

United Nations
**GENERAL
ASSEMBLY**

TWENTIETH SESSION

Official Records



**FIRST COMMITTEE, 1421st
MEETING**

Saturday, 18 December 1965,
at 8.55 p.m.

NEW YORK

CONTENTS

	Page
<i>Agenda item 31:</i>	
<i>International co-operation in the peaceful uses of outer space: reports of the Committee on the Peaceful Uses of Outer Space</i>	421

Chairman: Mr. Károly CSATORDAY (Hungary).

AGENDA ITEM 31

International co-operation in the peaceful uses of outer space: reports of the Committee on the Peaceful Uses of Outer Space (A/5785, A/6042; A/C.1/L.363/Rev.1, L.365)

1. Mr. GOLDBERG (United States) said that peaceful co-operation in outer space was an ideal theme for United Nations consideration. It was not only a few major Powers which would benefit from the newest developments; the potential values of space should be common to the world. Some remarkable technical breakthroughs had already occurred; they promised to make important modern services quickly and cheaply available to regions and States which otherwise could not have afforded them.

2. The weather satellite programme was now a practical reality; meteorological satellites were already providing weather information on a global basis. He urged the developing countries in particular to avail themselves of the new techniques. Automatic picture transmission systems would enable any nation to acquire local cloud-cover photographs directly from satellites passing overhead, and thus to save lives, money, crops and fishing fleets. He was glad that the World Meteorological Organization (WMO) was taking measures to ensure effective use of satellite data under the World Weather Watch programme. He hoped that all Member States would co-operate fully with WMO in that undertaking.

3. In terms of immediate practical benefits, satellite communications ranked at the head of outer space programmes. In April 1965 the international commercial communications satellite system had become a reality when the "early bird" satellite had gone into position. In June that satellite had begun handling commercial communications, including television transmissions between North America and Europe—a giant step towards the fulfilment of General Assembly resolution 1721 (XVI). The recent accession of Nigeria to the Agreement establishing Interim Arrangements for a Global Commercial Communications Satellite System had brought the total number of participants to forty-seven.

4. Of less immediate application but of great significance were the research programmes assigned to explore the realm between the earth and the moon—and beyond. Much of the work in that field was being carried out by the United States in co-operation with other countries. A particularly good opportunity for such co-operation was the programme under which foreign scientists were invited to propose individual experiments to be carried out by the National Aeronautics and Space Administration (NASA). Sixteen experiments had already been chosen and more were being considered. Seventeen countries had joined in projects using small sounding rockets. It had been a particularly fruitful year for co-operative satellite projects; Italian, Canadian and French satellites had been launched in the United States with great success.

5. The United States did not regard its accomplishments in space exploration as narrow national achievements. The eight countries which co-operated in the United States manned flight networks had played a vital part in the Gemini flights. The three countries which co-operated in deep space tracking and data acquisition could feel that they, too, had made the acquaintance of Mars. Scientists in thirty-eight countries had received complete sets of Ranger photographs of the moon suitable for professional measurement and analysis. The Mariner photographs of Mars were also to be circulated. To provide a larger base for future international co-operation, the United States offered many opportunities for education and training.

6. Besides the practical benefits of space exploration, the First Committee should remember the adventure of the spirit that was involved. But if space exploration was to remain a great human adventure, it must be carried out in an open and generous manner. Information must be shared in a spirit of participation which transcended national boundaries. The live radio and television reporting of the United States manned flight projects gave everyone such a sense of participation. Furthermore, since 1958 more than 15,000 individuals from 108 countries had visited NASA installations. If any representatives in the First Committee would like to visit Cape Kennedy, he would be delighted to make the necessary arrangements.

7. The United Nations had done useful work in the field of co-operation in the peaceful uses of outer space, although more progress in that direction was needed. It had issued publications on national and international activities, programmes of international organizations and educational opportunities in the field of outer space. It had also adopted resolutions setting out the principles which should govern co-

operation in the peaceful uses of outer space. The United States intended to respect those principles and hoped that other countries would do likewise. The next step was to begin putting some of the principles in question into the form of treaties. Two draft international agreements were now being prepared by the Legal Sub-Committee of the Committee on the Peaceful Uses of Outer Space, but progress was slow. There was no simple formula for getting negotiations moving, but all representatives should approach the problem with a determination not to let external political problems interfere. The United States would continue to work through the United Nations to extend the rule of law into outer space. His delegation had already suggested that the Organization should begin work on a comprehensive treaty concerning the exploration of celestial bodies. The United States Government planned to present a definite proposal on the contents of such a treaty.

8. The thirteen-Power draft resolution (A/C.1/L.363/Rev.1), of which the United States was a sponsor, would advance the objectives of the United Nations, and he hoped that all Members would support it. What had been accomplished so far in the peaceful uses of outer space was only the beginning; the United States believed that international co-operation must expand still further if mankind was to pursue its common destiny in space and derive the maximum earthly benefits from that endeavour.

9. Mr. FEDORENKO (Union of Soviet Socialist Republics) said that during the past two years his country had carried out space research both near the earth and in distant parts of the solar system, using automatic interplanetary stations, satellites, rockets and other means. It had gained much new scientific information, extended its knowledge of the laws of nature and found answers to problems of rocket and space technology. A Soviet cosmonaut had been the first to leave his space craft and make a free flight in space. Soviet launchings of the Cosmos series of scientific satellites continued. The Soviet Union was also trying to land a space station on the moon, to study the lunar surface and conditions as a preliminary to the landing and return of cosmonauts. The Molniya 1 and Molniya 2 communications satellites were being used for experiments in audio and video transmission between distant points in the Soviet Union. A successful television transmission carried out in November 1965 between Paris and Moscow suggested that regular television exchanges using space satellites was a real possibility, and the method would be widely used for television broadcasts.

10. His country was eager to co-operate with other countries in space research for peaceful purposes, and had recently concluded negotiations on the co-ordination of work with France. Recently, under a co-operation agreement with a number of East European and Asian countries, a two-week course had been held at Tashkent to train young scientists in satellite tracking. The success of that course had prompted COSPAR to set up a committee to organize other training courses designed particularly for scientists from the developing countries.

11. The United States too had carried out many interesting experiments during the period under review;

the Gemini 6 and Gemini 7 flights had made an important contribution to the conquest of space. Scientists from a number of socialist and other countries had also done interesting work. France had recently launched its first satellite. Despite certain difficulties, bilateral and multilateral scientific contacts had multiplied; COSPAR had continued to work successfully, and its membership had grown. The International Astronautical Federation and the regional organizations were playing an increasing part. The International Telecommunication Union (ITU) and WMO had done valuable work with artificial earth satellites, and scientists were working through WMO on the use of satellite data for weather forecasting.

12. The Soviet Union supported the proposal for the convening of an international conference on the exploration and peaceful uses of outer space in 1967. Such a conference would further space research and international co-operation, and would be particularly valuable to the developing countries, for which questions relating to the training of national scientific personnel, the participation of developing countries in space research programmes and the practical application of satellite meteorological and communications systems were of great importance.

13. Progress in the legal regulation of outer space activities lagged considerably behind the scientific and technical advances. While the declaration of legal principles contained in General Assembly resolution 1962 (XVIII) had contributed to the preparation of international legal rules for outer space activities, no legal principles governing the activities of States in outer space had yet been incorporated in international agreement form. Although the need for a declaration in that form had long been felt, the Committee on the Peaceful Uses of Outer Space had so far been unable, because of the opposition of certain Western Powers, to begin drafting an appropriate document, as recommended in General Assembly resolution 1963 (XVIII). Nor, unfortunately, had that Committee completed the draft international agreements on assistance to and return of astronauts and on liability for damage caused by objects launched into outer space. The Soviet delegation in the Legal Sub-Committee had repeatedly amended its original draft agreement on the rescue of astronauts, and had proposed new compromise texts. The blame for the fact that some provisions of the draft agreement were still being debated lay with those Western countries which evidently lacked sufficient interest in the conclusion of such an agreement.

14. The drafting of an agreement on liability for damage raised complex problems and would be a laborious process. In the Soviet view, the most acceptable basis for working out an agreement was that submitted to the Legal Sub-Committee by the Hungarian delegation, which took due account of the declaration of legal principles and of the different approaches of various legal systems.

15. The Soviet delegation supported the conclusions and recommendations contained in the reports of the Committee on the Peaceful Uses of Outer Space now under consideration (A/5785, A/6042).

16. Mr. WALDHEIM (Austria) said the two years which had passed since the General Assembly had last

dealt with the present item had witnessed spectacular achievements by the United States and the Soviet Union in the exploration of the planet Mars and of the lunar surface. The most significant feature, however, was undoubtedly the fact that man himself had seized control over the instruments at his disposal. The conquest of space would inevitably add a new dimension to the probing mind of the scientist, a new field of activity for engineers and a subject of growing importance for the political leaders of nations.

17. In view of the rapidity of scientific and technological developments, it became more and more imperative that the United Nations should incorporate in an international agreement the basic principles governing the exploration and conquest of outer space. The General Assembly had already adopted important resolutions on the basis of which the Committee on the Peaceful Uses of Outer Space had conducted its work. The two latest reports of that Committee (A/5785, A/6042) contained a number of encouraging elements, and his delegation hoped that the General Assembly would adopt the Committee's recommendations. The way would thus be open to increased international co-operation in the scientific and technical field of outer space research. He stressed the importance of training and the possibilities offered by the establishment of international space programmes.

18. In carrying out its mandate, the Committee on the Peaceful Uses of Outer Space should give more weight to the practical application of outer space research. In that way, Member States, irrespective of their degree of development, could benefit most directly from the peaceful exploration and use of outer space. Three major fields of application deserved special attention: the creation of a global satellite communications system, the establishment of a World Weather Watch, and the development of a navigational satellite network.

19. It was hardly necessary to stress the world-wide utility and importance of a global satellite communications system. The demand for international and intercontinental telecommunication services was continuing to grow, and existing facilities were already insufficient to meet the demand. The interest of Member States in the improvement of means of intercontinental communication was demonstrated by the fact that about fifty countries, including Austria, had signed the Agreement establishing Interim Arrangements for a Global Commercial Communications Satellite System.

20. The establishment of the World Weather Watch, under the auspices of WMO, was also of great importance. The World Meteorological Centres at Moscow and Washington were already in full operation, and further centres were likely to be established in Australia and in the tropical zones. The report of the Advisory Committee on the Application of Science and Technology to Development stressed that an improved world-wide weather forecast would be a service of outstanding value to developing and developed countries alike.^{1/}

^{1/} See Official Records of the Economic and Social Council, Thirty-ninth Session, Supplement No. 14, para. 40.

21. The encouraging possibilities of a satellite network for navigation purposes were now being studied by the International Civil Aviation Organization (ICAO) and the Inter-Governmental Maritime Consultative Organization (IMCO). It was becoming more and more apparent that the use of satellites for navigation could greatly contribute to the safety and effectiveness of traffic control both at sea and in the air. His delegation had therefore submitted a proposal which had been adopted by the Committee on the Peaceful Uses of Outer Space and which invited the Scientific and Technical Sub-Committee to submit a report on the possibility of establishing a civil world-wide navigation satellite system on a non-discriminatory basis (A/5785, para. 21).

22. His delegation regretted that the Legal Sub-Committee had been unable to make progress on the elaboration of the two draft international agreements. Nevertheless, useful work had been done in elaborating basic principles, in clarifying the positions of delegations and in narrowing the gap on a number of important points. He hoped that at its next session the Legal Sub-Committee would be able to overcome the remaining difficulties so that it could carry out its mandate under General Assembly resolution 1963 (XVIII).

23. Finally, he commended to the Committee the thirteen-Power draft resolution, of which Australia was a sponsor. He hoped that it would be unanimously adopted and thus constitute a further significant step towards increased collaboration designed to strengthen the principle of peaceful use of outer space.

24. Mr. HASEGANU (Romania) said that his country attached great importance to space activities and was aware of the vast prospects which they opened up for humanity. Since the First Committee had last discussed the problem, spectacular achievements had been recorded, particularly by the Soviet Union and the United States, in the exploration of space. A growing number of States were contributing to the conquest of space, and on 26 November 1965 France had successfully launched its first artificial satellite. The results of cosmic exploration were revolutionary, and had repercussions in all spheres of life. Some of the lessons of that exploration were already being applied. The reports of the two specialized agencies concerned with space programmes, ITU (E/4037/Add.1) and WMO (A/AC.105/L.19), provided a picture of the progress achieved and suggested how it could benefit man. A long-term programme should be worked out to enable States to benefit from the conquest of science and technology in outer space. Special emphasis should be laid on the training of national specialized personnel, and on satellite communications and space meteorology.

25. While the results obtained in space exploration were impressive, the United Nations had made only a modest contribution. It was particularly important to draw up legal principles governing the use of outer space, but little progress had been made towards doing so. Nevertheless, his delegation was convinced that the exchange of views that had already taken place had been useful and that eventually the work on the two agreements would be successfully con-

cluded. It was also essential to elaborate a convention embodying the principles governing the space activities of States.

26. Romania had participated actively in the work of the Committee on the Peaceful Uses of Outer Space and of its two sub-committees. It would continue to do so, in order to promote the objectives which the United Nations had set for itself in that field. Romania, therefore, fully supported the recommendations made by the Committee in its reports and was in favour of convening an international conference on outer space.

27. Mr. DELEAU (France) congratulated both the Soviet Union and the United States on their remarkable achievements in space. France was co-operating actively with the Soviet Union in the transmission of colour television pictures by satellite, and on 26 November 1965 France had launched its first artificial satellite. That launching had been highly successful and was to be followed by others in 1966. Another recent event of interest in the French space programme had been the successful launching of the satellite FR-1, designed to gather data on the propagation of characteristics of very low frequency electromagnetic waves in the ionosphere. That launching, which had taken place on 6 December 1965 from Vandenberg Air Force Base in California, was an example of the close collaboration between France and the United States in the space field.

28. His delegation was convinced that international scientific co-operation should be increased and should be free from any political considerations. With its increasing knowledge and experience France was prepared to expand its contribution to international co-operation for the peaceful use of space. His delegation considered that international exchanges of scientific information should be encouraged, and he congratulated the Secretariat on its useful work in that field. However, for budgetary reasons, he had some reservations about the proposal to convene an international conference. France was one of the sponsors of the thirteen-Power draft resolution and hoped that its adoption would encourage the Legal Sub-Committee to make further progress.

29. Mr. PRANDLER (Hungary) expressed admiration for the recent achievements by the Soviet Union, the United States of America and France in the exploration of space. Smaller countries such as his own could contribute to outer space research only through international co-operation. In November 1965 Hungary had participated in a meeting of the socialist countries held at Moscow to establish such co-operation, at which joint research programmes in a number of fields had been discussed.

30. His delegation approved the recommendations in the reports of the Committee on the Peaceful Uses of Outer Space, but regretted that difficulties had held up progress in the legal field. The Legal Sub-Committee had failed to agree on legal principles governing the activities of States in the exploration and use of outer space, and the problem had become urgent. General Assembly resolution 1963 (XVIII) gave the legal principles priority over agreements on specific matters, and he did not understand why they had been relegated to third place in the thirteen-Power

draft resolution. The results of the third and fourth sessions of the Legal Sub-Committee had been meagre. The Sub-Committee had failed to draw up an agreement on assistance to the return of astronauts and space vehicles, and on the question of liability for damage had reached preliminary agreement only on certain points. That failure was the result of the negative attitude of some Western countries. At the Legal Sub-Committee's fourth session, his delegation had submitted a revised version of its original draft convention on liability, and he hoped that further efforts would finally lead to agreement. He therefore agreed with the recommendation of the Committee on the Peaceful Uses of Outer Space that the Legal Sub-Committee should resume its work. He also endorsed the recommendation that United Nations sponsorship should be granted for the continuing operation of the Thumba Equatorial Rocket Launching Station (TERLS). He supported the convening of the working group on an international conference on the exploration and peaceful uses of outer space, considering that such a conference, provided that all States were enabled to participate, would be of benefit to the United Nations. The need for the conference had been recognized in General Assembly resolution 1472 (XIV), and the Secretary-General had even been requested to make the necessary organizational arrangements for holding it in 1960 or 1961. Since then, that need had greatly increased, and had been recognized by the Second Conference of Heads of State or Government of Non-aligned Countries, held at Cairo in October 1964.

31. Mr. FIORIO (Italy) stressed the need for the Committee on the Peaceful Uses of Outer Space to show scientific vision, common sense and imagination in order to pursue actively the further development of international co-operation in space through new ideas, proposals, and suggestions. The space situation and prospects of co-operation were changing every day, as was shown by the accelerating pace of developments over the last two months. France had joined the United States and the Soviet Union as a space Power by placing two satellites in orbit; the United Kingdom's Ariel satellite and the Canadian Isis orbiter had been successfully launched. There had also been the tremendous feats of the United States space ships Gemini 6 and Gemini 7 and the Soviet Union's launchings of the Luna series and other space craft. There was therefore no time to waste in ensuring the active pursuit of international co-operation; and he would like to convey that feeling of urgency to the Committee on the Peaceful Uses of Outer Space. That was why his delegation had become a sponsor of the thirteen-Power draft resolution, in which the General Assembly, while approving the past work of that Committee and its recommendations and proposals, would urge it to continue with determination its work in the development of law for outer space.

32. Mr. FAHMY (United Arab Republic), after referring to the tremendous achievements in space of the Soviet Union, the United States and, more recently, France, said that all activities in outer space should be for peaceful purposes. That was now more important than ever because world tension and the escalation of the arms race. The United Nations had always shown its interest in the question, and should now take further

steps to indicate guidelines for the activities of Governments. The first step should be to prohibit all non-peaceful uses of outer space. General Assembly resolution 1884 (XVIII), welcoming the expression of intention by the Soviet Union and the United States not to station in outer space objects carrying nuclear weapons or other weapons of mass destruction, had called on all States to refrain from using outer space for such purposes. Moreover, the 1964 Cairo Conference had called for an international treaty prohibiting the utilization of outer space for military purposes. The next stage should be the drafting of a binding agreement forbidding all military activities in outer space.

33. Unfortunately, however, developments in space law had not gained momentum with advances in space science. The Legal Sub-Committee of the Committee on the Peaceful Uses of Outer Space should therefore continue its work on the draft agreements and continue the effort to incorporate in an international agreement the legal principles governing the activities of States in outer space, as recommended in General Assembly resolution 1963 (XVIII). The essential need for international co-operation had been stressed in the Cairo Declaration of 10 October 1964, which had also urged the exchange and dissemination of information on space research and the convening of an international space conference. He therefore trusted that the working group to be convened early in 1966 would make a positive recommendation endorsing the idea of such a conference.

34. The role of the United Nations in space education and training had been repeatedly stressed by the Committee on the Peaceful Uses of Outer Space. The establishment of the Thumba Equatorial Rocket Launching Station (TERLS) had opened a new avenue, but he believed that a detailed draft programme should be prepared by the Secretary-General, as suggested in the second amendment in document A/C.1/L.365 to the thirteen-Power draft resolution.

35. The statement by the Secretary of the Committee on the Peaceful Uses of Outer Space annexed to its latest report (A/6042) quoted the recent conclusion of the Administrative Committee on Co-ordination that the question of training was one of the most important facing the United Nations family in the space field.^{2/} He believed that the Scientific and Technical Sub-Committee should consider the question of rendering technical assistance to the developing countries in that sphere. Accordingly, he was not entirely satisfied with the draft resolution in its present form, and for that reason had joined in submitting the amendments contained in document A/C.1/L.365.

36. Mr. SHAW (Australia) observed that progress in the exploration and use of outer space in recent years had not been limited to any one country. To the exciting achievements of the United States and the USSR had been added France's feat of placing a satellite in orbit. Other countries had contributed in less spectacular but no less real ways to the development of space science and its application to

modern communications and weather forecasting technology.

37. The General Assembly had from the outset emphasized the necessity for international co-operation in outer space with a view to preventing the creation of a new theatre of conflict. In common with many other countries, Australia had found that its role in the conduct of space activities lay in co-operation with other States rather than in isolated achievement, and its participation in international space projects had not only been of benefit to its own scientific community but had promoted the peaceful exploration and use of outer space for the benefit of all mankind. One of his country's main contributions was the provision of tracking facilities for satellites, manned space flights and interplanetary space probes, in support of the Gemini, Apollo and other programmes. In co-operation with the United Kingdom, Australia had carried out a large number of sounding rocket firings for scientific purposes, and as a founder member of the European Launcher Development Organization it was engaged in test launchings in preparation for the placing of a satellite in orbit.

38. Australia was also a participant in the arrangements for a satellite communications system, in the World Weather Watch and in research—in connexion with the International Years of the Quiet Sun—on long-distance radio wave propagation. The tremendous benefits to be derived from such programmes for a remote and largely agricultural country such as Australia were already being felt.

39. The Australian delegation was continuing to take an active part in the work of the Committee on the Peaceful Uses of Outer Space and of its two Sub-Committees, and its sponsorship of the draft resolution indicated its interest in encouraging the activities of that Committee and in extending the benefits of space technology to more and more countries. It was to be hoped that the example of co-operation among major space Powers provided by the establishment of the Thumba Equatorial Rocket Launching Station (TERLS) would set the pattern for increased co-operation between all countries in the Committee's work, and that United Nations sponsorship would be granted to that project.

40. His delegation hoped that the working group on the convening of an international conference and the Legal Sub-Committee would be able to make greater progress during 1966. It was most important that the rules which that Sub-Committee was working out for the regulation of space activities should make adequate provision for the rights and duties of international organizations, since it was only through them that the smaller States could participate in those activities.

41. In conclusion, his delegation welcomed the reports of ITU and WMO, and appreciated the continuing interest of those organizations and of ICAO in United Nations outer space activities.

42. Mr. MATSUI (Japan) congratulated the delegations of the United States, the USSR and France on their countries' recent outstanding achievements in space launchings. Such spectacular feats served to emphasize how essential was the need for the fullest possible co-operation among the major space Powers if

^{2/} Ibid., Thirty-ninth Session, Annexes, agenda item 4, document E/4029, para. 72.

outer space was to be used for peaceful purposes only. His country did not aim at becoming a major space Power, but it had co-operated in the past and would continue to co-operate in international space activities.

43. Although it was true that substantial progress had been made by the Legal and the Scientific and Technical Sub-Committees, the results left little room for complacency when considered in relation to the pace and scope of individual national programmes. It was essential that the Legal Sub-Committee should resume and intensify its endeavours to secure the conclusion of agreements on liability and on assistance to and return of astronauts and space vehicles. The Scientific and Technical Sub-Committee, when it met in 1966, would have before it evidence of the tremendous possibilities of the peaceful uses of outer space in the reports of ITU and WMO.

44. It should be the objective of international co-operation in the peaceful uses of outer space to enable the United Nations, through its Committee on the Peaceful Uses of Outer Space, to match the efforts of national Governments and to seek to ensure that the vast benefits to be derived from space exploration were applied to the peoples of all countries.

45. His delegation was one of the sponsors of the thirteen-Power draft resolution and hoped it would be approved unanimously by the Committee.

46. Mr. GOWLAND (Argentina) said that the work of the Committee on the Peaceful Uses of Outer Space was intended to promote one of the principal purposes of the United Nations: the establishment of a framework for the scientific and technical progress of humanity. The extraordinary achievements of the major space Powers demonstrated the urgency of the need for international agreement on the exchange of information and on legal responsibilities in space exploration, if outer space was not to become a new area of conflict.

47. His Government's interest in international co-operation in space activities had been demonstrated by its appointment of two experts to serve on the Sub-Committees of the Committee on the Peaceful Uses of Outer Space. Moreover, in the conviction that it was essential for the future of the world for every country to contribute to space research, his Government was providing training for space experts, and was developing small rockets. His delegation was one of the sponsors of the draft resolution, which stressed the special responsibility of the United Nations for promoting international co-operation in the exploration and use of space, and hoped it would receive unanimous approval.

48. Mr. GOTMANOV (Czechoslovakia) said that the participation of a growing number of countries in space research was providing greater knowledge of the resources and potentialities of space and a basis for improving living conditions for mankind. Each new space project brought to light new fields for study and extended the scope of the activities of the Committee on the Peaceful Uses of Outer Space. It was therefore to be hoped that progress would be made during the coming year towards the convening of a conference on the exploration and peaceful use

of outer space, at which the advances of the previous ten years could be reviewed and useful proposals could be made for the intensification of international co-operation in space activities. It was a matter for concern that the Committee on the Peaceful Uses of Outer Space had as yet made little progress in the preparation of the draft agreements called for in General Assembly resolution 1963 (XVIII). It might be advisable for the Assembly to define the specific tasks of the Committee in greater detail, in order to give renewed impetus to its work on those agreements.

49. His delegation took an active part in the work of the Committee and its two Sub-Committees, and the Czechoslovak Academy of Sciences was continuing its studies of methods of international co-operation in space research programmes. His country intended to do its utmost to promote the co-operation of all States in the peaceful use of outer space.

50. Mr. TREMBLAY (Canada) said that his delegation attached considerable importance to the promotion of international co-operation in the use of outer space, since it was only through such co-operation that the smaller countries could reap the benefits of recent spectacular advances in space technology. His country, with the co-operation of the United States space authorities and with the support of national industry, had recently launched its second satellite, Alouette 2, to carry out soundings of the ionosphere; it was hoped that the results of the second project would be even more valuable than those of the Alouette 1 launching, which was still providing scientific data.

51. His delegation believed that the work of the Committee on the Peaceful Uses of Outer Space provided an opportunity for all States, irrespective of their resources, to take an active interest in the encouragement of peaceful applications of space technology; he therefore hoped that it would be found possible in 1966 to arrange for the holding of an international conference on peaceful space exploration and its benefits for mankind. His delegation had demonstrated its interest in the continuance of the Committee's useful work by becoming a sponsor of draft resolution A/C.1/L.363/Rev.1, which he hoped would be adopted unanimously by the First Committee.

52. Mr. JAIN (India) said in the two years since the Committee had last met there had been a number of extraordinary achievements in space exploration; he congratulated the delegations of France, the United States and the USSR on their countries' recent successes. Many other countries attached special meaning and importance to programmes of education and training in the field of space research. His delegation had always attached great importance to the dissemination of knowledge and techniques of information in that field, since they were of the utmost significance for the less developed countries. UNESCO had already given technical assistance for the training of students and experts from the developing countries, and had provided fellowships for the training of overseas personnel at the Thumba Equatorial Rocket Launching Station. He hoped that the recommendations of the Administrative Committee on Co-ordination on future training programmes^{2/} would help to give the develop-

outer :
53. T
in the
the C
the ne
Antar-
twelve
from
serve
that c
peace

54. I
in ag
and R

55. I
the c
corp
L.36
The
empl
of e
the
with
mitt
Oute
mee
Oute
604:
tion
text
be
dis-
ber
Cor

56. I
acc
Ar
tio
wit
sp:
ar

57. I
Sc
ac
va
in
W
re

58. I
b
c
p
fi
e
h
t
i
t
t
t
t

ing countries a greater part in the peaceful uses of outer space.

53. The Indian delegation had consistently stressed, in the General Assembly, the First Committee and the Committee on the Peaceful Uses of Outer Space, the need to prevent any military use of outer space. The Antarctic Treaty of 1 December 1959, by which twelve Powers had agreed to keep Antarctica free from military bases, nuclear experiments etc., should serve as the forerunner of a declaration of the principle that outer space should be reserved exclusively for peaceful purposes.
54. The amendments in document A/C.1/L.365 were in agreement with the views he had just expressed, and his delegation supported them.
55. Mr. BAKOTO (Cameroon) said he believed that the draft resolution would gain in clarity by the incorporation of the amendments in document A/C.1/L.365, which his delegation had joined in sponsoring. The second amendment was intended to place greater emphasis on the importance for developing countries of expanded programmes of education and training in the peaceful uses of outer space, and was in line with the recommendations of the Administrative Committee on Co-ordination and the proposals of the Outer Space Affairs Group referred to at the 37th meeting of the Committee on the Peaceful Uses of Outer Space by the Secretary of the Committee (A/6042, annex II). As a result of informal consultations, however, the sponsors wished to revise the text of their amendments, and they would therefore be grateful if further consideration of the item under discussion could be deferred until Monday, 20 December, to enable them to put a revised text before the Committee.
56. Mr. SHALLOUF (Libya) said that his country had acceded to the Agreement establishing Interim Arrangements for a Global Commercial Communications Satellite System, and was ready to co-operate with other countries in the exploration of outer space. It would vote for the draft resolution and the amendments in document A/C.1/L.365.
57. Mrs. THOMAS (United Nations Educational, Scientific and Cultural Organization) said that the activities of UNESCO relating to outer space covered various aspects of international co-operation, including assistance to research projects, co-operation with WMO, and assistance to Member States at their request.
58. Between 6 and 10 December 1965 a meeting had been held at UNESCO headquarters to define the principles and main lines of a long-term programme to promote the use of space communication for the free flow of information and the rapid spread of education and greater cultural exchange. The meeting had been attended by experts from nineteen countries, with observers from the United Nations and its related organizations. It had strongly emphasized the need for the future use of space communication in the implementation of the UNESCO programme for the development of information media called for by the Economic and Social Council and endorsed by the General Assembly in resolution 1778 (XVII).
59. The experts had also considered that it was essential for UNESCO to continue its co-operation with the United Nations—including the Committee on the Peaceful Uses of Outer Space—and ITU. The report of the experts suggested the need for an arrangements under which the broad social implications of space communication could receive continuing consideration and under which new developments could be actively studied by all concerned. The experts had urged that United Nations technical assistance to provide experts and fellowships on the subject of communication satellites should be gradually increased. They had also recommended that a pilot project should be initiated with the help of UNESCO and other United Nations agencies on the use of satellite communication mainly for education in a large and heavily populated area.
60. The suggestions of the experts were being studied by the Director-General of UNESCO, who would report on them to the next session of the General Conference, to be held in November 1966.
61. Mr. PISKAREV (International Atomic Energy Agency) said that IAEA, in pursuance of its special responsibility for the encouragement of research on peaceful applications of atomic energy and for the exchange of information in that field, took an active interest in the work of the Committee on the Peaceful Uses of Outer Space.
62. There had been new developments in the use of atomic energy as a power source and as a means of propulsion in space, and it was probable that the use of ion and plasma engines would be followed in the near future by other advanced methods of propulsion, such as nuclear and arc rocket engines. Those developments had encouraged the Agency to undertake a programme of information on the use of nuclear energy in outer space, which had included, for instance, the organization during the third International Conference on the Peaceful Uses of Atomic Energy of a meeting on the direct conversion of heat into electricity.
63. The Agency had a special interest in the problem of contamination as a result of nuclear incidents in space—which involved the question of liability as well as that of the biological shielding of cosmonauts from radiation from nuclear power sources and naturally-occurring cosmic radiation. The Agency had formulated safety standards for nuclear facilities, and would assist in the establishment of such standards in outer space conditions. It was expanding its work on the biological effects of cosmic rays.
64. The work of ensuring international co-operation in the peaceful uses of outer space would call for greater participation by the United Nations family; IAEA was prepared to increase its efforts to that end.
65. Mr. CHAMMAS (Lebanon) moved the adjournment of the meeting until Monday, 20 December, at 10 a.m., when a vote could be taken on the draft resolution and amendments under consideration.
66. Mr. BAKOTO (Cameroon) supported that motion.

67. After a discussion in which Mr. THACHER (United States of America), Sir Roger JACKLING (United Kingdom), Mr. TREMBLAY (Canada), and Mr. BARODY (Saudi Arabia) took part, the CHAIRMAN put the Lebanese motion to the vote.

The motion was adopted by 27 votes to 22, with 16 abstentions.

The meeting rose on Sunday, 19 December, at 12.45 a.m.