in domestic markets for those products and in particular to the detriment of domestic producers of like or directly competitive products; ... (Conference on Security and Cooperation in Europe - Final Act, Helsinki, 1975, pp. 89,90: U.S. Dept. of State Bulletin 8826; General Foreign Policy Series 298, August 1975).

FEDERATION may contend that these recitals are not binding international agreements, but political documents expressing precatory goals; that the information obtained as to the wheat crop information was not among the joint tests planned and having been obtained by remote sensing from free outer space was not in violation of the subjacent State's (PAU's) sovereignty.

REMOTE SENSING OF STATES AND DISSEMINATION OF RESULTING DATA

FEDERATION's use of the multi-spectral scanner to collect data on surface features and resources of PAU, ORBITAL and other States was obtained and disseminated to all purchasers at cost without having obtained consent of the sensed States. FEDERATION may contend that its actions were lawful because: (1) the scanning was accomplished while in free outer space, and (2) under Article 19 of the Universal Declaration of Human Rights, it could "receive and impart information...through any media and regardless of frontiers."

The participants can also be queried concerning the human

rights provisions set forth in the Helsinki Accords, and they can address and distinguish resolutions relating to permanent sovereignty over natural resources. Quick disposal of these issues and effective use of authority will be the determining elements for the judges in dealing with these matters.

PAU may contend that States have sovereignty over their wealth and natural resources and that such sovereignty is violated by the remote sensing thereof, especially when the information obtained is transmitted to a Third State, without the advance consent of the sensed State.

The COPUOS, and its Subcommittees are considering at request of the U.N. General Assembly, questions relating to the remote sensing of the Earth by satellite on a priority basis. The Legal Subcommittee is to continue "to give detailed consideration to the legal implications of remote sensing of the earth from space, with the aim of formulating draft principles relating to remote sensing" (COPUOUS Report, 1979; UNGA Official Records: 34th Sess., Supp. #20 (A/34/20,) pp. 5,6).

The possible contentions set out above are arguments which were presented at the COPUOS Legal Subcommittee session. As many States now participate in benefits of remote sensing, objection to the initial sensing is rarely raised; however, the objections to dissemination of the sensed data to a third State without consent of the sensed State continues to be asserted. These States that such dissemination has adverse economic, political and national security implications. Some States suggest a principle that every State has a right to declare that certain types of primary data and analysed information obtained by remote sensing of its

territory may not be published or given to third parties without the consent of the sensed State. An example is remote sensing data with a spatial resolution better than 50 meters and analyzed remote sensing information premised on such data. The resolution obtained by FEDERATION, being 108.50 meters, may be objected to by PAU on this ground. FEDERATION may respond that spatial resolution from a technical viewpoint is not a reliable or standard reference and that further study thereon is desired by COPUOS (ibid).

Perhaps further argument may be advanced by PAU as to photography from space of its ground military facilities observing that a State's legislation has been upheld for acts affecting its security, wherever they occur, such as counterfeiting its money or conspiring the overthrow of its government. FEDERATION may respond that photography from free outer space is not unlawful, being similar to the accepted practice of electronic surveillance or photographing, of a coastal State from the high seas or from the airspace above such seas.

States generally agree that the sensed State should be given the remote sensing data obtained on a priority basis, and in any event no later than such information is given to a third State.

FEDERATION AND UTS DIRECT BROADCASTING TO OTHER STATES

PAU may contend that FEDERATION's direct broadcasting, including television, to receivers in PAU without PAU's consent was an unlawful infringement of its sovereignty, whether done directly by FEDERATION or by UTS, the multinational corporation domiciled in FEDERATION. PAU may point out that under Article VI of the 1967 Space Law Treaty, Parties to the Treaty bear international responsi-

bility for their national activities in space "whether such activities are carried on by governmental agencies or by non-governmental entities" and that non-governmental entities in space "shall require authorization and continuous supervision by the appropriate State" (Art. VI). Further, PAU may contend that it was a violation of its sovereignty as well as of ITV regulations issued pursuant to the International Telecommunications Convention. This could be a Treaty violation, for one State to subject another State to direct radio or television broadcasts without the latter's consent. Radio Regulation 428A reads:

"In devising the characterization of a space station in the broadcasting satellite service, all technical means available shall be used to reduce, to the maximum extent practicable, the radiation over the territory of other countries unless an agreement has been previously reached with such countries."

A plan consistent with the above regulation was adopted at the 1977 World Administrative Radio Conference (WARC) which in providing for allocation of the radio spectrum would operate to preclude direct broadcasting into another State unless the broadcast unlawfully used the channel allocated to the receiving State.

Participants might be queried concerning the WARC conference and the capability of the ITC to control the use of the radio spectrum, including the competence to control the placing of the broadcast satellites themselves. This would raise argument only from the participants who have carefully examined this problem, and the documents of the recent Geneva conference (Late 1979).

FEDERATION may contend that a requirement to obtain the receiving State's consent would contravene the principle of free flow of information, a fundamental human right recited in Article 19

of the Universal Declaration of Human Rights and reaffirmed in many international instruments, the most recent of which is the 1978 UNESCO Declaration.

The Legal Subcommittee of UN COPUOS has been considering as a priority item the request of the U.N. General Assembly to draft principles to govern the use by States of artificial Earth satellites for direct television broadcasting. A major issue yet unresolved, here considered is the purported conflict of the principle of free flow of information with the principle of respect for State sovereignty (see par. 18, ANNEX II, Report of the Legal Subcommittee, UN COPUOS on its 1979 meeting; A/AC.105/240, Apr. 10, 1979).

WHETHER FEDERATION'S SPACE OBJECT LANDING VIOLATED PAU'S AIRSPACE

FEDERATION's space object on a controlled descent passed through space above PAU's territory at points less than 110 kilometers above sea level. FEDERATION had agreed to avoid crossing PAU's airspace. PAU accepted "the prevailing practice under international law" as to where outer space begins. Did FEDERATION violate PAU's airspace?

There is presently no fixed delineation as to where sovereign airspace ends and free outer space begins. There is currently a Soviet proposal in the UN COPUOS for a U.N. General Assembly declaration that an object above 100/110 kilometers above sea level would be in outerspace.

This proposal did not obtain the necessary consensus for adoption. Supporters of the proposal were of the opinion it reflected the prevailing view that objects orbiting at such altitudes

were in outerspace. The sponsors of the draft Resolution explained that the proposal was not intended to establish a demarcation line between airspace and outer space. Efforts to establish such a demarcation line should be later attempted by Treaty, which conceivably would establish the beginning of outer space at an altitude lower than the 100/110 km. delineated in the proposed Resolution.

As neither the Convention on International Civil Aviation (the so-called "Chicago Convention of 1944"; TIAS 1591, 15 UNTS 61 Stat. 1180, which in Article I declares that "every State has complete and exclusive sovereignty over its airspace above its territory) nor the 1967 Space Law Treaty (which in Article I declares that "outer space...shall be free for exploration and use") nor any other international accord has determined the upper limits of airspace or the beginning of outer space, the conclusion cannot be made from the General recital of the Problem that FEDERATION violated PAU's airspace.

ISSUE NO. 3

Whether PAU violated international law by its nuclear tests and decoupling activities?

PAU'S NUCLEAR TESTS

It is noted that the nuclear tests are not referred to in the General Setting of the Problem as nuclear weapons tests, but as "peaceful nuclear tests". PAU contends that such tests were to ascertain helpful data for exploitation of outer space; and may further contend that these were not weapon tests although the data obtained from the tests would be useful for weapons' design.

FEDERATION may observe that while a question may exist whether insertion of nuclear fissionable materials in outer space for nuclear testing resulting in a nuclear detonation would be tantamount to placing a nuclear weapon in Earth orbit in violation of Article IV of the 1967 Space Law Treaty, any "nuclear explosion" in outer space would fall within the express wording of the prohibition of the Treaty Banning Nuclear Weapons Tests in the Atmosphere, In Outer Space, and Under Water, which came into force October 10, 1963. (App. A. Item 8, herein).

THE DECOUPLING OF THE SPACE OBJECTS COMPRISING THE LABORATORY

PAU may contend that the decoupling failure was due to FEDERATION's providing a defective device. FEDERATION was responsible for the specifications for manufacture of the decoupling device and was obligated under the Agreement to provide a device "in full and certain working order". In reference to the decoupling, FEDERATION may contend that the decoupling device - as indicated in the General Setting of the Problem - developed internal defects after its installation and that prior to its installation it was tested and was in full and certain working order as required by Article IV of the Agreement. PAU under the Agreement had sole discretion and control of the decoupling procedures and was to provide an engineer "fully familiar with the decoupling apparatus." FEDERATION may declare that the possibility of a failure of the decoupling device was foreseeable as a possibility and procedures for correction were issued by PAU, but that the implementing directives of PAU "proved unworkable in practice." FEDERATION may assert that PAU's engineers could have made the decoupling operate properly through customary engineering procedures, and it

was nevertheless PAU's responsibility to accomplish the decoupling. Since PAU failed in its duty under the Agreement to prescribe adequate procedures for a dangerous foreseeable contingency which did occur; FEDERATION may say that the PAU failures amounted to a violation of the bilateral Agreement.

ISSUE NO. 4

To resolve liability claims that have arisen as a result of activities of FEDERATION and PAU.

CLAIMS BY NATIONALS UNDER LIABILITY CONVENTION

It may be noted that the Liability Convention expressly provides that its provisions "shall not apply" to damage caused by a space object of a launching State to its own nationals, or to foreign nationals "during such time as they are participating in the operation of that space object..." Thus, the nationals of PAU and FEDERATION have no recourse under the Liability Convention against their respective governments for any damages sustained as a result of the space activities herein concerned. However, foreign nationals not participating in the space mission of launching State nor being in the immediate vicinity of a planned launching or recovery area on invitation of the launching State could recover against the launching State under the Liability Treaty, except to the extent of the launching State's exoneration - as when such State's activities are not in violation of international law and the damage to the foreign national resulted from the national's gross negligence, or the actions were not done with intent to cause damage.

It may further be noted that under the Liability Convention

(Art. I), the term "damage" includes death, injury and loss or damage to property; and the term "space object" includes "component parts of a space object."

PAU's WHEAT CROP LOSS

PAU may contend that it was agreed that the International Court of Justice, where appropriate, could decide issues ex aequo et bono (in justice and fairness), and thus PAU should be awarded monetary damages against FEDERATION for FEDERATION's breach of its agreement and violation of international law, as herein before discussed, for not apprising PAU of the wheat virus and other adverse crop conditions and FEDERATION's profiting thereby in the wheat commodities market to the detriment of PAU's economy.

FEDERATION's response may be that its dealings on the world market were normal supply and demand transactions, and that while it learned of PAU's crop problems from free outer space, PAU could and should have more readily obtained the same and more accurate information from ground inspection of its crops.

PAU's NUCLEAR FUELED SPACE OBJECT'S CRASH IN FEDERATION

PAU's space object with nuclear fissionable material aboard crashed in the territory of FEDERATION. Under Article III of the Agreement, each Party was obligated to take "all possible measures to prevent and avoid harmful effects that might arise from their joint activities." FEDERATION may contend that PAU because of the radiation danger in event of a mishap to its space object, had an increased obligation to assure safe operation of the space object in the vicinity of the space laboratory; that under Article II of the 1972 Liability Convention, PAU had an absolute liability to

all foreign persons on the surface of the Earth or in the airspace suffering damage proximately flowing from the impact of the PAU vehicle, including not only damage to farms, industrial property and the nuclear plant, but also for any resultant ill effects, including in some cases cancer, caused to persons from their exposure to the 1000 millirems of nuclear radiation.

PAU may contend that the nuclear fueled space object's activities were contemplated by the Agreement and that both Parties assumed the risks involved (see para. 1,2, Art. III). Further PAU may claim that the Liability Convention does not apply to the nuclear damage in that the exposure did not flow directly and immediately from the crash, but was a remote result due to other intervening consequences, particularly the unique weather conditions which caused an inversion and held the radioactive cloud for the two week period. The use of nuclear fissionable material as fuel in the reconnaissance activities of its space object was lawful. PAU will say, however, if the Liability Convention was held to apply, that PAU was exonerated from liability under Article VI of the Convention because of the failure of the UTS designed self destruct device whose purpose was to prevent nuclear risks (Note: In the General Setting of the Problem, FEDERATION has assumed the responsibilities of UTS in claims arising from the recited activities); and by the negligence or omission of FEDERATION knowing of the use of nuclear fissionable material by PAU in failing to promptly do the necessary testing to ascertain the presence of contamination and to notify PAU as contemplated by Article 5 of the Return of Astronauts and Space Object Treaty so that PAU could act to eliminate possible danger or harm.

FEDERATION in reply may contend that para. 2 of Article VI applies where the damage has resulted from activities which are not in conformity with international law and PAU violated international law in conducting nuclear tests. Proceeding with the reconnaissance activities around the space laboratory with nuclear fissionable material being use as fuel was, FEDERATION will state, in violation of Article IX of the 1967 Space Law Treaty and failed to give due regard to the safety of the laboratory and its personnel. FEDERATION may also contend there was a violation when PAU failed to avoid introduction of harmful contamination in space and that such action violated principles formulated and promulgated in accordance with the Charter of the United Nations, such as the Stockholm Principles, the Helsinki Accords and Declaration on Principles of International Law Concerning Friendly Relations and Cooperation among States (see App. 'A' to Jessup Problem, Nos. 12,16,18). FEDERATION may claim that they could and did lawfully rely on PAU's advisement that nuclear risks were very low, and that under Article VIII of the Agreement FEDERATION should be indemnified and held harmless for any claims arising from the crash in FEDERATION of PAU's nuclear fueled space object, including damages from the exposure of people to the nuclear radiation.

LEGAL RAMIFICATIONS OF FEDERATION'S ANTISATELLITE INTERCEPTOR STRIKING PAU'S SPACE OBJECT

The landing and recovery of the separated space object that had constituted the laboratory, under Article IV of the Agreement was to be "under the exclusive control and direction of the Party that owns it, and under the direction of that party's

space control center." Both control centers were aware of the decoupling problem "and that the decoupling failure could lead to a risky landing on the part of...the space object" (from the General Setting of the Problem, 3rd par. p.4), particularly when no personnel were aboard (ibid) as in the case of the returning PAU space object following its disengagement.

FEDERATION may contend that under Article II of the Liability Convention, PAU's liability was absolute "for the damage caused by its space object on the surface of the Earth or to aircraft in flight" and that its action in firing on PAU's space object was an authorized act of self preservation akin to self defense under Article 51 of the U.N. Charter and the "effective steps to eliminate possible danger or harm" envisaged in paragraph 4, Article 5, of the 1968 Agreement to Return of Astronauts and Space Objects. FEDERATION may argue that the damage subsequently occurring was the responsibility of PAU for its failure to obtain direction and control of its space object following its disengagement from FEDERATION's space object and that FEDERATION should recover from PAU compensation for the damage sustained by FEDERATION's nationals at the shopping center or aboard the aircraft. Such damage, FEDERATION will argue, should not be reduced by these victims failure to comply with the FEDERATION seat belt law, this being a matter between FEDERATION and the passengers, not diminishing the culpability of PAU. Under this rationale, using Article VIII of this Agreement and paragraph 1a, Article IV of the Liability Convention, FEDERATION should be reimbursed or held harmless by PAU for awards to third States or their nationals who were in the

shopping center or aboard the commercial airliner or to PAU's citizens, if any, who obtained recovery against FEDERATION under its domestic legislation or under another treaty.

Aside from its prior assumption of risk contention, PAU, may observe that under Article III of the Liability Treaty, when there is damage elsewhere than on the surface of the Earth to a space object of another launching State, the latter is liable only if damage is due to its fault or the fault of its agents. Thus, fault is the test of PAU's liability for colliding with the earth launched space object of FEDERATION that was launched during the space laboratory orbits. However, as such later launch by FEDERATION was a willful violation of its responsibility under Article III of the Agreement wherein the Parties agreed not to launch any earth bound space objects until after the objects comprising the space laboratory had returned "in order to ensure the safety and success of the mission", PAU should be wholly relieved of liability for damages to FEDERATION's earth-launched space object. PAU will argue that under paragraph 1, Article IV of the Liability Convention, PAU is further exonerated from absolute liability for damages resulting from the crash of a portion of its space object upon a shopping center of FEDERATION and causing a FEDERATION commercial aircraft to crash in FEDERATION territory, to the extent it establishes that such damages resulted wholly or in part from gross negligence or from an act done by FEDERATION with intent to cause damage. That FEDERATION's willful firing of an anti-satellite device at PAU's descending space object was such an act, that such premature, wanton and aggressive act by

FEDERATION prevented PAU from gaining control over its space object and caused the break-off of parts which (1) collided with FEDERATION's forbidden Earth launched space object, (which crashed into the shopping center in FEDERATION) and (2) caused the FEDERATION commercial aircraft to crash into FEDERATION territory, and thus was the cause of the resultant damage is certainly an argument PAU will make. By this theory, PAU should be exonerated and under Article VIII of the Agreement indemnified by FEDERATION from third party (nationals of a 3rd state) liability for damages suffered from the portions of its splintered space object and in any event PAU should have exoneration in whole or in part under paragraph 1 of Article VI of the Liability Convention as to damages to passengers on board the FEDERATION commercial aircraft who in violation of FEDERATION law did not fasten their seat belts during an announced emergency over FEDERATION, which conduct was gross negligence contributing to the damages suffered.

APPLICATION OF THE WARSAW CONVENTION, AS AMENDED AT THE HAGUE, 1955

Passengers aboard the commercial aircraft that crashed, or their estates, may have recovery under the Warsaw Convention, as amended at the Hague, 1955, to which both FEDERATION and PAU are Parties. The Convention applies to international carriage by air of persons and property. Article 17 thereof recites "the carrier shall be liable for damage sustained in the event of death or wounding of a passenger...if the accident which caused the damage... took place on board the aircraft..." A related recital in Article 18 covers the loss or damage to property transported by the aircraft. Exemption from liability is provided when the carrier "proves that he and his agent have taken all necessary steps to

avoid the damage or that it was impossible...to take such measures." (Art. 20). Whole or partial exoneration is further provided, in accordance with the law of the Forum, if the carrier "proved that the damage was caused by or contributed to by the negligence of the injured person. (Art. 21).

The recovery under the Warsaw Convention, as amended at the Hague, 1955 would be subject to the limit of liability set forth in the convention (about \$16,600 plus possible litigation costs) as a trade-off for the injured party not having to establish negligence on the part of the carrier. The limit, however, may be raised where the carrier and the passenger agree to a higher limit of liability (Art. 22) and the limit is entirely removed if the damage was caused by the carrier "with the intent to cause damage or recklessly and with knowledge that damage would probably result." (Art. 25).

FEDERATION's carrier may contend that it be wholly relieved of liability under Article 20 in that under the circumstances "it was impossible" to take measures "to avoid the damage".

This would entail a finding of the factual situation at the time of the mishap. Air traffic control centers provide airspace protection to space objects being launched from the ground as well as to aircraft in flight. This is done by allocating airspace, issuing Notice to Airmen (NOTAMS) and by continuous radar tracking of objects in flight with periodic radio contact with the cockpit. With the present scenario, it can be assumed that the FEDERATION and PAU space control centers had arrangements for voice communication with Air Traffic Control to alert them of a "target" entering a particular aerospace area. The FEDERATION flight control center

was immediately aware of PAU's space object path of descent following its disengagement in space from FEDERATION's space object. The FEDERATION flight control center fearing PAU's unmanned descending space object was out of control and would cause serious damage and loss of life in FEDERATION, can be assumed to have alerted air traffic control at least when it found that the main part of the PAU space object was not destroyed by the anti-satellite interceptor device it fired and such space object continued along the descent flight path without change..." It was this remaining portion of PAU's space object that was involved with the commercial airliner. It does not appear in the General Setting of the Problem the extent, if any, of radio communication between Air Traffic Control and the aircraft. However, in light of the recital that the space object fragment "caused" the airliner to crash, it is concluded that either the pilot was not vectored to a safe area or that if he did receive such instructions, the closing speed of the falling space object was such that it was impossible to avoid the collision. Hence, the carrier would be totally exonerated from liability under the Warsaw Convention, as amended at the Hague, 1955.

CONCLUSION

The judges may want to explore with some of the participants various features in the United Nations Charter. The questions of aggression (raising Article 2(4) and of self-defense (Article 51)) and the questions of the power of the Security Council, and the problem of the veto in rendering that exercise impossible might be raised. The use of antisatellite measures may require the participants to examine whether such measures are resolved by

United Nations Charter principles (e.g. Article 2(4) and 51) or require a new outer space treaty, and whether there is customary international law and general principles of law to resolve those issues. They may also be asked to consider the Outer Space Treaty of 1967 to determine whether it might apply as well as determine the legal effect - even if not legally binding - of the United Nations Resolutions (cited in the Appendix). With respect to the Helsinki Accords the participants must consider their legal effect - they are not legally binding as such because they are not to be registered as treaties pursuant to the United Nations Charter.

ANNEX

TREATY INTERPRETATION

This problem calls for interpretation of treaties, international agreements (i.e., the Agreement between the Parties for the joint venture) and of customary international law. While the interpretation of treaties engages some similarities to the interpretation of agreements under domestic law, including contracts, and in some there are similarities to the process of interpretation of constitutional documents, the judges should familiarize themselves with some of the major source materials.

The materials with respect to interpretation are voluminous. Those that might be consulted include Whiteman, Vol. 14, DIGEST OF INTERNATIONAL LAW: pages 1-510; McNair LAW OF TREATIES (1961); McDougal, Lasswell and Miller, THE INTERPRETATION OF AGREEMENTS AND WORLD PUBLIC ORDER (1967); and the Vienna Convention on the Law of Treaties. The Vienna Convention is not in force, but for the purpose of this problem it is treated as being in force for

the Parties. In consulting these sources, the judges will be able to probe a fundamental issue raised in the problem - the interpretation, application and enforcement of an agreement under international law.

Questions that will be relevant with respect to the 1979-1980 Jessup include (a) the extent to which the Parties have communicated their arrangement, and the extent to which they share expectations as to how the arrangement is to be carried out. Ambiguities or the failure to clarify the obligations "communicated" through the international agreement must be probed. Some can be considered as going to the essence of the agreement while others are lesser in nature, amounting to superficial misunderstandings that can be corrected through further communications between the Parties while the Agreement is carried out. The judges must be concerned whether the overall object and purpose of the treaty has been put in jeopardy by either Party's breach or failure to comply, and also whether there is acquiescence in a breach that would overcome this presumption.

(b) Ambiguities in the "real world" are some times overcome by resorting to the drafting materials ("travaux préparatoire" or negotiating record). These are not available to the participants and judges in this problem. Therefore, the judges must probe more closely the overall context of the agreement, i.e., the agreement must be measured against the world community's expectation of order established in such documents as the United Nations Charter. Clearly the Parties cannot by their own bilateral agreement be willing to accept aggression either toward themselves or toward third parties.

But judges should also insist that the participants are not entitled to claim the bare text as the final authority for their arguments. The practice of the Parties should be examined, and that practice is to be found in their conduct as laid out in the problem. Maxims or simple formulae of treaty interpretation, however, should be probed: the judges should not permit the use of these as the persuasive argument of either side. But the judges can probe the arguments that make much of a non-issue. A matter that is clearly (to the judges) unambiguous needs no lengthy argumentation, and this would amount to a weakness in presentation if valuable time is used to pursue the obvious. (For detailed development of background, in addition to the materials cited above, see Harvard Research in International Law, LAW OF TREATIES: DRAFT CONVENTION WITH COMMENT - American Society of International Law - 1935).

Finally, the judges can probe generally the role of the legal advisor with respect to matters such as these. The advisor is dealing with matters of policy, but he is bringing these to bear out of the policy instruments established by the Parties in their international agreements. The legal advisor is not in a position to revise the instruments - and his argument must not proceed toward this end. What he does do is aid in selecting the interpretations to be made, and in articulating the criteria for interpretation. The judges will find the Preface of Hans Kelson to his text, LAW OF THE UNITED NATIONS, 1950, particularly useful as background with respect to the competence of the legal advisor. The remarks of Kelsen in that Preface have application here, even though the participants are before an

international tribunal rather than advising their clients as such. They are particularly important because the court has been given competence or jurisdiction to decide the issues ex aequo et bono. The question raised here is whether the Court is applying equity as part of the law to be applied, or as a separate body of law. Discussion with respect to this matter may be found in Friedmann, *THE CHANGING STRUCTURE OF INTERNATIONAL LAW*, at p.366-367; also in the Meuse Case, Individual Opinion of Judge Hudson, P.C.I.J. Ser. A/B, No. 70, p. 76 (1937), cited in Briggs, *THE LAW OF NATIONS*, 1952 at pages 42-43. See generally *RESTATEMENT OF THE LAW Second, FOREIGN RELATIONS LAW OF THE UNITED STATES*, 1965, p. 359 et seq.