

Overview of Space Activities



XI Office of Telecommunications Policy

Introduction

The Office of Telecommunications Policy (OTP) is an independent ... ency within the Executive Office of the President. As establised by Reorganization Plan No. 1 of 1970 and further specified by Executive Order 11556, OTP has three major functions: (1) to serve as the President's principal adviser on communications policy; (2) to establish policies and provide coordination for the Federal Government's communication systems; and (3) to serve as spokesman for the Executive Branch on communication matters, enabling the President to act as a more effective partner in discussions of communications policy with the Congress, the Federal Communication Commission and the public at large. In furtherance of its charter, OTP develops plans, policies; and programs with respect to communications that are designed to promote the public interest, support national security, contribute to the economy and world trade, promote the interests of the United States in its relations with foreign nations, and foster effective and innovative communication technology.

During 1974, OTP was active with a range of communication matters involving the application of space technology. International discussion on mobile satellite communication services continued to focus on aeronautical and maritime programs. In accord with OTP policy guidance, a Memorandum of Understanding was s gned by the U.S. Federal Aviation Administration, the European Space Research Organization (ESRO) and the Government of Canada for an experimental aeronautical satellite system to serve interrational civil aviation flights over the Atlantic.

Talks continued during the year, primarily within the Intergovernmental Maritime Consultative Organization (IMCO) Panel of Experts, regarding the need for establishing an international maritime satcllite service designed to improve communication to ships at sea. The Office also forwarded to Congress proposed amendments to the Communications Satellite Act of 1962 to reflect, changes that have occured since the time the original legislation was enacted into law.

The potential tuture use of communication satellites to broadcast television transmissions directly to home receivers is a subject which has continued to genefate debate within the United Nations. At the Fifth Session of the U.N. Working Group on Direct Broadcast Satellites held in Geneva in March of 1974, the United States tabled draft principles on direct broadcast satellites in the interest of identifying and building on areas of common agreement. Although some progress was made in this regard, there nevertheless continues to be wide differences of opinion on the principles which should govern the use of direct broadcast satellites.

An integral - rt of OTP's mandate is the continuing review of the space telecommunications demands for use of the radio spectrum which is a limited natural resource. This goal is accomplished through the frequency management program within the office. During 1974, the Office participated in the World Maritime Administrative Radio Conference of the International Telecommunication Union held in Geneva. OTP. along with the Federal Communications Commission and the Department of State, is involved with the preparation of the U.S. position for the 1977 Broadcast Satellite Conference of the International Telecommunication Union for the use of the frequency band 11.7-12.2GHz. Also during the year, the Office, continued to monitor development on the question of insurance coverage for the launch of communications satellites.

Aeronautical Satellite Experiment

Policy guidelines were issued by OTP in early 1971 for the development of a national program on satellite communications for international civil aviation operations. Operating within the OTP policy framework, extensive negotiation with foreign authorities have been carried out by the Department of Transportation, Federal Aviation Administration (DOT/FAA) and the Department of State. After three years of negotiation, a Memorandum of Understanding was signed in 1974 by the DOT/FAA and Canada concerning a joint program to test the use of satellites for improving air traffic control. The experimental AEROSAT program will explore ways of using satellite capabilities to improve the cost effectiveness of oceanic en route services, including the possibility of combining or reducing air traffic control facilities The planned experimental system will consist of two geosynchronous satellites over the Atlantic Ocean and two ground stations in Europe and North America. Each satellite will contain five L Band communication channels, and two VHF channels. The space segment will be jointly owned by ESRO and Comsat (the U.S. private sector participant) each owning 47 percent, and Canada owning 6 percent. Consistent with U.S. policy guidelines, the space segment will not be government owned and the FAA as a systems user will lease circuits from COMSAT, a private commercial carrier. The first satellite is scheduled for launching in the 1977-78 time period and the second will follow at a later date.

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Maritime Mobile Satellite Service

The Intergovernmental Maritime Consultative Organization (IMCO) continues to be the principal international forum for discussions concerning the provision of international satellite telecommunications to merchant ships at sea. The Panel of Experts of IMCO met again in London in September 1974 to review the cconomic, technical, and institutional issues that the creation of such a system raises. The U.S. continues to analyze user requirements in relation to the establishment of maritime satellite telecommunications services while at the same time reserving judgment on the institutional means of providing such service. A world conference initiated by IMCO is scheduled for April 1975 to consider the desirability of creating a new international organizational structure to provide maritime satellite services. OTP is coordinating the development of the U.S. Government's position for this conference and, in concert with other interested parties, is formulating the Administration's maritime communications satellite policy.

As a related matter, the development of a maritime satellite system (MARISAT), designed to meet the needs of the U.S. Navy between 1974-76, continues to be an area of policy review by OTP. The MARISAT program which has a five year design lifetime, will also provide limited commercial services for maritime users during the initial years of use. Later when Navy use is terminated, the entire satellite will be capable of providing commercial maritime service.

Proposed Ar endment to Communications Satellite Act of 1962

OTP submitted legislation to Congress that would amend the Communications Satellite Act of 1962. The 1962 Act called for the creation of a commercial communications satellite system as part of an improved global communication network, and it created the Communications Satellite Corporation (COMSAT) as the chosen instrument of the United States for accomplishing the purposes of the Act. The amendments are designed to update the Act to reflect current conditions in international communications but do not change the basic policy premises underlying the original legislation. In 1962 there were a number of technical and operational , uncertainties regarding the creation of COMSAT to serve as the chosen instrument of the United States in a global system. These uncertainties gave rise to the inclusion of several provisions in the Act relating to COMSAT's ownership and the conduct of its affairs, provisions not normally associated with a private communications common carrier enterprise. With the successful establishment of the International Telecommunications Satellite Organization's (INTELSAT) global communications satcllite system and the emergence of COMSAT as an established and mature corporation, it is appropriate to remove a number of these special provisions. Such changes would:

(1) Eliminate the requirement that COMSAT incorporate in the District of Columbia.

(2) Repeal the provision calling for Presidentially appointed and common carrier elected directors.

(3) Eliminate the special class of common carrier stock.

(4) Reduce permissible common carrier shareholdings to five percent.

(5) Permit COMSAT to issue par value stock.

(6) Repeal the requirement for COMSAT to obtain FCC approval prior to obtaining additional

capital. In addition, the possible emergence of specialized international satellite systems that would be separate from the INTELSAT system is also recognized. One amendment would make explicit that COMSAT could participate in such new international systems, on a non-exclusive basis, thus legislatively affirming an FCC rule-making decision to the same effect in the context of domestic satellite systems. Another amendment clarifies the Executive Branch role in the planing, implementation, and operation of new international satellite systems that are developed pursuant to international agreement in which the United States is a party.

Direct Broadcast Satellites

The possibility of the use of telecommunications satellites for broadcast of television programs directly into home receivers continues to generate interest, particularly in the United Nations. The United Nations Committee on the Peaceful Uses of Outer Space and its two subcommittees have been studying this question for a number of years.

Although there are international legal instruments which impact on the question of direct broadcast satellites already, for example, the United Nations Charter, the Outer Space Treaty, applicable provisions of the International Telecommunications Convention and Regulations, certain relevant principles expressed in the Universal Declaration of Human Rights and Resolutions of the General Assembly, the desirability of a particular convention to govern this type of direct broadcast has been expressed. The United Nations General Assembly has called for the elaboration of principles to govern States using satellites for direct television broadcasting.



39-GPO NASA-J. 586-756-(P.O. 801) B. 6060

Among the many problems involved in creating such an agree ont, the most crucial one is related. to the principle of freedom of information. Two opposing views emerged in the debates on this issue. One view, shared by the United States, stresses the concpt of the free flow of information; the other view stresses the concept of prior consent, that is, the notion that no state should be allowed to engage in such broadcasting without the prior approval of the state which may be the intentional or unintentional recipient. The United States voted against the resolution calling for creation of a Convention to govern states using satellites for direct television broadcasting, and is fundamentally opposed to any legal regime inhibiting the free flow of information. The United States, however, has been receptive

to discussing general principles that could appropriately apply to the use of direct broadcast satellites. The United States tabled a set of voluntary principles in March 1974 at the fifth session of the U.N. working group on Direct Broadcast Satellites in Geneva. While some support for U.S. views was evidenced, there nevertheless continues to be wide diffrences of opinion over the formulation and application of appropriate principles to govern the use of this technology. These differences continued to be apparent when the Legal Subcommittee feiled to

be apparent when the Legal Subcommittee failed to achieve agreement on principles at a subsequent meeting in May 1974. Debate continues on this issue, and the matter is unresolved. OTP participated in the deliberations of both the

U.N. working group of Direct Broadcast Satellites and the Legal Subcommittee, and will continue to work with other interested U.S. agencies in formulating and presenting U.S. policy views on this issue.

Frequency Management

The radio spectrum consists of that portion of the electro-magnetic spectrum by which radio communications are conducted. This resource, shared by all countries of the world, requires coordination, not only on a national basis but also on an international basis to ensure mutual compatibility of radio frequency usage. National spectrum planning, known as frequency management, is carried out by the staffs of the OTP and the Federal Communications Commission (FCC) with assistance from the Interdepartment Radio Advisory Committee (IRAC), the latter being made up of representatives of major Federal Government departments and agencies using radio. International spectrum planning is done under the auspices of the International Telecommunication Union (ITU), a specialized agency of the United Nations located in Geneva, Switzerland, and composed of 148 member Administrations.

Satellite systems are dependent upon access to radio frequencies for their successful operation. Spectrum management procedures referred to in the paragraph above have been refined to accommodate the unique requirements of satellite and space services. The system review procedure established over a year ago is proving itself as the number of satellite systems increase, each competing for spectrum in which to operate. Considerable experience has now been gained with this review procedure whereby each new proposed satellite system is studied to ensure the availability of spectrum prior to the expenditure of funds for development and procurement. This same review procedure is used to assess the compatibility of satellite systems proposed by other countries with those of the U.S.A.

Under OTP guidance, the IRAC, including a liaison representative of the FCC, completed the development of US. proposals for the ITU World Maritime Administrative Radio Conference that was held in Geneva, Switzerland, from April 22 to June 9, 1974. Also proposed were position papers for use by the U.S. Delegation to that Conference in considering the proposals of other countries. The Final Acts of the Conference included several additions to the International Radio Regulations to permit the orderly introduction of maritime satellite communications.

Satellite Launch Insurance

The financial costs associated with the launch of communication satellites is a significant factor in the development of operational systems. Experience has shown that the possibility of launch failure poses considerable bu ' ess risks to private communications companies interested in deploying commercial systems. In 1974, OTP surveyed both prospective system operators and the insurance industry to determine whether the availability of commercial insurance against launch failure is a significant barrier to entry by potential suppliers of service. Limited experience to date indicates that insurance coverage, at reasonable rates, is commercially available from the private sector. Recent experience has been exceptionally encouraging, with insurance coverage being initiated in 1974 for the first launch of a multilaunch program. Consequently, it appears that alternative arrangements for providing suitable insurance coverage will not be necessary.

cc: International Subj International Chron Mr. Wheatley (chr) RWheatley:sbw

December 13, 1974

Shine all the service of the short of the

- To: Bill Fishman
- From: Ron Wheatley
- Re: A Short Summary of the Present State of the Law of Space and its Applicability to Satellite Telecommunications and Earth Resources Survey Satellites

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10. International Legal Problems of ERTS



Attachments .

List of Documents Attached

- Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space including the Moon and Other Celestial Bodies 222 (XXI)
- 2. Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space 1662 (XVIII)
- 3. General Assembly Resolution 1721 (XVI): International Cooperation in the Peaceful Uses of Outer Space, December 20, 1961
- 4. Draft Convention on Registration of Objects Launched into Outer Space
- UNGA Resolution Commending Convention on Registration of Objects Launched into Outer Space, November 26, 1974
- 6. UNGA Resolution: International Cooperation in the Peaceful Uses of Outer Space, November 26, 1974
- 7. Draft Treaty Relating to the Moon
- Convention on International Liability for Damage Caused by Space Objects
- 9. Agreement on the Rescue of Astronauts, the Return of Astronauts, and the Return of Objects Launched in Outer Space
- 10. International Cooperation in the Peaceful Uses of Outer Space
- 11. Agreement on the Establishment of the "INTERSPUTNIK" International System and Organization of Space Communications
- 12. United Nations General Assembly Resolution: Preparation of an International Convention on Principles Governing the Use by States of Artificial Earth Satellites for Direct Television Broadcast
- 13. Union of Soviet Socialist Republic's Proposal: Convention on Principles Governing the Use by States of Artificial Earth Satellites for Direct Television Broadcasting
- 14. The Guiding Principles of the Declaration on the Use of Satellite Broadcasting, adopted by Unesco's General Conference on November 15, 1972

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- 15. Canada and Sweden Proposal: Draft Principles Governing Direct Television Broadcasting by Satellite
- 16. Draft Convention on Freedom of Information
- 17. Direct Broadcast Satellites: Working Paper presented by the United States
- 18. Freedom of Information: Interference with Radio Signals
- 19. Argentina: Draft International Convention on Direct Broadcasting by Satellite
- 20. UNGA Resolution: Freedom of Information
- 21. USSR Model Draft Principles Governing the Use of Space Technology by States for the Study of Earth Resources
- 22. USSR Preliminary Draft of Legal Principles to be Applied to States Utilizing Remote Sensing Satellites
- 23. Argentina: Draft International Agreement on Activities Carried Out Through Remote Sensing Satellite Surveys on Earth Resources
- 24. France: Draft Principles Governing Remote Sensing of Earth Resources from Outer Space
- 25. Draft Questionnaire on the Needs of Developing Countries for Assistance in the Practical Applications of Space Technology



Historical Background

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The United Nations has been and continues to be a focal point for the development of global space law. In 1958 the General Assembly of the organization created an Ad Hoc Committee on the Peaceful Uses of Outer Space, and in 1961 this Committee was made permanent, the membership being fixed at 24. The tasks of this Committee were divided over two sub-committees, a Scientific and Technical Sub-Committee and a Legal Sub-Committee, the latter one being entrusted with the task of studying legal problems which would arise in the exploration and use of outer space. The First Committee of the United Nations, by considering the political implication of the various proposals made by the Outer Space Committee, also plays a significant role in the law-making process. These Committees also have working groups assigned to them.

Present State of the Law of Space

As of this time, the two major landmarks in the legislative field that have been passed are (1) the "Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space," which was unanimously adopted by the General Assembly of the United Nations on December 13, 1958, and (2) the "Treaty on Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies," which was opened for signature in London, Moscow, and Washington on January 27, 1967, and entered into force on October 10, 1967.

Consequent to this Treaty, one international agreement and one international convention to implement the basic rules set out in the two instruments above were established: the "Agreement on the Rescue of Astronauts, Return of Astronauts, and the Return of Objects Launched into Outer Space," of April 22, 1968, and the "Convention on International Liability for Damage Caused by Space Objects" of March 29, 1972.

On November 26, 1974, two draft resolutions on United Nations activities relating to outer space were adopted by the General Assembly. In the first resolution, the General Assembly endorses the report of the Committee on the Peaceful Uses of Outer Space and sets down the guidelines for future United Nations activity on outer space questions. In the second resolution (the U.S. was one of 34 sponsors), the General Assembly commends the Convention on Registration of Objects Launched into Outer Space and requests the Secretary-General to open it for signature and ratification at the earliest possible time.

Future Projects

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At this time, the Outer Space Committee is considering two important areas for possible future legal action: (1) a draft treaty relating to the Moon; and (2) two working groups of the Scientific and Technical Sub-Committee are considering the question of direct broadcasting and that of surveying the earth by remote sensing satellites, that is, the Earth Resources Technology Satellites.

Summary of Important Principles

The salient principles governing outer space activities and incorporated in the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies (the Space Treaty or Outer Space Treaty); the Agreement on the Rescue of Astronauts, the Return of Astronauts, and the Return of Objects Launched into Outer Space; and the Convention on International Liability for Damage Caused by Space Objects" are:

- 1. The exploration and use of outer space and celestial bodies shall be carried out for the benefit of all mankind;
- 2. There shall be freedom of exploration and use of outer space for all States on a basis of equality irrespective of their degree of economic or scientific development;
- 3. Man's activities in outer space are subject to international law including the United Nations Charter, in the interest of maintaining international peace and security and promoting international cooperation and understanding;
- 4. Claims of sovereignty and national appropriation to outer space and celestial bodies are barred;
- 5. There shall be an unconditional obligation to help and to return astronauts promptly and safely if they land elsewhere than planned and to exchange information relating to astronaut safety;
- 6. Activities in outer space and on celestial bodies are to be reported to the Secretary General of the United Nations to the greatest extent feasible;

- 7. Harmful contamination of the environment must be avoided and international consultation made in connection with potentially harmful space experiments;
- 8. A launching State shall be internationally liable for damages caused by its space vehicles;
- 9. The State on whose registry an object launched into outer space is carried retains jurisdiction over the object and over any personnel thereof;
- 10. No weapons of mass destruction may be placed in orbit or on celestial t dies.
- Military activity is permitted in space for "peaceful purposes" and installations on celestial bodies may be inspected by any other State.
- 12. States are to conduct their outer space activities with due regard to the corresponding interests of all other States.

It should be added that space law regulation of satellite telecommunications, remote sensing direct broadcasting, as with all other kinds of uses of outer space, must also be based on these principles.

As the Convention on Registration of Objects Launched in Outer Space becomes open for signature and ratification, it will add the rules governing the registration with an international body of:

- All space objects, manned or unmanned, to be launched into orbit or to be sent to the Moon or other celestial bodies;
- 2. All installations to be established on the Moon or other celestial bodies;
- 3. All military personnel, equipment, or facilities intended to be used for peaceful exploration of the Moon or other celestial bodies subject to the conditions prescribed in Article IV of the Space Treaty.

Developments of Special Rules to Govern Telecommunication by Satellite

The most important developments in the application of telecommunications satellites for peaceful purposes have been the creation of two organizations. First, INTELSAT was created in 1964 with an aim to establishing a global system for point-to-point communications between the continents. The Soviet Union has on various occasions strongly criticized INTELSAT, in particular because the operation of the system, under the Interim Arrangements, was done by COMSAT, a U.S., partly private corporation created by an act of Congress. Because of this, the Soviet Union in 1968 proposed in the United Nations a Draft Agreement on the establishment of another global organization to be called INTERSPUTNIK. On November 15, 1971, an agreement to establish INTERSPUTNIK was signed in Moscow. L3 of this time, apart from the Soviet Union, eight countries have become members of the organization: Bulgaria, Hungary, R.D.A., Cuba, Mongolia, Poland, Rumania, and Czechoslovakia. Some points of interest concerning this agreement are that it is open to all countries of the world, not just members of the International Telecommunications Union as with INTELSAT (although this does not really affect many countries), and it leaves the members free to participate in the creation or exploitation of other spatial telecommunication systems, national or international, and that it does not exclude the possibility of cooperation between INTERSPUTNIK and other systems of telecommunications.

Aside from the two global organizations, a considerable number of regional and bilateral agreements on space telecommunications have been concluded. Within the confines of this report, it is not possible to give a complete survey of these agreements. One example, however, is the agreement between the United States and India under which the two States will cooperate in using a geo-stationary satellite to bring education and instructional programs to some 5,000 Indian villages. Another example is the United States/Canada



The wide implications of satellite telecommunications led the United Nations in 1961 to give attention to the problem of the desirable features of future international satellite telecommunications systems. The XVI General Assembly of the United Nations resolved in Resolution 1721 that communications by means of satellites should

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be available to the nations of the world as soon as practicable on a global and nondiscriminatory basis. These desiderata were reiterated in later U.N. Resolutions, and in 1968 the General Assembly recommended under Resolution 2453 (XXIII) that State parties in negotiations regarding international arrangements in this field should constantly bear this principle in mind so that its ultimate realization may not be impaired.

Direct Broadcast Satellite

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A number of international legal instruments apply to direct broadcast from satellites including the United Nations Charter, the Outer Space Treaty, the applicable provisions of the ITU Convention and Radio Regulations, relevant principles contained in the Universal Declaration of Human Rights and Resolutions of the United Nations General Assembly.

On August 8, 1972, the Soviet Union addressed a letter to the Secretary-General of the United Nations requesting the inclusion of an item in the agenda of the 27th Session on the "Preparation of an International Convention on Principles Governing the Use by States of Artificial Earth Satellites for Direct Television Broadcasting." The most crucial of the problems facing this proposal are related to the question of freedom of information. Two groups polarized on this issue. One group, the United States and certain other countries, espoused a freedom of information approach that would enhance the free flow of information. The other group, made up primarily of the Communist States and a number of developing countries, considered that the primary emphasis should be laid on the protection of sovereign rights of States which might be affected by the acceptance of the princple of freedom of information. This is a question that has not yet been resolved.

In November 1972, UNESCO adopted a Declaration of Guiding Principles on the Use of Satellite Broadcasting. That Declaration stated in part that "each country has the right to decide on the content of the educational programs broadcast by satellite to its people," and that states should "reach or promote prior agreements concerning direct satellite broadcasting to the population of countries other than the country of origin of the transmission." In the same year, the United Nations General Assembly rejected consideration of a convention to govern the use of direct broadcast satellites for television. On November 14, 1972, the United Nations General Assembly adopted a resolution entitled "Preparation of an International Convention on Principles Governing the Use by States of Artificial Earth Satellites for Direct Television Broadcasting." The United States voted against this proposal. One of the primary tasks of the Outer Space Committee and its subcommittees is the preparation of this convention. A number of proposals have been submitted by various countries, for example, Canada and Sweden, for draft conventions. The controversy over prior consent and fre flow of information have prevented any action by the General Assembly on these draft resolutions which might be adopted to govern the use by States of artificial earth satellites for direct television broadcasting.

Update

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The Committee on the Peaceful Uses of Outer Space (Space Committee) concluded its seventeenth session on July 12, 1974. The session began July 1, 1974, and during that time its reviewed the reports of (1) its Legal Subcommittee which met from May 6 through 31, 1974, in Geneva (document A/AC. 105/133); (2) its Scientific and Technical Subcommittee which met from April 15 through 26, 1974 in New York (document A/AC. 105/131); and (3) its Working Group on Direct Broadcast Satellites, which met from March 11 through 22, 1974, in Geneva (document A/AC. 109/127).

On July 12, 1974, the Outer Space Committee approved the schedule for 1975 meetings. The Legal Subcommittee would meet from February 10 through March 7, 1975, and the Scientific and Technical Subcommittee from April 21 through May 2, both in New York. The Outer Space Committee's session would be in New York from June 9 through 20, 1975. No agreement was reached on whether the Working Group on Direct Broadcast Satellites would reconvene in 1975.

At its final meeting, the Outer Space Committee noted that its Legal Subcommittee should consider at its next session, as matters of high priority, the draft treaty relating to the Moon, the elaboration of principles governing the use by States of artificial satellites for direct television broadcasting, and the legal implications of remote sensing of the Earth from space. The Committee also requested the Subcommittee to consider matters relating to the definition and/or delimitation of outer space and outer space activities.

ITU Involvement

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In 1963, an Extraordinary Administrative Radio Conference to allocate frequency bands for space radio communication purposes took place in Geneva. The provisions adopted were amended and supplemented by the World Administrative Radio Conference for Space Telecommunications (WARC-ST) held in Geneva in 1971. The most important feature of the provisions adopted at this Conference is that priority rights recognized in terrestrial services will not be applied to space telecommunications services.

The Development of Rules to Govern the Use of Earth Resources Technology Satellites

The first experimental earth resources technology satellite was launched by the United States on July 23, 1972. The United Nations, recognizing the need to study the technical, political, and legal implications of the development of these satellites, adopted in November 1971 a Resolution by which a working group on remote sensing of the Earth from outer space was established. During the session of the working group held from January 19 until February 10, 1973, a considerable number of problems connected with the application of these satellites were discussed.

The Working Group and Task Force on Remote Sensing from Outer Space has met periodically from February 10, 1972, to July 1974. One of its principal recommendations has been the establishment of an international center under United Nations auspices for collection of information in specific fields such as the monitoring of the global environment and the assessment of blobal food production. Moreover, the Outer Space Committee endorsed the recommendation of the Subcommittee that work in the remote sensing field should be carried on and that, to facilitate this, the Secretary General should prepare the following studies:

(a) Organizational and financial requirements for the establishment of a center under United Nations auspices, as recommended by the working group, for the collection of information;

(b) Organizational and financial requirements for the establishment of one or more regional data-storage and dissemination centers under United Nations auspices, and of the inclusion of data reception areas in such centers; and

(c) Organizational and financial implications of attaching educational and training facilities to such centers.

In its report to the Committee, the subcommittee also had recommended that the Secretary-General prepare a preliminary assessment of the organizational and financial requirements of a future space segment for global coverage by a joint international enterprise operated, owned, and financed by an independent international organization or under United Nations auspices. The Outer Space Committee suggested that the subcommittee consider this question again at its next session and assess its implications in light of the Secretary-General's other studies.

10.

International Legal Problems of ERTS

From the international standpoint, a significant feature of such a system is the capacity to acquire data and general information about the surface of the Earth within the territorial jurisdiction of all States. Among the legal questions raised by the use of these satellites are: (1) Is the launching state permitted to acquire data about other nations without their prior consent? (2) Can data acquired about a nation be used by or disseminated to other nations or private persons without the consent of these nations? (3) What is the situation de lege lata and what should it be de lege ferenda?

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C. Documents

United Nations Documents: Series A/AC 105







Maritime Policy Background

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Some Alternative Considerations In The Formation Of An

INTERNATIONAL MARITIME SATELLITE COMMUNICATIONS POLICY

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II.	U.J. Interests
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Some Altérnative Considerations In The Formation Of An

INTERNATIONAL MARITIME SATELLITE COMMUNICATIONS POLICY

I. Introduction

Broad agreement exists among principal international maritime nations for an improved maritime communications system to meet the requirements of voice and record public correspondence (company and personal), safety of life at sea, and navigation. The nature of satellite technology and the preponderantly international character of merchant shipping and its communications requirements strongly support exploration of an international cooperative effort for the improvement of maritime communications.

The application of communications satellite technology to satisfy maritime communications requirements is under active study by three groups. A consortium of U.S. communication's common carriers has plans to inaugurate a commercial service known as MARISAT in mid-1975. The European Space Research Organization (ESRO) has undertaken the development of an experimental maritime satellite known as MAROTS scheduled for launch at the end of 1977.

And the Intergovernmental Maritime Consultative Organization in 1972 established a Panel of Experts whose report will serve as the basic reference document for an International Conference on the Establishment of an International Maritime Satellite System scheduled for April 1975 in London, England.

The question is whether to establish an international organization for the provision of maritime satellite communications. If so, what should be the organization's institutional framework? The satellite system's technical, economic, operational and financial characteristics are matters which are being discussed by government and industry spokesmen. These discussions are leading to the formulation of a maritime satellite telecommunications policy consistent with U.S. national interests.

II U.S. Interests

While the desirability of an improved maritime communications capability exists, the special needs of the U.S. Government, U.S. common carriers and private maritime interests are being examined. Then, in such concert with other nations by means of such things as bilateral discussions prior to the London meeting, the U.S. will take measures as are appropriate to achieve its objective. The U.S. Coast

Guard sees decided benefits in improved communications for safety of Life at sea. The Maritime Administration is interested in the areas of public correspondence and navigation insofar as an improved communications capability strengthens the competitive position of U.S. vessels in international trade. An improved navigational capability is of particular interest to operators of supertankers who seek to reduce operating costs by transiting the shortest routes and by lessening the likelihood of collision. The extent of support among ship owners and operators for a satellite system is difficult to assess. There is evidence that American operators would give substantial support, and that similar support would probably come from supertanker operators of any flag registry. Enthusiasm is not universal. There is some evidence, for example, that Japanese operators and owners hold reservations, particularly regarding investment and operating costs. Also, preliminary economic studies undertaken by the IMCO Panel of Experts indicate a global satellite system might not be economically viable for several years after its initiation. A dependable assessment of projected economic viability and possible short-term need for initial subsidization requires detailed information on attitudes of ship owners and operators of

all nations. U.S. private telecommunications entities such as the international record carriers (ITT, RCA, WUI, TRT), COMSAT and AT&T are vitally interested in quality International Maritime Telecommunications service in general, and in maritime satellites in particular. III Policy Objectives

Assuming that a suitably critical and timely need by U.S. Government and industry for a global maritime satellite system can be demonstrated, it is in the U.S. national interest to ensure that the following policy objectives are achieved whatever form such a global satellite system may take:

1. It is U.S. Government policy to utilize commercial telecommunications facilities and services to the maximum extent feasible. Thus, insofar as U.S. participation is concerned, provision must be made for financial and operational responsibilities to be undertaken by a private entity (construed in its generic sense) designated by the U.S. Government.

2. The U.S. believes effective management of a satellite system can be achieved only if a participant's investment and operating decisions are directly proportional to his actual use of the total system.

3. Procurement policy and procedures necessary to establish a global satellite system should be conducted on the basis of open international invitations to tender, and awards made to bidders offering the best combination of price, quality and delivery time which coincidentally favors U.S. satellite hardware manufacturers.

4. It is U.S. Government policy, in the language of the 1967 Outer Space Treaty, that ". . . the exploration and use of outer space shall be carried out for the benefit and in the interest of all countries . . . and shall be the province of all mankind."

IV Some Alternative Courses of Action The following alternative courses of action with respect to the provision of maritime satellite communications are available:

1. Encourage the development and operation of the U.S. carrier's MARISAT program. As now conceived, the MARISAT program will be owned and operated solely by U.S. communications common carriers. The carriers expect to launch their first satellite in July 1975. The MARISAT program which has a five year design lifetime, will provide limited commercial services for maritime users during the initial years of use. The system will serve primarily the requirements of the U.S. Navy during the first two years of service. 1975-1977. In 1977 the Navy will have the option of renewing their contract for another year. After the Navy's use has terminated, the rather limited satellite capacity will be available on: a commercial basis.

The MARISAT program would meet the policy objectives enumerated above since it is (1) entirely a commercial undertaking, (2) subject to FCC regulatory authority regarding services and prices, (3) not obliged to accept multi-national procurement sharing, and (4) available to any properly-equipped user.

On the other hand, precisely because the MARISAT program is entirely a U.S. undertaking, much of the discussion in the IMCO Panel of Experts has been critical of the U.S. for what is considered the implicit disregard of legitimate sovereign interest in matters of communications services and technology. Whereas there is joint ownership of submarine telephone cables, and an 87-country ownership of INTELSAT, MARISAT appears to many IMCO members to be a conscious effort to draw away from the pattern of joint international ownership of facilities dedicated to international traffic. Moreover, to be economically successful and offer worldwide service, the U.S. owners would require earth stations in other countries. In view of the unilateral nature of the program, these may be difficult to obtain. Furthermore, the very limited capacity of the system would probably not be sufficient to meet the U.S. merchant fleet needs in the long run.

Because this service is not totally global, a possibility exists that other competitive systems might emerge. There is no assurance such systems would be technically compatible with MARISAT. Of course, the ESRO'S MAROTS program could be integrated with MARISAT - some talks of this subject have already been held among the interested parties, and thus enhance its advantages; otherwise, the lack of interoperability between systems would necessitate dual shipboard equipment and consequent cost increases.

Finally, there might be political difficulties for the U.S. in the UN, IMCO and other specialized agencies on the grounds that, even though MARISAT would be open to use by all ships, the U.S. was utilizing outer space improperly since it declined

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even a planning and operational role to non-U.S. users in areas as critical as safety and distress, which many nations regard as governmental responsibilities. In summary, the major limitations of MARISAT are three: 1) the technical problem of limited capacity, and 2-3 years of exclusive U.S. Navy use, 2) the geographic limitation that the system will serve the Atlantic and Pacific Oceans but not the Indian Ocean, 3) the lack of foreign participation in the system with concomitant political problems. A second generation MARISAT could resolve most of these problems.

2. INTELSAT.

The INTELSAT space segment can be used for maritime communications services. INTELSAT has considered the possibility of a maritime communications services option in the next generation of satellites, the INTELSAT V. There has been no serious consideration of the possibility of a dedicated maritime satellite.

INTELSAT attention to maritime communications services has been ambivalent at best. Some members, such as the U.K., prefer to delay the establishment of any maritime

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satellite system in which they do not have a principal voice because they fear a loss of revenue from existing facilities. More importantly in INTELSAT, however, is the fact that a number of issues regarding the design of the INTELSAT V satellites to provide international public services are unresolved. International point-to-point public service is INTELSAT's prime objective, and specialized services, such as maritime communications, may be provided only if public point-to-point telecommunications services are not unfavorably affected.

Use of a multi-purpose INTELSAT satellite would meet the policy objectives outlined above. The U.S. has supported INTELSAT since its inception and supported the entry into force of the Definitive Agreements which now govern its activities. Additionally, INTELSAT is an existing organization with broad international membership that includes all major countries with a substantial maritime interest, except the USSR, Panama, Liberia, and the Peoples' Republic of China; it enjoys a record of accomplishment; and it has the financial resources necessary to provide and maintain the facilities for maritime communications service. Its use can offer the further advantage of not requiring the establishment of a new international organization since it is capable of making facilities available directly to telecommunications operating entities.

European countries and the USSR have stated their opposition to the INTELSAT alternative at the meetings of the IMCO Panel of Experts because of U.S. dominance, especially in matters of procurement. Perhaps the most important drawback to the INTELSAT option is that the USSR is not a member of INTELSAT, and its utilization of the INTELSAT space segment would not entitle it to a substantial investment and voice in INTELSAT management nor in managing the maritime services. Objection to INTELSAT and preference for a new international organization reflect the Russian objectives of achieving a major management voice in the new system and the concomitant technological and production benefits.

A final European and USSR objection to the INTELSAT alternative rests in the fact that public international communications is INTELSAT's prime objective. Decisions regarding such maritime communications services as

INTELSAT might offer would be made by a Board of Governors with voting weighted on the basis of total utilization of the INTELSAT space segment. Utilization for maritime communications would never approach utilization for public international communications. Accordingly, maritime countries, such as the Scandinavians and the Netherlands, with relatively little, and the USSR with no utilization of the INTELSAT space segment for public international communications, but with major interests, and of major importance in the world's merchant fleet, would have only a minor voice in decisions regarding the nature and character of INTELSAT's maritime offering. Finally, it seems that there might be no INTELSAT V maritime option provided in the costly deployment of the system, as approved by the Board of Governors.

3. INMARSAT.

Section 2.

INMARSAT is the international organization proposed in the Report of the IMCO Panel of Experts. The final Report, prepared in September 1974, includes a draft Convention for the new organization; it sets out the technical characteristics of a maritime •

system, and the economic and financial consequences of various system configurations. The Report will be discussed in London at an International Conference on the Establishment of an International Maritime Satellite System to be held in April 1975.

The U.S. has reserved its position with respect to the POE Final Report as follows:

> "In the view of the United States of America, establishment of a new international organization is likely to pose problems and result in lengthy negotiations leading to serious delays in providing a maritime satellite capability.

> "The United States considers further that even if sufficient study and preparatory work were to verify the need for a new international organization to provide a maritime satellite capability, the United States would still have concerns with a number of fundamental aspects of the Panel's work, including inadequacies and inconsistencies in the proposed draft agreement, the limited nature of economic analysis completed, which do not include a system cost-benefit analysis, and certain shortcomings in study of the operational aspects of the system performance such as the important area of ship terminal equipment reliability.

"Thus, under the circumstances, the United States reserves its position with respect to the entire Report."

The POE-proposed institutional arrangements of INMARSAT are seriously deficient vis-a-vis the aforementioned U.S. policy objective. First, the INMARSAT draft Convention does not permit full participation and assumption of full responsibility by a designated private entity. Second, the draft Convention might not relate executive/managerial decision authority to investment as is the case with INTELSAT. Third, the cost of supporting the organization's administrative machinery will probably increase the cost of providing international communications services. Fourth, purely competitive factors (price, quality, delivery, time) as the determinants of contract awards might be diluted by a commitment to production-sharing. Fifth, the POE-proposed draft Convention contains ambiguous language concerning non-discriminatory use of the satellite system which is to be created. Of course, it may be possible that resolution of some, if not all of these deficiencies may be negotiated to U.S. satisfaction. One approach is to redraft the single agreement into an operating Agreement and an Intergovernmental agreement along the 'lines of the INTELSAT experience.

U.S. representatives at the several meetings of the Panel of Experts consistently opposed the

establishment of a new international organization, but received little support for their continuous proposals to study other options. The INMARSAT proposal seems to be the course of action preferred by an influential segment of the IMCO membership.

4. MAROTS.

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Pursuant to a decision of the European Space Conference in Brussels in July 1973, the European Space Research Organization (ESRO) has undertaken the development of an experimental maritime satellite known as MAROTS Belgium, France, Germany, Italy, the Netherland, Norway, Spain, Sweden, and the United Kingdom, represented by their private hardware manufacturers, are participating in the program, the United Kingdom being the largest contributor. MAROTS coverage is not yet firm: it could cover most of the Atlantic Ocean and the Caribbean, or it could cover the eastern Atlantic, traffic around the Cape, the Indian Ocean and the South China Sea to Hong Kong. The satellite is scheduled to be launched at the end of 1977, and while initially it will be experimental, it could after a short period of experimentation provide commercial service.

The MAROTS program seems intended to (1) develop Europe's capabilities in the manufacture of communications satellites, (2) have operating European satellites available for the INMARSAT organization in the event INMARSAT decides to lease rather than own satellite capability, and (3) serve either as a counter or a complement to the U.S. carriers' MARISAT program.

The MAROTS program is not now technically compatible with MARISAT, and the possible deployment of a MAROTS satellite over the Atlantic Ocean could give rise to a competitive situation between it and MARISAT. However, in recent months there have been discussions between MAROTS and MARISAT representatives looking toward resolution of the technical incompatibility and the possibility of the two systems providing global coverage through a more easterly deployment of the MAROTS satellite, that is, over the Indian Ocean, with MARISAT serving the Atlantic and Pacific Oceans only.

To the extent that a combined MARISAT/MAROTS program retains the latitude for U.S. participation through

private industry, with decisionmaking vested with the major users, with procurement based solely on competitive factors, and is open to all ships, U.S. policy objectives will be met. Its major limitation, though, is its limited commercial service capacity. V A Possible Approach

Another course of action is for the U.S. to take a positive attitude toward the INMARSAT scheme. The primary question here is whether taking a negative attitude is productive. For example, if the U.S. decides to not participate, would the Europeans and others continue their efforts to create such a system? It is possible that the Europeans may go ahead with the system regardless of costbenefit analysis projections that investment may not be recouped in the near future. The danger here is that, if such an organization were created and was eventually successful, the U.S., by not participating, would have made the same mistake that the Russians made as to its refusal to participate in INTELSAT ten years ago, and thus be precluded from a potentially successful organization for international maritime satellite telecommunications. On the other hand, by taking a positive approach toward INMARSAT, the U.S. reserves for itself a position of hegomony in

the important early years of the organization. Moreover, it will be years before INMARSAT can launch an operational satellite. In the meantime, the most likely interim service will be provided by a MARISAT/MAROTS combination. Therefore, by taking this approach, the U.S. is implicitly endorsing the MARISAT/MAROTS program which, if it follows the qualifications set out in paragraph 4, is an intensive system. Finally, any follow-on system under INMARSAT auspices would most likely build on the MARISAT/MAROTS interim system, thus insuring that the U.S. leadership in this telecommunications field will be preserved.

There are courses of action such as a multilateral cooperative arrangement other than INMARSAT with principal maritime powers and excluding other nations; or a decision not to participate in the April Conference and let other countries go their own way, but they would seem to be of questionable advantage and significant disadvantage to the U.S.

International Telecommunications Industry Structure Study

WFISH MAN:dc DO Cords; DO Chron Subj; Zapple Chron VInt. Chron Mr. Eger

January 7, 1975

Memorandum for:

Mr. Nicholas Zapple Staff Counsel Senate Commerce Committee

You will recall on November 11, Mr. Eger and I came up to talk to you about a number of matters including the recent meeting which had been held in Munich. At that time you asked for periodic reports on the formulation of an international policy statement by this Office. This memorandum is the first in a series of such reports. I will also touch very briefly on other matters of primary concern to the international group so that you will have a good overview of our present work.

I. International Policy Statement

a. Industry Structure

The basic question, that of industry structure, is too well-known to you to require elaboration. It has been studied on a number of prior occasions but we are making a fundamental reassessment of the policy issues both because of the basic importance of the issue and because of the constant changes occurring in the industry. This major effort was begun only two months ago, and some additional time is required before we can formulate even preliminary views. It is impossible to say at this time whether our research and analysis will lead to a recommendation for change or to maintenance of the status quo. I can assure you that we will do everything in our power to make our final recommendations informed and responsible.

b. Cable/Satellite Mix

The controversy between cable and satellite service for international communications has been going on since 1955. In 1970, the Commission issued its formal Notice of Inquiry, and in the next year, OTP issued some general guidelines to the Commission as to what the policy in this area should be. It is apparent, however, that neither of these efforts has been satisfactory, and we continue to consider the general subject at OTP. We hope to evolve a more comprehensive policy statement which will be available sometime this year. However, there are many related issues that make policy formulation in this area particularly difficult. Included among them are the complex operational matters of cable and satellite mix considering economics, service, and cooperation with overseas entities. In addition, there are specific considerations such as the U.S. role in INTELSAT which is of considerable importance. Regulatory issues also impinge on this issue since the timing and size of rate reductions, and in some cases the possibility of rate increases, has a large bearing on the determination of demands for the service. The specific development of policy is also hindered by the lack of a planning mechanism between the U.S. and foreign entities, the absence of a valid procedure, both economically and in regulatory terms for selecting one specific system over another, and on the Government level the absence of sufficient technical, economic and operational data to permit us to make appropriate judgments. Whether indeed the carriers have all the data they need is an issue as well.

In order to formulate policy and resolve these problems, the following basic data assembly and analysis is required: Analysis of past circuit and channel statistics, development of communications demand models, analysis of cable and satellite outages, analysis of service availability of various facility mixes showing the effects of redundancy, reliability, and alternate routing; determination of a valid cost comparison methodology, and the determination of comparative costs; the analysis of past and future regulatory decisions on the cost of service such as the authorized user decision, earth station ownership, possible deregulation of leased channel services and the like.

To deal with these matters, we currently have under analysis a system reliability study, which will provide needed input of service availability considerations required for the evaluation

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of alternative facilities. We are working on a computer forecasting model which will forecast public service and private demand as well as non-U. S. satellite circuit growth which is necessary to evaluate total satellite fill. We have a price elasticity study underway which will determine the impact of rate reductions on the volume of traffic and an international data requirements study which examines the future demand for data service which is an area that is expected to become increasingly important. We are also looking at alternate voice data Government requirements. This is particularly important because the Government is a very large user of such international services. We are also examining the way in which the existing U. S. carriers operate and the overall system through which they transmit messages, both here in the United States and to the overseas points.

We are looking at the cost distributions of the existing facilities attempting to identify the distribution of costs of international service (transmission switching, local distribution). We are also reaching out to examine the operations of overseas correspondents, such as their institutional structures and their attitudes, both historical and current, with respect to rate reduction, cable satellite mixes, etc.

It should be pointed out that the Munich meeting and the follow-on activities incident thereto are also part of this effort. The carriers have submitted their views to the Commission concerning the proper respective roles for the carriers and the U. S. Government and their joint interaction with the overseas partners. We anticipate that some procedure will be established shortly to permit the domestic U. S. group to begin its work with the anticipation of a late Spring meeting with the European administrations.

The foregoing is, of course, a highly abbreviated summary of the work that is going on in OTP and OT in the cable/satellite international area. As you can see, it covers quite a wide spectrum of issues. We believe that this overall appeoach is absolutely vital if the job is going to be done properly, since one cannot deal meaningfully with any of these areas in isolation. I would expect that barring unforeseen difficulties, we will be prepared to make recommendations of a policy nature sometime in 1975. As a practical matter, however, it should be recognized that much joint carrier/USG and U.S./foreign effort is now underway, and it would be unwise to issue a policy statement which later analysis will overtake. Our views will probably, therefore, appear late in the year.

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II. Maritime Satellite

The problems posed by global maritime satellite service are currently occupying a large possion of our time.

The IMCO meeting of some 80 governments is expected to take place in late April of this year. In order to prepare adequately for that meeting, it has been necessary for this Office to devote a substantial amount of our time in the last two months to study and analyze the maritime satellite area, including numerous meetings with interested government agencies and with the maritime and communications industries. Following these meetings, it is intended that a representative of this Office and the Department of State will visit a large number of maritime nations prior to the meeting in an effort to assess their current posture on the issues of major importance to the U. S.

Heretofore, the United States has been very reluctant to consider joining a global maritime satellite system, and we have expressed that reluctance candidly at a number of meetings. It appears, however, that there is wide sentiment among the major maritime powers, including the United Kingdom, France, Germany, and the Soviet Union, to-move ahead with the creation of a new international body for the purpose of establishing global maritime service. For this reason, we have to assess very carefully whether the United States wishes to join that consortium or whether it will continue on its, present course which would suggest that it will not participate.

The issues thus posed for the United States are of fundamental importance to our future posture in the international communications community. We therefore deem it prudent to engage in bilateral discussions with the major maritime administrations informally before the meeting in order to see whether either they or the United St is wishes to reassess prior positions and, if so, on what terms, We will accordingly be doing a good deal of traveling in the montax of January, February, and March and expect to formulate a final view on this question some time in the middle of March. After our bilateral discussions, and before the formal instructions to the U.S. delegation have been drafted, we expect to confer with all interested parties in the Congress so as to have the benefit of their views on the policy issues posed.

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I have attached to this memorandum a number of documents which are self-explanatory and which will give you some flavor for the Munich and maritime meetings and discussions that we have been holding.

These are the major activities in the Office at the moment. If you would like further information on either of them or on any other matters in which we are currently involved, I would be more than happy to provide such information to you either orally or in writing.

If you agree, I would expect to submit further reports to you as matters develop.

William L. Fishman

Attachments

NORTH ATLANTIC PLANNING OF FACILITIES



POST-MUNICH DEVELOPMENTS RE NORTH ATLANTIC PLANNING OF FACILITIES

Since the Munich meeting last Fall with the European Administrations, the U.S. side has done practically nothing to organize itself or to prepare joint (with industry) positions in preparation of the follow-on meetings requested by the Europeans. The lead in these matters is in the hands of the FCC although there are few possible signs as to any activity in spite of OTP urging the FCC that it should proceed.

Two things have recently happened:

(1) The Spanish Government invited the Munich participants to a joint follow-on meeting in Palma, Mallorca, February 25-28. In view of the FCC telex response indicating that since the U.S. government representatives (FCC, OTP, DOS) will be present, but only as observers, and since we are not ready yet to discuss the issues proposed, the Government of Spain has subsequently canceled the proposed meeting.

(2) FCC has just resurrected Docket 18875 (cable/satellite inquiry), originally initiated in 1969 and dormant since 1971, in order to provide itself with a cloak of legality that the regulatory agency apparently felt was needed before they could engage in further discussions relating to planning of international facilities with the potential applicants for such facilities.

OTP has had input in the original Docket 18875, and a somehow increased role during the Munich meeting. We are ready to participate significantly in any FCC efforts in this area. We are concerned, though, that a continuation of the present "do-nothing" policy by the FCC, extremely frustrating for the foreign administration, will not contribute to improved relations with our major counterparts in Europe, which was the stated intent of the Munich meeting.

WNaleszkiewicz:sbw 2/26/75 cc: DO Records DO Chron International subject (Munich) International chron Mr. Fishman Mr. Naleszkiewicz (chron)

(given to J. Eger)





International Trade

3.0 OTP/OT History

The major activities in the export trade area began with a letter to Secretary of Commerce Dent from Betsy Ancker-Johnson (Assistant Secretary for Science & Technology) and Tilton Dobbins (Assistant Secretary for Domestic and International Business) on August 13, 1973. This initiated a

90-day program definition phase effort involving OTP, OT, and DIBA, under the leadership of Jack Cole of OT. A committee was formed, met regularly, and decided to concentrate on five major product areas as examples:

- Land mobile radio
- PBX's
- Video tape recorders
- Satellite earth stations
- Electronic displays

Shortly after the committee established this list of product areas, its efforts foundered on bureaucratic shoals. This is traceable to basic disagreements in approach (analytical versus "trade fair" approaches) and poor cooperation in the integration of these approaches. The effort came to an end early in November 1973.

More recently, a short study of non-tariff barriers in the areas of microwave and two-way radio equipment export was prepared by Jim Hart of 2SD/Boulder (November 1974). The study consists of a number of interviews with businessmen engaged in exporting, and is a compendium of anonymous but pointed comments. The study gives an excellent feel for the problems faced by exporters.

At about the same time, Paul Polishuk of OT led an industry trade mission to Eastern Europe (Yugoslavia, Romania, and Poland). A report on this mission will be issued shortly.

Two activities are underway involving Saudi Arabia; State, Commerce, OTP and OT. These consist of a joint working group on industrialization of Saudi Arabia and an upcoming briefing on satellite technology for the communications minister (with potential U.S. industry participation).

OT and the Office of International Marketing visited the Arthur D. Little Company recently to discuss telecommunications export markets; this consultation was intended to provide background information for an export market study planned by OIM. A twenty-five member Commerce Department Industry Sector Advisory Committee (ISAC), established under the Trade Reform Act, held its first meeting on January 23. ISAC 22 has been asked to provide suggestions to the Office of the Special Trade Representative (STR) for foreign tariff and non-tariff concessions to be sought in the GATT negotiations in Geneva, as well as to provide hard data to support the negotiations. Their data have been requested by February 20, and their final draft report by April 17. Western Electric Company was represented at the first meeting.

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February 10, 1974

TO: William Fishman

FROM: Ronald B. Wheatley

SUBJECT: Commerce Meeting on Technical Sales Seminar to Eastern Europe

A meeting was held at Commerce on January 20, 1975 to discuss OT Commerce's participation in a Technical Sales Seminar to Fastern Europe under the auspices of the Department of International Business Administration (DIBA). Mr. Paul Polishuk discussed the balance of trade problem; that is, the 1972 projection that there will be an anticipated deficit of \$2.7 billion by 1980 is holding true. The trip to Yugoslavia, Rumania and Poland was an attempt to penetrate the Eastern European market for US telecommunications manufacturers. Polishuk discussed the potential markets and the factors inhibiting export suci as financing considerations, antitrust factors, and export control p oblems. According to Polishuk, the potential markets are in the areas of: telephone and telegraph, data communications, regional satellites, land mobil and CATV, (on a lesser scale).

Polishuk pointed out that the Technical Sales Seminar approach is a new format for OT. Essentially it amounts to taking a small. team of interested persons in government and industry to a particular region or country. This team introduces US equipment by way of formal presentations and addresses, at the same time, the broader issues such as the economics of the equipment, growth projections of the area, etc. These formal meetings are followed by informal meetings with host nationals. According to Polishuk, there have been nine of these seminars sponsored by DIBA in various sectors of industry, and it is estimated that these seminars have resulted in \$50 worth of trade.



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Polishuk sees a potential market for telephone products in Eastern Europe. According to him, there are 3 - 6 telephones per 100 people in Eastern Europe as compared with 62 per 100 in the US and 50 per 100 in Ganada. Moreover, the domestic telephone growth rate in these countries is good with a \$1.5 billion potential market.

Sumarizing the three countries' outlook, Polishuk said that all of them have room for development, all are interested in industrialization; and all want to manufacture for both the internal and the domestic markets. They are looking toward the Middle East and Latin America for export markets. F' ally, all three desire to acquire technology at a very fast rate.

The Eastern European Technical Sales Seminar was the first telecommunications seminar other than the one that went to Russia in 1972. Another such seminar for telecommunications is planned for North Africa in June 1975.

Polishuk said that if these Technical Sales Seminars are not followed up by other programs, for example, further discussions and negotiations followed by contracts and prompt delivery then they lose their credibility. Delays in letting contracts and delivery due to export controls have an adverse effect on future sales. According to Polishuk, the mechanism for an effective follow-up program for these seminars is lacking at Commerce.