REPORT OF THE DISCUSSIONS HELD AFTER THE FOUR SESSIONS OF THE 35TH COLLOQUIUM ON THE LAW OF OUTER SPACE

The topic of the first session of the Colloquium was "Emerging and future supplements to space law, specifically in the context of the International Space Year". In the discussion that took place following presentation of the papers, *Mr. M.Orrico* (Mexico) raised questions concerning *Mr. Ganzkow*'s report on the growing relationship between Florida and Mexico, wondering whether the legal basis for such a relationship and treaty exists.

Commenting on *Dr. Terekhov*'s paper, *Prof. J. Gabrynowicz* (USA) addressed the position that the Cosmos 954 claim was not settled pursuant to the 1972 Liability Convention, noting that the Convention provides that all claims must first be pursued through diplomatic channels, requiring signatories to enter consultations and acting as an incentive for them to settle out of court. She maintained that the Liability Convention successfully played the role it was intended to play in the Cosmos 954 case. *Dr. Terekhov* said that while the Cosmos 954 claim was indeed settled through diplomatic negotiations between Canada and the then USSR, the negotiations were not those provided for in Article XIV of the Liability Convention. The Convention mechanisms, including relevant negotiations, could have been applied only if both parties agreed that the Convention as a whole was applicable to the case. On the other hand, diplomatic negotiations are one of the universally recognized means of settlement of international disputes, and they may be used by states in order to resolve disputes in the outer space field outside the scope of the Liability Convention. *Prof. J. Gabrynowicz* also commented on *Dr. Eilene Galloway*'s suggestion that a document analogous to the US Constitution be drafted to embody the first principles of space law. Remarking on "A Declaration of First Principles for the Governance of Space Societies" drafted by members of the international community of space lawyers and policymakers in connection with the 1987 Bicentennial of the US Constitution, Prof. Gabrynowicz questioned how the document recommended by Dr. Galloway would be different. Responding, *Dr. Galloway* mentioned that she had been a member of the committee that drafted the 1987 "Declaration", but that certain members of the committee were familiar solely with the commercial aspects of space, and were surprised to discover that so much space law already exists. She noted that many viewed the law as a barrier to space activities, and that there was a great need for learning in this regard. She referred to *Mr. Wirin*'s paper, and his comments about commercial space, although noted that she disagreed with his premise. Responding, *Mr. Wirin* commented that he felt that he and Dr. Galloway had essentially the same vision, but that it appeared differently to each of them. He saw government money dwindling, and felt that it is necessary to encourage the commercial space industry. He emphasized that he is not recommending a wholesale revision of existing space laws.

Commenting on *Dr. Terekhov*'s paper, *Mr. B. Maiorski* (Russia) noted that the former Soviet Union initially indicated in a note to the Canadian government that it would act in accord with the Liability Convention, but subsequently it became clear that the definition of "damage" in the Convention is too narrow, noting that search and rescue is not damage. On the settlement of space law disputes, Mr. Maiorski noted that there is no definition of what constitutes a dispute, and questioned how to deal with the issue of compulsory jurisdiction. Regarding the CIS, and commenting on *Mr. von der Dunk*'s paper, he suggested that we should not be concerned with semantics (in particular regarding the name "CIS"), and that in fact ten states, not nine, were involved in the Minsk Agreement (Ukraine was the last state to adhere to it). *Mr. von der Dunk,* agreed with Mr. Maiorski on the importance attached to space as shown by the rapid constitution of the Minsk Space Agreement.

Prof. S. Gorove (USA) asked *Mr. Maiorski* whether Russia's views would have been different regarding Cosmos 954 if the amount of compensation had been different. Mr. Maiorski gave an oblique reply.

Dr. C.Q. Christol (USA) asked about the status of the four major COPUOS treaties following the breakup of the Soviet Union, and *Mr. Maiorski* responded that Russia is the "continuing state".

The second session of the Colloquium dealt with "Legal regulation of economic uses of outer space", and in the discussion, the following comments were made.

Dr. B. Maiorski (Russia) objected to *Dr. Cocca*'s suggestion to add protocols to the OST, since this may lead to multiple legal regimes regarding the same treaty, which is dangerous in international law. He would prefer a new agreement.

Prof. C.Q.Christol (USA) asked whether an ocean launch from an Exclusive Economic Zone (EEZ) would have any bearing on the question of who the "launching state" is, and *Prof V. Kopal* (Czechoslovakia) explained that the EEZ does not belong to national territory.

Dr. Safavi (Iran) affirmed that the EEZ is not part of the territorial waters, but subject to special rules to the benefit of the adjacent state. He also asked about the present situation and the destiny of INTERSPUTNIK.

Dr. Maiorski answered that INTERSPUTNIK still exists and flourishes. It was even reinforced as Germany has succeeded in the membership of the former GDR.

Prof. Dr. K.H. Böckstiegel (Germany) stated that he also would not favour amendments to the Space Treaty. He further referred to the Martin Marietta Case where gross-negligence is excused with reference to the CSLA, which explicitly prescribes cross-waivers. He wondered if the decision would be the same if such a legal obligation did not exist (e.g. in another state).

Prof. J. Gabrynowicz (USA) mentioned that the judge in the Martin Marietta Case expressly followed Congress' intention to protect launch companies.

Ms. T. Masson-Zwaan confirmed that the specific history of the US cross-waiver legislation determined the outcome of the Martin Marietta decision, and that a similar case might therefore be judged otherwise in a country where no CSLA exists.

Ms. C. Christensen (USA) added that the waiver history was related to NASA's history of avoiding that all involved companies would sue each other.

Lt. Col. F.K. Schwetje (USA) said that NASA's policy was meant to avoid Martin Marietta situations and that it prevents participating companies from expensive insurance-overpay.

Mr. F. von der Dunk (Netherlands) asked two questions to *Dr. Vereschchetin*. First, he asked him to elaborate on the status of Baikonur which now is property of Kazachstan, whereas news reports say that Russia will pay almost 95% of the costs and will receive more than 85% of the potential profits, and second, with reference to Art. 3 of the Minsk Agreement, which states that "the fulfilment of inter-State programs of space-research and exploitation in the area of military and dual (military and civilian) purpose space facilities shall be assured by the joint strategic armed forces", he asked what "assured" meant in this respect. Do the armed forces retain ultimate authority with veto power, or are they basically obliged to provide support to all programs?

Dr. Vereschchetin replied to the first question that Baikonur should perhaps rather have become common property, since it had been paid for by the entire Soviet Union. Baikonur is the property of Kazachstan but may be used by other states on the basis of the Minsk Space Agreement. Regarding the second question, he stated that the military space programmes are assured jointly by all states party to the Agreement. *Dr. Maiorski* added concerning the first issue that even though Baikonur is property of Kazachstan, the military disposes of the use of the base. Baikonur is owned for 94% by Kazachstan and for 6% by Russia.

Prof. Gorove (USA) asked *Mr. Reibel* the following question: if a US private entrepeneur procures the launching of a satellite in France, who is the launching state, only France or also the USA? *Mr. Reibel* responded that only France would be the launching state. *Prof Gorove* agreed.

On another subject, *Amb. E.R. Finch* (USA) suggested that a future topic for IISL session could be the relationship, if any, between the law of Outer Space and the Law of the Sea in specific areas of space law, including but not limited to space rescues. He referred to a paper by Prof. H. Almond (Acta Astronautica Vol.17 No.1, pp. 151-152, 1988) for an Academy Note of Dr V. Vereschchetin and Dr E. Finch, entitled 'The Future of Outer Space Rescues'.

Finally, *Amb. Cocca* reacted to the remarks by *Dr. Maiorski* and *Prof. Böckstiegel*. He stressed that he never suggested that the Outer Space Treaty should be amended. He proposed a separate protocol to enforce and complement it, not to modify it.

The third session was called "Managing Environmental Issues, Including Space Debris". An animated discussion followed the papers which were presented during this session.

Prof. C.Q. Christol (USA) asked *Dr. He Qizhi* about the difference between a hybrid system and free access to information. *Dr. He* responded by noting that the World

Meteorological Organization gives weather information to states at no charge.
Dr. H. Almond (USA) wondered how solar power satellites would direct their energy to the earth. *Dr. J. Glaser*(USA) answered that transmission of energy would be done by microwaves.
Then *Amb. E.R. Finch* (USA) asked *Dr. Perek* whether it would be better to put solar power stations on the moon, and Dr. Perek replied that such stations would only be available for areas when the moon is visible, and therefore they would not be universal.
Dr. W. Wirin (USA) had a question for *Dr. Rothblatt*, about what would happen if liability were shared by governments and commercial entities, because the US government would claim immunity under the Federal Tort Claims Act. Dr. Rothblatt conceded that it would be easier to sue private entities than the government, and that the Liability Convention cannot be used by US citizens against the US government.
Ms. T. Masson-Zwaan (France/Netherlands) then asked *Dr. Rothblatt* whether he was implying that the space launch business was mature enough to cover such liability. Dr. Rothblatt replied that protection of the environment is more important than private profits.
Dr. Kuskuvelis then noted that Dr. Rothblatt's proposal would increase insurance costs, and the author replied that such increases would be a cost of doing business.
Concerning *Ms. Smith*'s paper, *Dr. N. Jasentuliyana* (UN/Sri Lanka) clarified that the COPUOS principles dealt with nuclar power sources themselves, wherever found, including on the surface of the moon. *Amb. Finch* noted that the Johns Hopkins Applied Physics Laboratory was researching the use of H3 in clean fusion reactors. *Ms. Smith* replied that it was unclear whether lunar bases or fusion reactors would be completed first.
Mr. F. von der Dunk (Netherlands) asked *Mr. Tuinder* about the lack of overlap in membership between ESA and the EC. Mr. Tuinder replied that this issue would soon be moot because most ESA states who are not yet EC members are applying for such membership.
Dr. J. Glaser (USA) stated that with regard to solar power satellites, 60% of the budget has been spent for environmental impact studies. Funds raised by power transmission would be available for observatories on the dark side of the moon. Microwave transmission will be happening soon, and it is also possible to beam energy to the moon.
Amb. E.R. Finch (USA) read relevant portions of a letter he received from Vice President Quayle regarding US domestic inter-agency and bilateral space efforts. He also stated that the definition of space debris is no clearer than the air space/outer space delineation. He said that the "Magna Carta" on space prepared by the IAA can be the basis for a new treaty on space environmental protection.
Prof. Dr. K.H. Böckstiegel (Germany) stated that the International Law Association space law committee is in the process of elaborating a legal text on the space environment. A first draft is expected at the 1994 meeting in Argentina, and he requested concrete suggestions from IISL members.
Prof. S. Gorove (USA) wondered whether fuels of solid rockets launched into outer space should be regarded as space debris. Prof. Gorove disagreed with those who maintain that space debris, like the broken pieces of a launch vehicle, are not to be regarded as space objects. He expressed the view that such a position ran contrary to Article I of Liability Convention. Prof. Gorove also emphasized that the issue of space debris is of worldwide concern and he expressed the hope that the USA will change its position in COPUOS and will not continue to oppose the placing of the space debris issue on the agenda of the committee or its subcommittees He added that US Vice President Quayle's address to the World Space Congress raised hopes that the US position may soon change.
Finally, *Lt. Col. F.K. Schwetje* (USA) noted that nobody pollutes on purpose, and that there is a common interest in prevention of space pollution. With regard to internalizing liability costs, he noted that such costs will be passed on to consumers.

The last session of the Colloquium dealt with the remaining topics falling under the general heading "Other legal subjects". In the discussion which followed the presentations of this fourth session, *Dr. B. Jasani* (UK) requested a precise definition of the term 'space weapons'. *Mr. Ekblad* (Sweden) responded that the scope of his paper was limited to space stationed weapons.
Next, *Prof. C.Q. Christol* (USA) stressed that uses of the aerospace plane would be governed by two legal regimes, i.e. air and space law. For the determination of the applicable regime, preference should in his view be given to an allocative theory. This theory would be based on the factors of interest and purpose of the mission, including the actual use of the vehicle,

which would allow for the factual identification of the vehicle. From this factual base it would be possible to determine and apply the relevant legal regime.

Also referring to the legal status of aerospace planes, *Dr. M. Orrico* (Mexico) stressed the need for a solution of the still pending delimitation issue of air and outer space.

Mr. Hashimoto agreed with the previous speakers that main issues with regard to the legal status of the aerospace plane were not yet resolved, but he expressed the hope that his proposed differentiation between STS and STO types of space planes would help to find a constructive solution.

Again with regard to aerospace planes, *Dr. I. Kuskuvelis* (Greece) underlined the legal significance of its use as a multi-mission vehicle.

Next, *Dr. H. Safavi* (Iran) stressed the need to define and delimit outer space, in order to settle disputes arising with respect to the applicability of either air or space law. In his opinion, the aerospace plane is neither an aircraft nor a space object. He referred to his 1961 proposal to delimit air and outer space at a height of 90 miles above sea level. He further proposed the adoption of a new convention covering the legal aspects of the aerospace plane, especially with regard to the transportation of passengers and cargo and responsibility for damage caused by these vehicles in air space and outer space.

Prof. S. Gorove (USA) referred to his earlier contribution with regard to problems concerning the legal status of aerospace planes. With respect to the enlargement of international cooperation, he referred to the current discussions taking place within UNCOPUOS on the importance of Article 1(1) of the Outer Space Treaty. Prof. Gorove also asked *Prof. Gabrynowicz* whether the global commons would be included in her concept of property. *Prof. Gabrynowicz* answered that the importance of the survival of the species had to be stressed. The notion of property should therefore also cover the global commons, because this is essential to humanity's well-being. Finally, *Prof. Gorove* referred to a definition of the notion of space weapons which had been provided in the past by *Dr. E. Galloway*, whereupon she indicated that her definition was based on article 5 of the regional Treaty of Tlatelolco of 12 February 1967, and was reproduced in her recent Book of Honour, edited by Dr. Jasentuliyana ("Space Law: Development and Scope").

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