

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF TELECOMMUNICATIONS MANAGEMENT
WASHINGTON, D.C. 20504

*Authorized
Users*

August 6, 1969

MEMORANDUM FOR MR. WHITEHEAD

Attached copy of the letter concerning the Apollo communications was sent to the FCC today. Also, copies have been sent to the carriers.

Ralph

Ralph L. Clark

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF TELECOMMUNICATIONS MANAGEMENT
WASHINGTON, D.C. 20504

OFFICE OF THE DIRECTOR

August 6, 1969

Honorable Rosel H. Hyde
Chairman
Federal Communications Commission
Washington, D. C. 20554

Dear Mr. Chairman:

This is with reference to the request of the Communications Satellite Corporation for continuation of the direct contractual relationship between the National Aeronautics and Space Administration and the Communications Satellite Corporation for communications supporting the Apollo project.

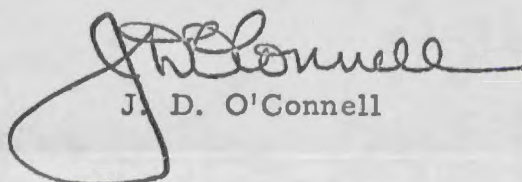
The Commission's opinions of July 20, 1966, as amended February 1, 1967, concerning the so-called "authorized user" matter cited this service as an example of a situation "where the requirement for satellite service is of such an exceptional or unique nature that the service must be tailored to the peculiar needs of the customer and, therefore, cannot be provided within the terms and conditions of a general public tariff offering."

Nevertheless, when the question of continuation of this arrangement was raised some weeks ago, it was considered that it might be possible for the service to be handled through one of the terrestrial carriers. However, a number of circumstances have subsequently arisen which make it essential to continue the present arrangement.

The future service requirements in support of Apollo will involve a pattern of operational relationships between the Government, Comsat, which operates the satellites, and the operators of earth (and ship) stations similar to those which presently prevail. The satellite portion of the NASCOM service was established by INTELSAT under a special allotment arrangement, based expressly upon the requirement of the U.S. Government associated with the Apollo missions. Further, these services involve the provision of non-standard circuits of less than CCITT quality. In order to assure that these arrangements are not impaired to the detriment of the space program, and in the belief that the interjection of U S. terrestrial carriers into this pattern would not provide any benefits, we have concluded that the service should continue to be furnished directly by Comsat.

It is therefore in the national interest that the direct contractual relationship between Comsat and NASA for provision of the NASCOM service in support of Apollo be continued. NASA has been instructed to renew or extend its contract with Comsat.

Sincerely,

A handwritten signature in dark ink, appearing to read "J. D. O'Connell". The signature is stylized with a large, looping initial "J" and a long horizontal stroke extending to the right.

J. D. O'Connell

From: Lydie Hull

July 22, 1969

Miss Daugherty,

Since you may not yet have received the letter of July 18th we discussed on the phone this morning, I am sending you another. Will you please discard the first Xerox copy when it is received.

Thank you.

Lydie Hull

COMMUNICATIONS SATELLITE CORPORATION

JAMES McCORMACK
Chairman

18 July 1969

The Honorable James D. O'Connell
Director of Telecommunications Management
Office of Emergency Planning
1800 G Street, N. W.
Washington, D. C.

Dear Mr. O'Connell:

We have received copies of letters furnished to the carriers by NASA for extension of the present NCS/NASCOM satellite circuits after September 30, 1969. This extension would renew the service being provided for the past three years to NASA for the very vital Apollo communications requirements which, as you know, has been an important and successful part of the Apollo effort.

The satellite portion of the NASCOM service was established by INTELSAT under a special allotment arrangement, based expressly upon the urgent requirement of the U.S. Government associated with the Apollo missions. The INTELSAT partners, in their decision to provide this service based on the long-term commitment of NASA and the Signatories involved and the urgency of the requirement, clearly indicated that the satellite service arrangements were unique and not intended to establish a precedent for regular commercial service.

The unique NASCOM satellite services include sharing of units between earth stations (Ascension and Canary Island links) and providing of non-standard circuits of less than CCITT-CCIR quality. NASA is now contemplating extending

this same type of service, modified by an additional non-standard service of a single circuit to two earth stations (ship-borne), with switching between the ships based on their immediate requirement. NASA also desires that this ship service be a part-time service, which would provide for availability of its priority requirements but at a cost less than the full-time service.

As you can see from the above, Comsat is in the anomalous position of being requested by NASA to quote to the carriers for a service which we have never tariffed and provided to them and would only contemplate providing on the basis of an underlying long-term agreement with the Government. The chances that INTELSAT will provide an extension of the NASCOM service under terms and conditions similar to those proposed by NASA would be enhanced by an absence of unresolved disputes within the U.S.

Comsat believes that the unique aspects of the present service will, in large measure, be reflected in the extension of the service beyond September 30, 1969 which is proposed by NASA. We accordingly request a determination by your Office that the establishment of this service to NASA, as an authorized user, be extended to include the future requirements for NASCOM. This determination should be made by your Office before Comsat proceeds with arrangements necessary for extension of the NASCOM service.

The urgency of this service and its importance to safeguarding the lives of the crews of manned Apollo missions underscores the importance of extending the direct, and outstandingly successful, service being provided by Comsat.

Sincerely,

James W. McCormack

OFFICE OF TELECOMMUNICATIONS POLICY

EXECUTIVE OFFICE OF THE PRESIDENT

WASHINGTON, D.C. 20504

October 28, 1971

DIRECTOR

Honorable Dean Burch
Chairman
Federal Communications Commission
Washington, D.C. 20554

Dear Dean:

The unrealized potential of satellite communication systems for U.S. domestic services continues to be a source of serious concern to the Administration. Prospective suppliers of these services have been delayed for more than six years while various parts of the Government have examined and reexamined the question of public policy guidelines.

In January 1970, the Administration recommended that domestic satellite communications be allowed to develop under a basic policy of open entry. Under this policy, any financially qualified entity which sought to establish a domestic satellite system, including common carriers, would be authorized to do so, subject only to antitrust considerations and essential technical coordination.

The Commission responded favorably to this approach, but chose to solicit applications and comments from all prospective satellite operators before proceeding further. The private sector has since responded to this initiative with seven proposals for full-service satellite systems and several proposals for partial service offerings -- all to be offered on a privately financed commercial basis.

The Office of Telecommunications Policy has carefully reviewed the major applications to determine whether they raise questions about any of the principles and premises set forth in the Administration's original

recommendation: We have examined questions of technical and economic feasibility, particularly those relating to spectrum and orbit utilization and to the existence of economies of scale or other natural monopoly conditions. We also have reviewed the several legal and procedural issues raised. In no area did we find evidence which would negate the Administration's previous policy recommendation.

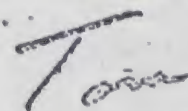
Indeed, the opposite is true. There are customers waiting for satellite services and prospective suppliers with the capital and the will to offer them on a commercial basis. We see no reason for the government to continue keeping these groups apart. No further study, sifting of applications, or enforced commercial arrangements would be as constructive for the using public or for the industry as the prompt opening up of this new and exciting field.

As you know, the President recently established measures designed to alleviate the problems of our nation's economy. The prompt authorization of domestic satellite systems would aid substantially in this effort by stimulating up to \$450 million in investments, and associated employment, in the aerospace and electronic industries -- two segments of the economy which have been hit particularly hard by cutbacks in Federal spending. The authorization would also provide lower transmission costs and thereby help reduce upward pressure on common carrier rates.

I urge the Commission to examine carefully the enclosed recommendations and to adopt an open entry policy as promptly as possible.

I am available, as is my staff, to discuss this subject in whatever depth you may desire.

Sincerely,



Clay T. Whitehead

Domestic Satellite Communications

Summary OTP Findings and Policy Recommendations

The several applications from prospective domestic satellite operators now pending before the Federal Communication Commission indicate clearly that such facilities can play a significant and increasing role in enhancing the nation's communications capability and broadening the range of economic services.

The Administration recommended in January 1970, that domestic satellite operations be established under a basic public policy of open entry and competitive operation. Under this policy, any financially qualified entity which sought to establish a domestic satellite system for public or private use could do so, subject only to antitrust considerations and essential technical coordination.

The Office of Telecommunications Policy has examined the applications now before the FCC to determine whether the Administration's policy recommendation continues to be appropriate. This examination shows there are no technical, economic, or legal considerations which preclude the approval of any proposed system. Conversely, there is substantial evidence that a policy of open entry and competitive operation would produce benefits in terms of innovative systems and services, cost reductions, and economies of specialization for the communications user.

The available orbit space will readily accommodate all proposed U.S. and Canadian satellites using 4 and 6 GHz spectrum allocations without fear of harmful interference, even in the rather unlikely event that all proposed systems would be built. This can be achieved with an average satellite separation of about 30°, which is shown to be more than adequate by several applicants (Hughes, WTCI, COMSAT, and WU) and our own analysis, provided adjacent satellites are alternately polarized. Furthermore, there are numerous engineering and operating options which would allow additional systems to be built as this becomes necessary, even using existing technology and these spectrum bands.

It also appears that noninterfering sites can be found for all proposed earth stations under established coordination procedures. Sample calculations for the New York City area indicate there are many sites which, according to the ITU coordination criteria, qualify for detailed coordination with specific terrestrial relay stations, even in this congested area.

Further technological developments, such as the use of multiple satellite antenna beams, will permit the installation of additional satellites of increased capacity in coming years. In conjunction with the use of other frequency allocations of substantially greater extent than the 4 and 6 GHz bands, these developments will multiply both the number of satellites which can be established and the capacity of each severalfold, providing a substantial reserve capacity to meet future growth in demand.

There are no significant economies of scale in the proposed systems which would preclude the feasibility of multiple systems or result in substantial inefficiencies. The annual cost per in-orbit channel is virtually the same for the 12, 24, and 48 channel satellite configurations proposed, and the small differences which exist are well within the range of uncertainty of the cost estimates. There are some economies of scale for particular types of earth stations (e.g., multipurpose, multichannel), but these are rapidly overcome by economies of specialization for special-purpose systems; even when economies of scale appear, they are bounded due to the limited channel capacity available through a single earth station/satellite path.

There is no a priori evidence that multipurpose systems are more economic or more suited to user demands than single-purpose systems. There are substantial cost savings for some systems which provide specially tailored services (e.g., network TV distribution). Similarly, there may be economies in providing a given type of service at different quality levels. As in the case of the specialized common carriers, there is reason to believe that the marketplace

can best resolve the tradeoffs between service and cost, particularly in an era of dynamic technological development.

The demand for service identified in the applications will support several -- although probably not all -- of the proposed systems. There appears to be a near-term need for about 100 satellite channels (5-10 satellites, depending on capacity), whereas the applications encompass a total of 336 channels in 12 primary satellites plus another 264 channels in 8 spare/secondary satellites. Even so, there is no evidence to indicate that selection of the successful operator(s) by the government is either necessary or preferable on public interest grounds to a marketplace determination. The cost of these systems is great (typically in the \$50-200 million range), and investors will weigh their prospects carefully before making final commitments to systems without an adequate traffic base or competitive advantage.

The American people should and can receive a dividend from U.S. investments in space technology through domestic satellite services. However, a discriminatory tax on this mode of communications for any purpose, including support of public television, is an inefficient, inequitable, and largely counterproductive approach to the realization of that objective. By raising the cost and thus deterring the commercial use of satellite services, this tax would simply encourage less cost-effective technologies and stifle innovation in satellite technology. If a subsidy for worthwhile public services is required, it should be granted by the Congress and supported by a tax that does not burden a particular mode of communications.

Numerous legal and procedural questions have been raised in the applications and comments before the FCC. Our examination indicates that the Commission has adequate legal authority and precedents for adopting an open-entry policy, as urged by the Administration, without further administrative proceedings.

There are many measures consistent with existing rules and procedures which the Commission could adopt to expedite the authorization of domestic satellite communication systems and avoid unnecessary comparative hearings. The following is an illustrative example of one approach:

(1) Issue a ruling, as in the case of specialized carriers, that arguments of economic exclusivity alone will not be considered grounds for comparative hearings in situations where competitive supply of services appears feasible.

(2) Require all applicants to undertake prior coordination of satellite and earth station locations and frequency assignments to avoid possible interference situations -- again as in the specialized carrier procedures.

(3) Require each applicant to specify the desired orbit location, frequency bands, antenna polarization, and expected implementation date for each proposed satellite, and to define a service arc within which the proposed service can be satisfactorily provided, as set forth in the regulations of the World Administrative Radio Conference.

(4) Provide a 60-90 day period following issuance of a policy statement, within which applicants may revise their proposals and undertake the coordination of technical parameters as noted in (2).

(5) Routinely approve all applications for which there is no basic conflict in orbit location and spectrum usage (i.e., no common-frequency satellite proposed by a different entity within 3° of the location requested), subject to relocation within the service arc at the discretion of the Commission in order to accommodate additional systems.

(6) Set comparative hearings for all applications for specific orbit locations which are in conflict and which cannot be resolved through consultation with the FCC staff and affected parties. Such hearings would deal with matters

of both technical compatibility and economic exclusivity, but would be limited to the particular satellites in conflict.

(7) Rule that the cost of relocating satellites (including associated earth station costs) within the stated service arc to accommodate additional systems shall be borne by the system operator until 120 days prior to satellite launch, after which all such costs shall be borne by the new entrant.

While some antitrust questions have been raised in the proceedings, in our view they should be resolved in favor of liberal entry and unrestricted initial operation. None of the proposed systems, including those contemplated by COMSAT, COMSAT/AT&T, and Hughes/GTE, appear to pose a serious anti-competitive threat at this time, either individually or in combination. (Nor do we see any legal reason for excluding COMSAT from either activity they have proposed). Any measures necessary to prevent anti-competitive behaviour can be taken if and when such practices appear; to establish them at the outset without firm assurance that they are necessary would have the effect of precluding rather than fostering competition in this new field.

Service to Alaska and Hawaii, as proposed by several applicants, poses a different and more complex set of legal issues, having to do both with the distinction between U.S. domestic and international carriers and services and with international agreements to which we are a signatory. We conclude that applications to provide service to these areas should be approved subject to appropriate consultation with INTELSAT as required in the definitive agreements. Similarly, we find no valid basis for denying traffic to a domestic satellite system which would otherwise be served by trans-oceanic cables, except to the extent such facilities offer lower costs or are more effective in meeting the specific requirement.

In conclusion, we find there are no unique circumstances or public interest considerations which require that domestic satellites be treated differently than any other new technological development. The Commission has established rules and procedures for dealing with private radio communication systems, specialized communications carriers, and common carriers which should be applicable to the domestic satellite proposals now before it, or likely to emerge in the near future. These rules and procedures, interpreted in the light of the Administration policy recommendations concerning entry and operation, and augmented by procedural arrangements such as those previously identified, should allow the prompt authorization of all proposed systems and an early development of this exciting new communications capability.



OFFICE OF
TELECOMMUNICATIONS
MANAGEMENT

PRESENTATION

TRENDS IN SATELLITE COMMUNICATIONS TECHNOLOGY

AND

POTENTIAL FUTURE APPLICATIONS

July, 1969

OUTLINE

BACKGROUND

- FUTURE WORLD ENVIRONMENT
- USER NEEDS AND DEMAND FOR TELECOMMUNICATIONS SERVICES
- TRENDS IN TECHNOLOGY
- POTENTIAL FUTURE APPLICATIONS
- BENEFITS TO PEOPLE OF THE WORLD
- IMPLEMENTING FUTURE SYSTEMS

SUMMARY

PURPOSE OF PRESENTATION

- o To highlight trends in satellite communications technology, with a focus on long-range trends;
- o To identify the kinds and wide-range of potential future applications; and
- o To foster appreciation of the dynamic pace of satellite communications technology and to postulate the implications these trends will have on implementing future systems.

The Presentation is a summary of a Staff Paper prepared by OTM and is based, in part, on a general survey of NASA and INDUSTRY with respect to the trends in technology.

BACKGROUND

- DYNAMIC PACE OF TECHNOLOGY DURING 1960's
(Communications-Electronics & Space)
- DEMONSTRATIONS OF PRACTICAL APPLICATIONS
- DEPLOYMENT OF OPERATIONAL SYSTEMS
 - Military
 - Global Commercial
- CURRENT AND PENDING ACTIVITIES :
 - INTELSAT Conference (1969-1970)
 - World Administrative Radio Conference (ITU-1971)

FUTURE WORLD ENVIRONMENT

- Long-Range Forecast
Kahn & Wiener (The Year 2000)
- Analysis of Situation
Drucker (Age of Discontinuity)
- Rising Expectations of Developing Nations
Urge to join INTELSAT
- "Management Revolution"
Systems Approach to Solve Social Problems
Ramo (Cure for Chaos)
- "Communications Revolution"
Solid State Physics
Transmission systems/Switched networks
Computer & Communications
- "Era of Abundance" in International Telecommunications

USER NEEDS
FOR TELECOMMUNICATIONS SERVICES

4 Broad Range of User Needs

- International Public Telecommunications
- Domestic Public Telecommunications

- Specialized Telecommunications

Expanded networks to provide telephony, telegraphy, telex, facsimile, data and television distribution --

Future emphasis on data, computer to computer, PICTUREPHONE and other graphics, and access to less-developed areas of the world.

Aeronautical and maritime communications, traffic control and navigation.

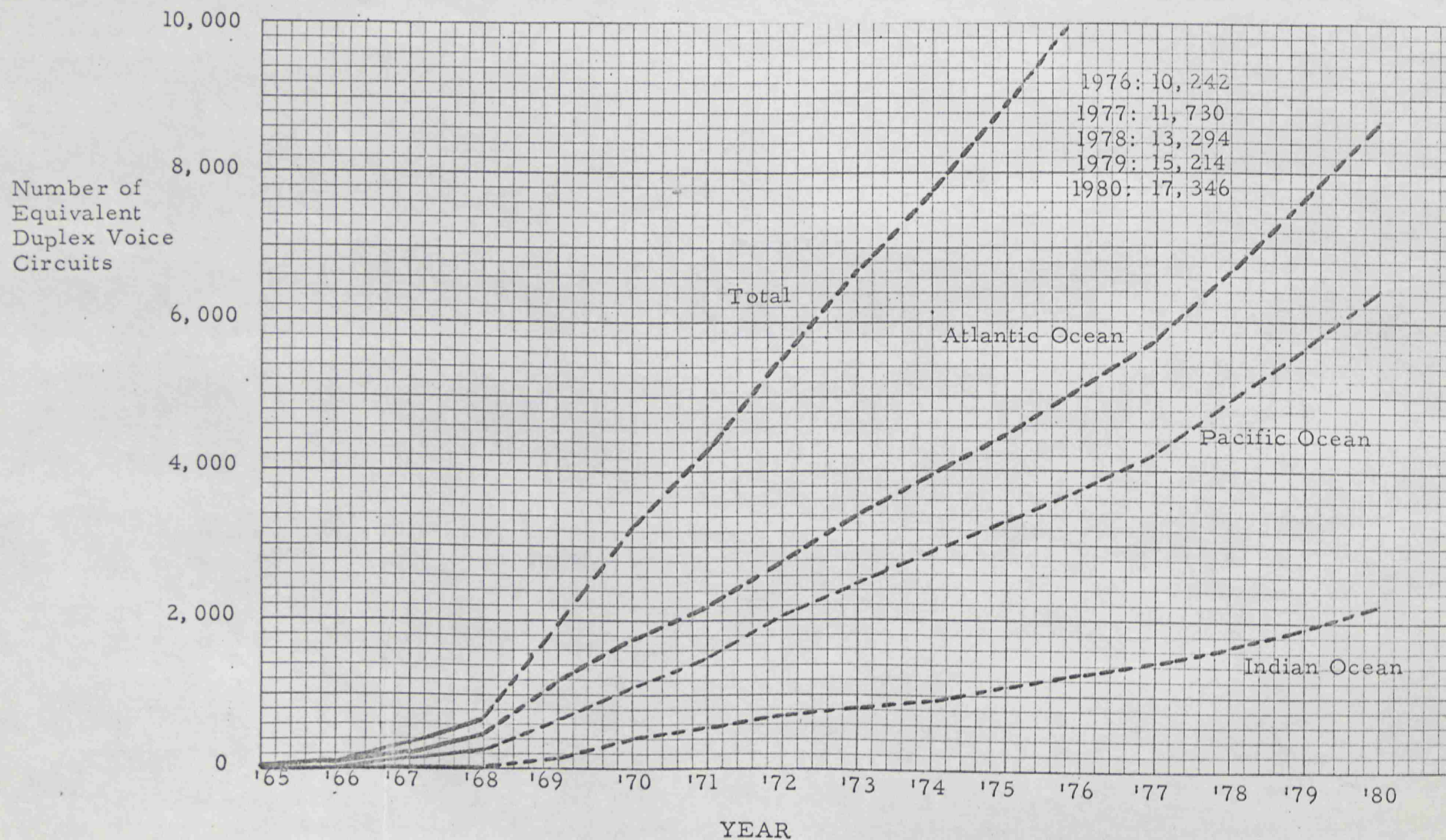
Broadcast (Expanded television distribution by dedicated networks.)

Space Data Relay.

● Objective

To maximize the early availability of a full range of high quality, dependable, telecommunications services throughout the world at the lowest practical cost, consistent with other objectives, and the effective use of resources including the frequency spectrum.

Growth in Satellite Utilization
(INTELSAT System)



Per ICSC-39-10E to 1973
COMSAT Staff 1974-1980

TRENDS

IN

TECHNOLOGY

TRENDS IN TECHNOLOGY

PROGRESS TO DATE

(1957 - 1969)

List Major Milestones --

-- Geostationary Satellites

-- High Powered Wideband Active Repeater Satellites

-- Earth-oriented Antenna Satellites

-- Long-life spacecraft

-- System Applications

(Progress chart)

(INTELSAT System Map)

(Pictures of INTELSAT Facilities)

TRENDS IN TECHNOLOGY

(Continued)

Building Blocks for the Future (1970 - 1985)

- Boosters TITAN III C - ATLAS/CENTAUR
- Spacecraft Large - High Capacity - Long life
 Multiple "Spot" Beams
 VHF - UHF - SHF - Millimeter Wave
- Terminals and Earth Stations
 - Standard
 - Transportable (Low Cost)
 - Mobile (Aeronautical - Maritime)
- Systems Approach
 - General Purpose
 Global System
 - Special Purpose
 Dedicated Networks

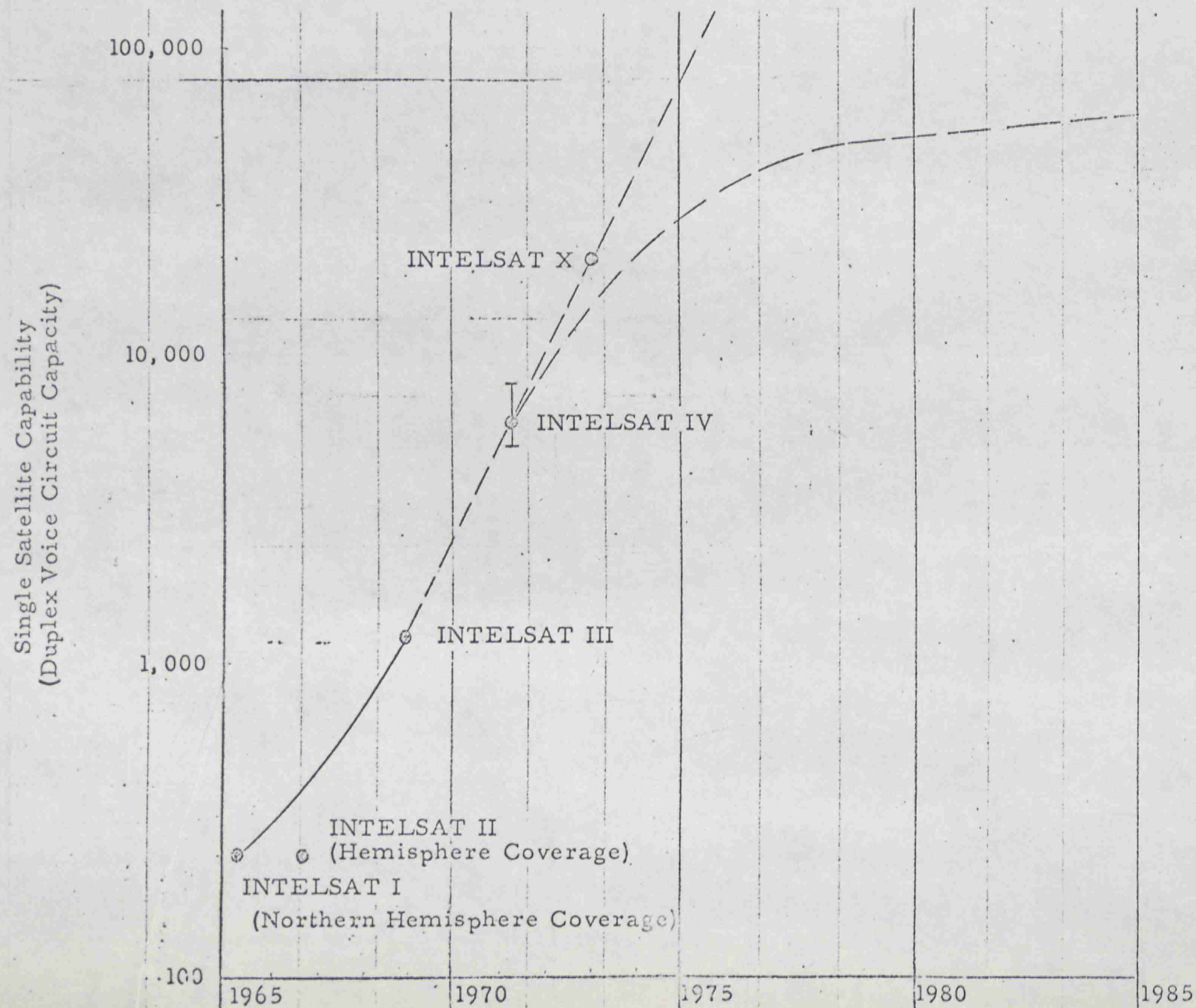
(Picture of Future Technology)

TRENDS IN TECHNOLOGY

(continued)

9

Growth of Operational Performance in Commercial Communication Satellites



POTENTIAL

FUTURE

APPLICATIONS

POTENTIAL FUTURE APPLICATIONS

10

Expected Technological Advances

Potential Applications

Phasing

Large Boosters - Atlas/Centaur
- TITAN III C

INTELSAT IV & later
INTELSAT V & later

1971
Post 1975

Spacecraft

Multiple Steerable "spot" beams
Large Parabolic Reflector
Multiple purpose satellite cross
band operation

INTELSAT V or VI
Special Purpose (Broadcast)
General and Special Purpose
(e. g. INTELSAT & aeronautical)

late 1970's
mid 1970's
late 1970's

Terminals and Earth Stations

Transportable (low cost)
Mobile (aeronautical, maritime and
land mobile)
Integrated (Multipurpose) terminal

Developing Nations Earth Stations
Specialized Applications
Future INTELSAT System

Early 1970's
Early 1970's
Mid 1970's

System Approach

Frequency reuse
Millimeter waves
Advanced Modulation

INTELSAT V
INTELSAT VI
INTELSAT V

Post 1975
Late 1970's or Early 1980's
Post 1975

Chart - General Purpose Applications

Chart - Special Purpose Applications

BENEFITS

TO PEOPLE

OF THE WORLD

BENEFITS TO PEOPLE OF THE WORLD

- ATTRIBUTES OF SATELLITE COMMUNICATIONS

- Coverage
- Capacity
- Versatility
- Flexibility

- ACHIEVEMENTS TO DATE

- Global System Space Segment
- Earth Station Population

- TRANSITION FROM "ERA OF SCARCITY" TO "ERA OF ABUNDANCE"

- Technology Limitations Paced Growth
- High Capacity Geostationary Satellites
- New Environment for International Telecommunications Users

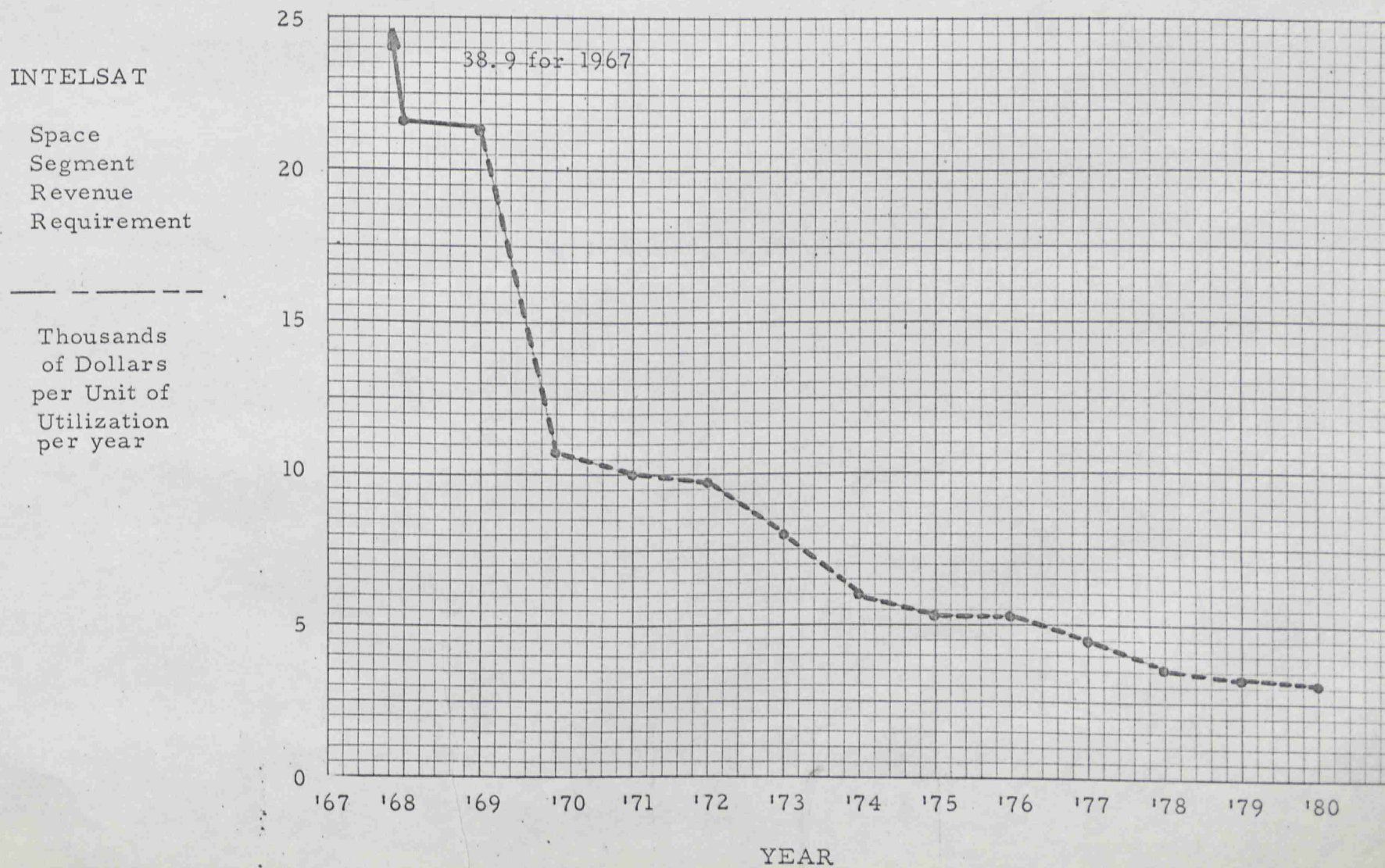
- SPECIAL VALUE TO DEVELOPING NATIONS

- Direct Access to Global Network
- Rapid Implementation of Basic Plant Made Possible

BENEFITS TO PEOPLE OF THE WORLD
(Continued)

12

Trends in Costs for Satellite Communications

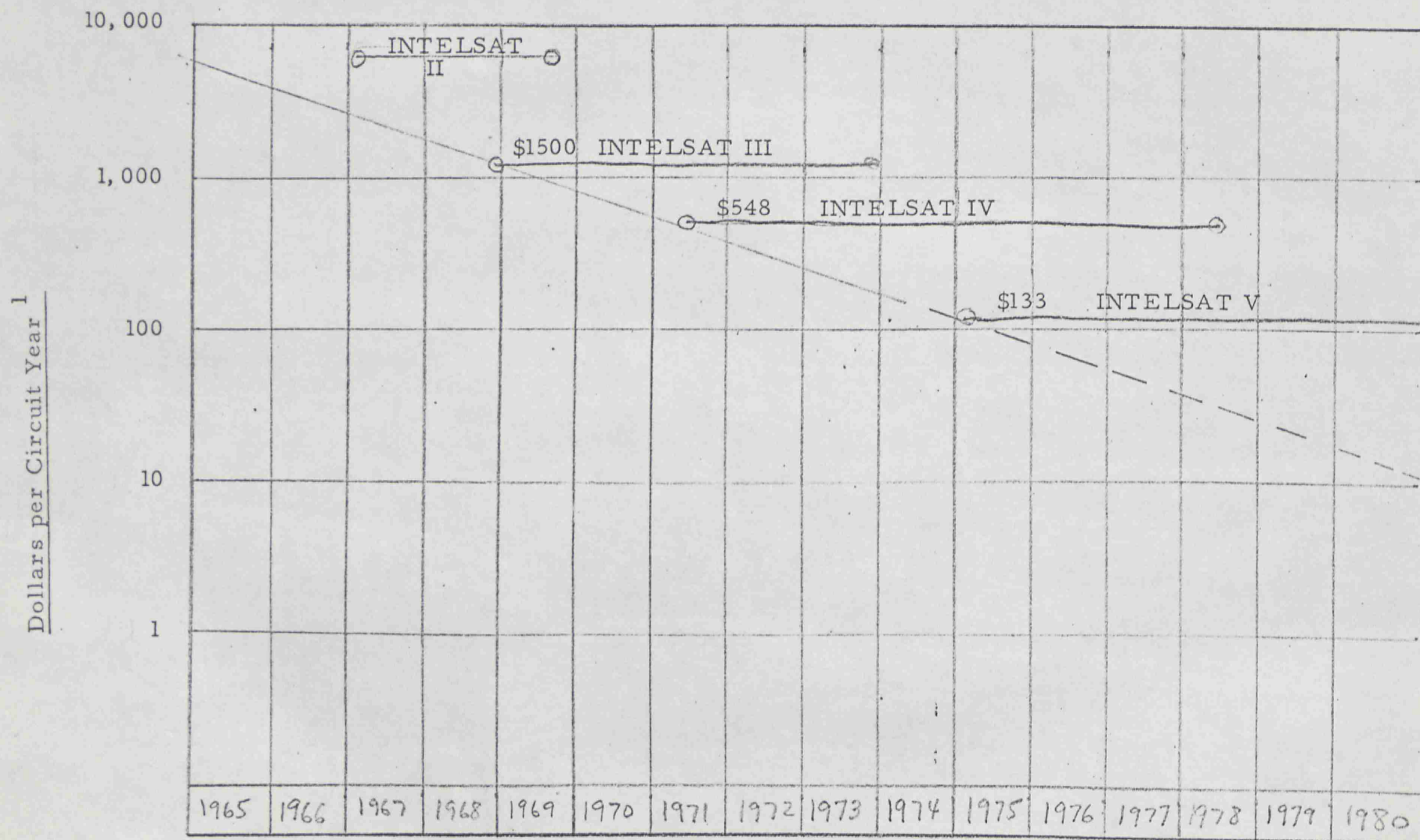


Per ICSC 37F-12E

TRENDS

13

SATELLITE COST PER CIRCUIT YEAR (Incremental Investment)



¹ Duplex Voice Circuit
Space Segment only.
Does not include R&D and O&M costs.

CONCLUSIONS ON TRENDS

14

SATELLITE COMMUNICATIONS TECHNOLOGY

- Active Research and Technology Programs will continue to provide Advanced Technology on a broad scale.
- Trends in satellite communications technology should continue to advance rapidly during the 1970's.
- Numerous high-performance, advanced technological building blocks will be available for practical applications.

POTENTIAL FUTURE APPLICATIONS

- User needs and demand for telecommunications services will continue to expand.
- Projected growth in capability of satellite communications technology will make possible a wide-range of practical applications for the benefit of people throughout the world.

IMPLEMENTING

FUTURE

SYSTEMS

IMPLEMENTING FUTURE SYSTEMS

● CONSTRAINTS ON SYSTEM IMPLEMENTATION

- Orbital Slots
- Frequency Spectrum
- Market (Nature and Size)
- System Costs
- Economics of Scale
- Ready Availability of Most Advanced Technology.
- Regulatory Restrictions
- Institutional Inflexibilities

● PROBLEMS TO OVERCOME

- Maintaining the Momentum of Accomplishments to Date
- Timely Exploitation of Rapidly Advancing Technology
- Meeting the Needs and Demands of Users
- Establishing Institutional Arrangements having Timely Decision-Making Attributes
- Following Rational "Organized" Approach to System Implementation.

INSTITUTIONAL VIEWPOINTS
ON

17

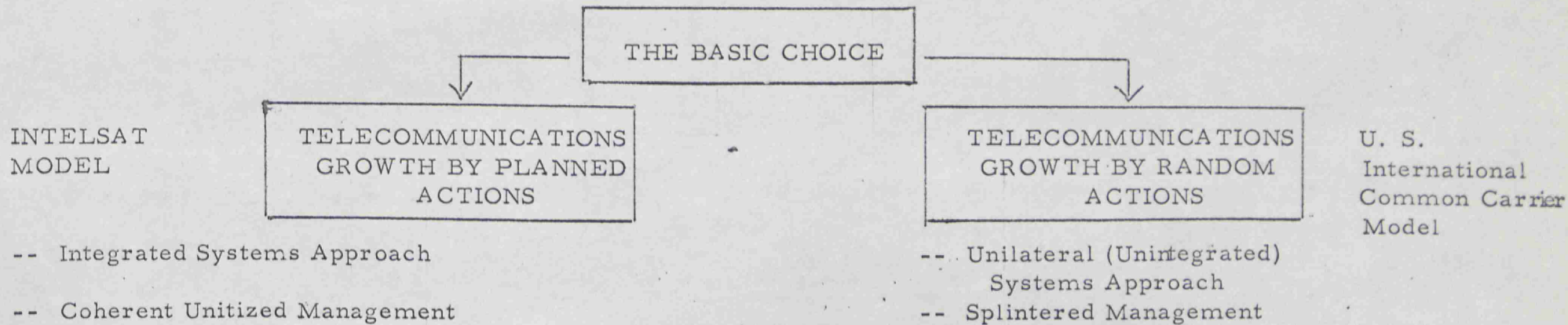
IMPLEMENTING TELECOMMUNICATIONS SYSTEMS

<u>Community of Interest</u>	<u>Viewed By</u>	<u>Principal Interests</u>
The World	Communicator	<ul style="list-style-type: none">- Available, dependable, low-cost global telecommunications for the benefit of mankind.
The Developed Nations	Political Leader (West Europe Japan)	<ul style="list-style-type: none">- Nationalistic Drive.- Desire to close so-called "technological gap" through national space programs.- Aspiration for larger piece of INTELSAT action.
	Communicator	<ul style="list-style-type: none">- Available, dependable, low-cost global telecommunications for the benefit of mankind.
The United States	National Policy-maker	<ul style="list-style-type: none">- Communications Satellite Act of 1962 (same as World Communicator's view)
The Developing Nations	Political Leader	<ul style="list-style-type: none">- Aspirations to develop.- Representation in INTELSAT Consortium.
	Communicator	<ul style="list-style-type: none">- Low Cost, easy access to the global system.

IMPLEMENTING FUTURE SYSTEMS

18

INSTITUTIONAL ARRANGEMENTS (Alternative Approaches)



RATIONALE

International Cooperative Approach

Promote Growth by Joint Effort toward
Common Goal
(Services & Low Rate Motivation)

CONSEQUENCES

Orderly System Evolution
Large Market Base
Economics of Scale
Ready Availability of Most Advanced Technology
Output of Large U. S. Space Program
Large Satellites-Lower Cost/Circuit/Year
(see Chart 16)
Multiple Purpose Satellites are Consistent Institutionally
with this Model.

RATIONALE

Separate National/Industry Approach

Promote Growth by Competition
(Profit Motivation)

CONSEQUENCES

Disorganized "Piecemeal" System Growth
Unnecessary Duplicative Facilities
Non-Optimum Routing (Via Networks)
Economic Penalty to Users
Smaller Market Base & Unilateral Implementation
Availability of Most Advanced Technology
Not Guaranteed.

SUMMARY

● GREAT POTENTIALS FOR THE FUTURE

- Satellite communications can provide improved telecommunications throughout the world (higher capacity and quality-lower costs).
- Many opportunities to expand the range of telecommunications services.
- World is entering the "ERA OF ABUNDANCE" in international telecommunications.

● CHALLENGES FOR THE UNITED STATES

- Work Toward Goals of Communications Satellite Act of 1962
- Provide leadership to
 - Exploit the opportunities for enhanced telecommunications throughout the world.
 - Promote international cooperation in the implementation of satellite communications.

Consent

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF TELECOMMUNICATIONS MANAGEMENT
WASHINGTON, D.C. 20504

OFFICE OF THE DIRECTOR

June 16, 1969

Memorandum for Mr. Clay T. Whitehead:

Subject: Communications Satellite Traffic -- United States
Mainland and Hawaii

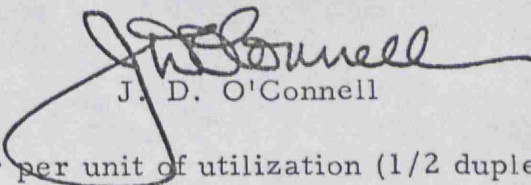
This memorandum highlights the existing and projected estimates of subject traffic. The number of equivalent duplex voice circuits using INTELSAT satellites is as follows:

<u>USER</u>	<u>Actual</u> <u>1 June 1969</u>	<u>End</u> <u>1969</u>	<u>End</u> <u>1970</u>	<u>End</u> <u>1971</u>	<u>End *</u> <u>1972</u>
Commercial	99	140	-	-	-
Government	<u>30</u>	<u>39</u>	<u>-</u>	<u>-</u>	<u>-</u>
Total	<u>129</u>	<u>179</u>	<u>278</u>	<u>385</u>	<u>614</u>
% of Total Pacific Ocean Area	22.2	17.1	19.5	19.5	25.5

An estimate of the value to the INTELSAT Consortium of the traffic volume depicted above is as follows:

Space Segment Revenue to INTELSAT

End 1969 rate	<u>\$7,160,000</u> per year **
End 1970 rate	11,120,000 per year ***
End 1971 rate	15,400,000 per year ***
End 1972 rate	24,560,000 per year ***


J. D. O'Connell

* See ICSC 38-10

** Based on \$20,000 per year per unit of utilization (1/2 duplex voice circuit)

*** Rates are expected to be reduced nominally during future years.

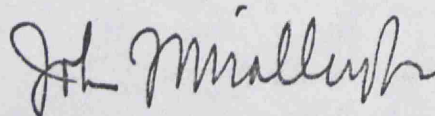
EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF TELECOMMUNICATIONS MANAGEMENT
WASHINGTON, D.C. 20504

May 21, 1969

NOTE FOR MR. WHITEHEAD

Mr. O'Connell is out of town, but before leaving he reviewed the attached memorandum in draft and approved it.

In order that you might have this as soon as possible, he asked me to sign it for him, and send it over to you today.

A handwritten signature in dark ink, appearing to read "J. J. O'Malley, Jr.", with a stylized, cursive script.

John J. O'Malley, Jr.

Attachment

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF TELECOMMUNICATIONS MANAGEMENT
WASHINGTON, D.C. 20504

OFFICE OF THE DIRECTOR

May 21, 1969

MEMORANDUM FOR MR. CLAY T. WHITEHEAD

This is in response to your memorandum of May 13, 1969, requesting my advice on the authority of the President to take the initiative in defining the broad characteristics of a domestic communications satellite policy and domestic communications satellite system. You also requested a summary of the "thirty circuit" procurement, including the issues involved, the FCC ruling, and the provision for DTM certification that direct procurement from Comsat is in the national interest.

1. Presidential Authority Regarding Domestic Satellite Service

As your memorandum notes, the Communications Satellite Act (CSA) of 1962 confers substantial authority and responsibility on the President relevant to the provision of domestic communications satellite services. Of course, we all recognize that the state of the communications satellite art has advanced considerably since Congress enacted the Satellite Act in 1962 when it would have been indeed difficult to envision the use of communication satellites for anything other than intercontinental communications services. We would quite agree with Assistant Attorney General Reynquist when he stated in a recent letter to the Legal Adviser of the State Department that Congress could not then foresee the specific organizational form domestic communications by satellite would have in relation to international communications. (See letter from Assistant Attorney General Reynquist to Legal Adviser, Department of State, dated 29 April 1969, pp. 5-6; copy attached.) The Congress did, however, make clear in the Satellite Act the objective of the United States that an international communications satellite system be established expeditiously, and on the basis of an international agreement that would protect the system not only from electromagnetic interference, but also from wasteful duplication of facilities created by competing foreign systems. To these ends, the Act, particularly Section 201(a), authorizes the President, among other things, to insure that arrangements be made for foreign participation in the system and to use this authority to obtain coordinated and efficient use of the electromagnetic spectrum.

The sum and substance of the Assistant Attorney General's opinion is that policy questions regarding a foreign domestic satellite system and the international system are "inextricably related," and for this reason alone no action should be taken approving a foreign domestic system without first determining its impact on the international (or INTELSAT) system. Mr. Reynquist's conclusion is that any United States launch assistance provided for a foreign operational domestic satellite system must have the specific approval of the President. It would certainly seem that if the policy issues regarding a foreign domestic system are significantly related to the international system, those affecting a United States domestic service or system must also be related. Therefore, the specific approval of the President should be required before any separate domestic United States system is authorized.

This is not to say that the Government ought to take the initiative in the technical planning for commercial communications satellite service. The United States domestic and international carriers, including Comsat, rather than the Government should take the initiative in developing the basic technical requirements for a satellite system; but this cannot be done very efficiently in the absence of a policy framework developed by the Government. As the carriers move forward in their planning we would contemplate the Presidential (or Executive Office) function to be to monitor developments carefully, including not only information coming into the State Department from abroad, but also by fairly frequent consultation with Comsat, the United States terrestrial carriers, the Departments of State and Defense, and NASA, to insure that the over-all policy concept set out in Section 102 of the Satellite Act is being followed.^{1/}

The fact that the President appoints three Comsat directors and is directed by the Act to make an annual report to Congress on the "national program" contemplated in Section 201(a)(1) of the CSA is further evidence of the intent of Congress to provide for a major role for the President in the development of sound communications satellite policy. Of course, the degree to which the Executive Office and the White House participate in the policy process is itself a policy matter, but the United States and Canadian domestic satellite issues seem to us to be of such transcending importance that if the White House role is to be meaningful at all, it must assert itself here.

^{1/} You are undoubtedly aware that Subsection 102(d) states that it is not the intent of Congress to preclude the use of "the communications satellite system for domestic communication services. . . ."

As you know, we have continuously opposed the provision of launch service for an independent Canadian domestic satellite. We adhere to that position. It is our view that the White House ought to promulgate the policy that our commitments to INTELSAT as well as the national interest of the United States would best be served if the United States domestic pilot program be serviced through INTELSAT satellites (or, at least, that INTELSAT be offered the opportunity to provide the service). At the same time the FCC should be urged that in order to make most efficient use of the radio spectrum and lower system costs as much as possible that a multiple purpose system, rather than a single purpose system, ought to be authorized.

In summary, the Act does not seem to place any practical limitation on the powers of the President in the provision of policy guidance for the development and operation of commercial communication satellites. However, we would not recommend the issuance of a formal statement of Presidential authority in this area, because it would not result necessarily in the solution of a particular problem, and might lead to a political debate over how the statement should be interpreted, and so forth. This is not to say that upon an appropriate occasion a Presidential statement resolving a specific issue might be very appropriate and helpful-- for example, a Presidential statement that the United States will take service for its domestic pilot program from INTELSAT, and will consider at a later time, depending on the circumstances, whether to take service from INTELSAT for any regular domestic system. Such a statement could then be transmitted to all other interested governments with a statement to the effect that launch service will not be provided to any foreign entity for any commercial system outside of INTELSAT.

2. The "Thirty Circuits" Problem

As you may know, this problem arose in 1966 when the Department of Defense decided to contract (subject to the approval of the DTM) directly with the Communications Satellite Corporation (Comsat) for thirty voice-grade satellite circuits between Hawaii and the Far East. The problem has been temporarily resolved after months of negotiating with the FCC, but it may become a serious problem again if NASA decides to contract directly with Comsat for shipboard service for its Apollo program.

The "thirty circuit" procurement became a policy problem because the Satellite Act does not specify who should be authorized to deal directly with Comsat for service. Subsection 102(c) of the Act states the intent of Congress to be "that all authorized users shall have nondiscriminatory

access to the system; Subsection 305(a)(2) authorizes Comsat to "furnish, for hire, channels of communication to United States communications common carriers and to other authorized entities, foreign and domestic. . .;" and Section 305(b)(4) authorizes Comsat "to contract with authorized users, including the United States Government, for the services of the communications satellite system. . . ." While the Satellite Act clearly does not limit Comsat's role to that of a "carrier's carrier," it is silent on precisely how a user would be authorized to deal with Comsat. We maintained from the outset of the "thirty circuits" case, and the Department of Justice agreed, that the United States Government was an authorized user as a matter of law, and that it can contract directly as a matter of right with Comsat for satellite service. Of course, the terrestrial carriers maintained, understandably, that Comsat was intended by Congress to be a "carrier's carrier" and that it could not provide service directly to the Government or the public, except in unique or exceptional circumstances.

Teletypewriter and other record services are provided to the Government and the public over circuits which the record (telegraph) carriers have purchased in the telephone cables from AT&T. In the TAT-4 cable, for example, the record carriers paid \$217,000 for each voice circuit, which they can subdivide into 28 teletypewriter circuits. A practical problem underlying the "thirty circuits" dispute was the deep concern that we shared with the Department of Defense over the excessively high charges that DOD was paying for international private line teletypewriter services, particularly in the Atlantic cable complex. At the rate set by the FCC prior to the "thirty circuits" case, an American carrier could, if it were deriving the maximum of 28 teletypewriter circuits from each voice circuit, receive a rate of \$4,375 per month per circuit and could, therefore, amortize its investment in less than two months.

The "thirty circuit" dispute took place in the context of an FCC proceeding of a much larger scope which the Commission had initiated in June 1965. The proceeding was a formal inquiry, in which the public was invited to submit comments, addressed to whether, or to what extent, the Commission ought to permit entities other than communications common carriers to obtain service directly from Comsat. This office did not interject itself in the proceeding formally, although the General Services Administration (GSA) did state in a filing before the Commission in the fall of 1965 that the Government is in a unique category and can, as a matter of right, contract directly with Comsat for service. Although we felt that while the Government has the legal right to go to Comsat directly for service, the

DOD maintained, and we agreed that a requirement exists for both satellite and cable service. It is our view, therefore, that the only permanent solution to this problem would be a merger of all the international communication carriers; but in the meantime, in view of the difficulties involved in the orderly introduction of communication satellite service, there seemed to be an immediate need for the establishment of an Executive Branch policy to guide the Government departments and agencies in the procurement of commercial communications satellite service. In the course of the development of that policy in late 1965 and early 1966, I held a number of meetings with representatives of the interested Government agencies in order to get their views and assistance in developing the substance of that policy. However, the FCC, which had been represented at all of those meetings, sent me a memorandum on April 20, 1966 advising, in effect, that it had its own proceeding going on the general question of authorized use of Comsat services; and that neither Comsat nor the terrestrial carriers could provide service directly to the Government unless the Commission should issue appropriate authorization to do so. While the Commission memorandum, which was signed by the Chief of the FCC Common Carrier Bureau, did not have the status of official Commission policy it clearly implied that despite whatever policy might be established by the Executive Branch for procurement of satellite service for the Government the Commission would adhere to the concept of Comsat as a carrier's carrier and would permit direct procurement by entities other than carriers only in "exceptional and urgent circumstances." Of course, when DOD learned of the way the FCC staff was leaning on this issue it accelerated its negotiations with Comsat, and as a reaction to this the FCC staff moved forward rapidly with the preparation of an opinion in the Authorized User proceeding. The race was on between DCA and the FCC. (For an extended discussion of developments within the Department of Defense, and between DOD and the carriers, see House Report No. 2318, 89th Cong., 1st Sess., "Government Use of Satellite Communications - 43rd Report by the Committee on Government Operations" October 19, 1966, especially Part IV.)

As a result of its negotiations with the carriers, DOD (acting through the Defense Communications Agency) on May 31, 1966 had received bids to furnish the thirty half-circuits from Comsat and from four terrestrial carriers. The bids ranged from \$4,200 per month for Comsat to \$12,500 per month for Hawaiian Telephone Company. On June 1, 1966, DCA

entered into a master contract with Comsat,^{2/} and on June 23, 1966 the FCC issued a public notice stating in substance that if the U.S. Government wished to lease commercial satellite circuits it must do so through the terrestrial carriers and deal directly with Comsat only in "unique or exceptional circumstances." Needless to say, this disturbed us a great deal, because it put the Government in no different position than the general public in the procurement of satellite service. I wrote to Chairman Hyde on June 28, 1966 expressing my disappointment in the Notice, and advised him that all the Government agencies, including the Department of Justice, were in agreement on the Government's right to procure satellite service directly from Comsat; that I was concerned about the economic well being of the carriers but that, based upon current charges for cable circuits the Government might possibly save \$6 million over a 3-year period by going directly to Comsat. My letter apparently had no effect on the Commission, which on July 21, 1966 released its formal opinion--just a few days before DCA issued a purchase order to Comsat.

Almost immediately, informal discussions were begun with the Commission looking toward a modification of the Authorized User opinion. The Assistant Attorney General in charge of the Office of Legal Counsel was persuaded to take an active part in the matter; but, despite all our efforts, it became necessary for GSA to file a formal petition for reconsideration with the Commission on August 21, 1966, because the Commission indicated that it would not budge in its refusal to permit Comsat to provide thirty circuits directly to the Department of Defense. Discussions continued during the fall of 1966 until, finally, on January 1967 the Commission agreed to modify its opinion to recognize the unique position of the United States Government.

On February 3, 1967, therefore, the Commission released a memorandum opinion (copy attached) terminating the proceeding and authorizing the terrestrial carriers to provide service to the DOD. DOD had agreed in advance to assign the Comsat contract to the terrestrial carriers as a quid pro quo for the establishment of composite rates which would afford substantial savings to the Government on a global basis. The composite

^{2/} The contract contained a clause permitting its assignment to the terrestrial carriers if the Government so chose.

rates were about half way between the satellite rates and the previously existing cable rates.^{3/}

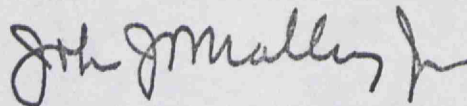
We accepted the FCC disposition of the matter as in the best interests of the Government at the time, primarily because it would allow substantial savings to the Government in its procurement of international communication services and also because it recognized that special position of the Government vis-a-vis the direct procurement of services from Comsat.

To be perfectly clear, the revised FCC authorized user decision leaves wide open the question of who--the FCC or the Executive Branch-- has the right to make the final decision as to whether a Government agency can go directly to Comsat in a particular case. However, the revised opinion does recognize not only the responsibility of the DTM in this area, but also that Comsat may be authorized to provide service directly to the Government whenever such direct service is "in the national interest." Thus, the Commission modified the "unique and exceptional" test for direct Government procurement. The present status of the matter is that there is a "gentlemen's agreement" between the Executive Branch and the FCC whereby the Commission has agreed to look to the DTM as the focal point in those cases where a department or agency wishes to procure service directly from Comsat. Before a direct procurement by the Government is permitted the DTM must certify to the Commission that the direct procurement is in the "national interest," but the Commission has not agreed to accept this certification as binding. Thus, it is possible that another "thirty circuits" case can develop.

It seems to us that another confrontation will probably not develop with the FCC if the Executive departments and agencies cooperate with this office in the development of a sensible policy which is coordinated with the FCC at the level of the Chairman. We hope that the Commission will maintain an aggressive policy looking toward progressively lower composite rates. If, however, this should not prove to be the case the Government can either seek to re-assert its rights to go directly to Comsat or expand the services provided in the Government-owned communications satellite system.

^{3/} In order to keep this matter as simple as possible, I have not referred to the complications which were introduced after DCA decided to assign the Comsat contract to the three record carriers (ITT, WUI, RCAC) and the Hawaiian Telephone Co. on an apportioned basis. Japan refused to permit WUI to provide service there; Thailand would deal only with RCAC; and the Philippine Government expressed the wish to continue to deal directly with Comsat. The matter was finally resolved in May 1968, after lengthy negotiations between DCA, the State Dept., the carriers, and the foreign governments concerned.

For your convenience, I have attached copies of the FCC opinions of July 21, 1966 and February 3, 1967; my letters to Chairman Hyde of June 28, 1966 and January 31, 1967; and the letter from Assistant Attorney General Reynquist to the Legal Adviser of the State Department, dated April 29, 1969.



FVR

J. D. O'Connell

Attachments

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF TELECOMMUNICATIONS MANAGEMENT
WASHINGTON, D.C. 20504

OFFICE OF THE DIRECTOR

June 28, 1966

The Honorable Rosel H. Hyde
Chairman
Federal Communications Commission
Washington, D. C. 20554

Dear Mr. Chairman:

I appreciate your taking the time last Tuesday to discuss the matter of Government utilization of communications satellite services. I also appreciate your calling me on Thursday to advise that the Commission would be issuing a Public Notice that day which would state, among other things, that the Communications Satellite Corporation (COMSAT) would be authorized to provide service directly to the Government only in those cases where there are unique or exceptional circumstances warranting the authorization. My staff and I have studied the Public Notice. As you realize, we are disappointed that the Commission contemplates taking a position which would attempt to restrict the right of procurement of communications satellite services by the Government. As I pointed out to you in our meeting on Tuesday, we are of the opinion that Congress gave the Government the right to directly procure communications satellite services from COMSAT.

Based upon our meeting of last Tuesday, I feel that there may be some misunderstanding as to our position in this matter. The main reason I am writing now is to clarify that position to the extent that it may not be completely understood by the Commission.

In the first place, I recognize the Commission's concern that commercial communications satellite service should be implemented in a way which is not unduly disruptive to established communication systems.

We recognize the Commission's right to prescribe the relationship that ought to exist between COMSAT and the carriers. We disagree, however, with the Commission's position that it has the authority, under the Communications Satellite Act of 1962 and/or the Communications Act of 1934, to prescribe the conditions under which the Government can obtain service from COMSAT.

The Honorable Rosel H. Hyde

This subject has been discussed with other departments and agencies of the Executive Branch, including the Department of Justice. All are in complete agreement that the Communications Satellite Act of 1962 clearly designates the Federal Government as an authorized user. I wish to make it clear, however, that the Department of Justice is the appropriate agency to speak on any legal interpretations involved.

Aside from the question of Congressional intent as expressed in the Communications Satellite Act of 1962, I would like to point out some of the effects which can be foreseen if the Commission should rule to regulate COMSAT's right to provide service to the Government or to affect the Government's authority to deal directly with COMSAT.

A major purpose served by the Communications Satellite Act in granting the Government authority to deal directly with COMSAT will be to expedite the furnishing of service under any conditions, particularly emergencies. In the past, formal procedures and legal restrictions have sometimes created delay and uncertainty concerning the provision of common carrier services to the Government. The Government needs an assured and uncomplicated responsiveness in the provision of all types of communication services if it is to cope adequately with the world requirements of the present day. Unless the provision of communication services can be made adequately responsive to the needs of the Government, it would appear important to review the general question of whether the Government should continue the policy of relying upon the common carrier/regulatory systems for the provision of the bulk of its services.

You know that our policy position has been to utilize the common carriers to the maximum extent possible considering responsiveness, reliability, assurances of service in the shortest possible time, and reasonable comparative costs. We have been working toward the development of an over-all pattern of procedures which would permit both this office and the Commission to seek new and more responsive ways for the common carrier/regulatory systems to meet the needs of the Government. The Commission's Public Notice indicates an entirely different approach to this serious problem. It is my hope that a careful review of Governmental needs in the present day will make it possible for us to work together toward the improvements that are needed.

The Honorable Rosel H. Hyde

I am also hopeful that we can avoid the necessity of a lengthy review of this matter in the courts and in the Congress.

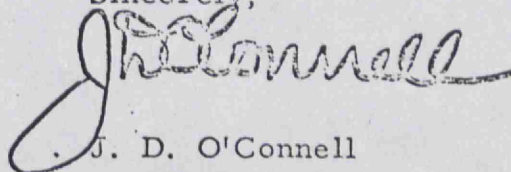
It has never been our position that because the Government has the right to procure services directly from COMSAT that such right should be exercised indiscriminately and without taking into account the impact that such direct acquisition of services may have on the industry. I should also make it clear that even in those instances where direct service is authorized we have always recognized the right of the FCC to establish rate schedules as well as to issue appropriate licenses and permits.

The question of cost is also an important element of this matter. On the basis of the recent common carrier tariff filings for cable circuits in the Pacific, the charges proposed by COMSAT for the half-circuit cost associated with a current Department of Defense procurement amounted to an over-all saving on the order of \$6 million for 30 voice channels over a 3-year period. These savings are obviously substantial and in the interest of Government economy should be given serious consideration.

Since the Commission has, in the past, followed the policy of respecting the findings of the Executive Branch with respect to matters of urgency and military necessity, I am assuming that the Commission does not intend to change this policy and to enter upon an alternate course of questioning the nature of Governmental need of contracts placed for the provision of communications satellite services.

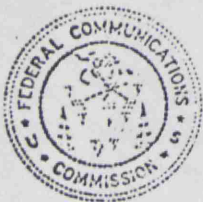
In view of the potential problems and conflicts introduced by that portion of the Commission's Public Notice of June 23, 1966, which deals with the U.S. Government as an authorized user, I would like to suggest reconsideration by the Commission and further effort to reach a cooperative policy which will better serve the needs of the Federal Government.

Sincerely,



J. D. O'Connell

FEDERAL COMMUNICATIONS COMMISSION



WASHINGTON, D. C. 20554

87035

PUBLIC NOTICE -C

July 21, 1966

FCC ISSUES FORMAL OPINION IN MATTER OF COMSAT "AUTHORIZED USER" SERVICES

The Commission has adopted a Memorandum Opinion and Statement of Policy in its inquiry into legal and policy questions concerning authorization relating to the provision of satellite communications services by ComSat directly to non-carriers. (Docket No. 16058) As stated in an advance announcement (Public Notice of June 23, 1966, FCC 66-563), the Commission has concluded that: (a) ComSat may, as a matter of law, be authorized to provide service directly to non-carrier entities; (b) ComSat is to be primarily a carrier's carrier and in ordinary circumstances users of satellite facilities should be served by the terrestrial carriers; and (c) in unique and exceptional circumstances ComSat may be authorized to provide services directly to non-carrier users, therefore, the authorization to ComSat to provide services directly is dependent upon the nature of the service, i.e., unique or exceptional, rather than the identity of the user. The policy recognizes that the United States Government has a special position, because of its unique or national interest requirements and that ComSat therefore may be authorized to provide service directly to the Government, if such service is required to meet unique governmental needs or if otherwise required in the national interest, in circumstances where the Government's needs cannot be effectively met under the carrier's carrier approach. The Memorandum Opinion also indicated the nature of the procedures to be followed by ComSat seeking authority to provide service to non-carriers.

These conclusions are based upon Commission determinations that the terrestrial carriers cannot under existing law themselves be licensed to operate the international space segment and therefore cannot compete effectively with ComSat in furnishing satellite service to the public. ComSat is not and does not propose to be a full service carrier meeting directly the needs of the vast majority of users of international services for all classes of communication services. If ComSat were to be permitted to provide leased channel services directly to users, other than in unique or exceptional circumstances, the basic purposes of Congress in enacting the Satellite Act -- reflection of the benefits of the new technology in both quality of service and charges therefor -- would be frustrated. A requirement that, except in unique and extraordinary circumstances, users take service from the terrestrial carriers, should not have adverse effects upon either ComSat or the users

(over)

but instead should make it possible to reduce rates for all classes of users.

* The Commission also announced that, in furtherance of the aforementioned statutory policy with respect to rates, it expects the common carriers promptly to give further review to their current rate schedules and file revisions which fully reflect the economies made available through the leasing of circuits in the satellite system. Failure of the carriers to do so promptly and effectively, the Commission stated, will require the Commission to take such actions as are appropriate.

-FCC-

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D. C. 20554

FCC 66-677
86505

In the Matter of

Authorized entities and author-
ized users under the Communica-
tions Satellite Act of 1962

)
)
) Docket No. 16058
)
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MEMORANDUM OPINION
AND STATEMENT OF POLICY

By the Commission: Commissioner Johnson not participating.

Preliminary Statement

1. During April, May and June, 1965, the Commission received requests from several concerns (including press wire services, a newspaper, a television network, and an airline) for information regarding procedures to be followed in order that such concerns might be authorized to obtain satellite telecommunication services directly from the Communications Satellite Corporation (ComSat). On May 28, 1965, ComSat forwarded to the Commission its initial tariff, offering channels of communication via satellite to communications common carriers only. In an accompanying letter of transmittal, the Corporation stated that in the event that any other entities, foreign or domestic, were to be authorized to obtain channels directly from ComSat, it would expect to supplement its tariff to provide for the offering of such channels.

2. On June 16, 1965, the Commission issued a Notice of Inquiry stating that the foregoing developments presented issues concerning the extent to which, as a matter of law, entities in the United States other than communications common carriers can be authorized, under the Communications Satellite Act of 1962 (Satellite Act), to obtain telecommunication services directly from ComSat; the extent to which, as a matter of policy, such entities should be authorized to obtain services; the nature and scope of such services; the type of entities which may be deemed eligible to obtain the services; the nature and extent of the authorization required; and the policies and procedures which the Commission should establish to govern applications for such authorization.

3. Legal briefs and comments were received on or before November 1, 1965, from Aeronautical Radio, Inc. (ARINC) and the Air Transport Association of America (ATAA), filing jointly; the American Telephone and Telegraph Company (AT&T); the Columbia Broadcasting System, Inc. (CBS); the Communications Satellite Corporation (ComSat); the Administrator of General Services (GSA); the GT&E Service Corporation (GT&E); the Hawaiian Telephone Company (Hawaiian); the International Business Machines Corporation (IBM); the International Educational Broadcasting Corporation (IEBC); ITT World Communications, Inc. (ITT); Merrill Lynch, Pierce, Fenner & Smith, Inc.; the Communications Committee of the National Association of Manufacturers (NAM); United Press International, Inc. (UPI); the United States Independent Telephone Association (USITA); Western Union International, Inc. (WUI); and the Western Union Telegraph Company (WU).

4. In addition to the briefs and comments received from the above listed parties, general comments or statements were received from American Broadcasting Companies, Inc. (ABC); the American Communications Association (ACA); the American Newspaper Publishers Association (ANPA); the American Petroleum Institute (API); the American Trucking Association (ATA); the Associated Press (AP); the Communications Workers of America AFL-CIO (CWA); Dow Jones & Company, Inc.; Eastern Airlines, Inc.; RCA Communications, Inc. (RCAC); and the Washington Post Company (the Post).

5. On or before January 3, 1966, reply comments were received from ARINC and ATAA filing jointly; AT&T; the Association of American Railroads (AAR); ComSat; GSA; Hawaiian; IBM; ITT Worldcom; RCAC; WUI; and WU.

6. An analysis of the briefs, comments and reply comments indicates that the filing parties have focused primarily on the initial question of the Notice of Inquiry, i.e., the extent to which, as a matter of law, entities in the United States other than communications common carriers may be granted access to the facilities and services of ComSat. The second point to which attention was given is the question of policy relating to non-carrier access to the satellite system directly through ComSat. Relatively few parties addressed themselves to the questions of the nature of authorized entities, the nature and scope of authorized services, and the policies and procedures to be adopted by the Commission for handling and disposing of applications for authorization of direct access to the satellite system.

7. We shall discuss first the basic legal questions raised and then the policy issues. However, the two are inter-related and aspects of policy are necessarily developed in the ensuing discussion of the legal issues.

Basic Legal Issues

8. The critical question is the extent to which the Satellite Act contemplates, permits or requires that ComSat be authorized to provide service directly to entities other than carriers. In general, respondents to our Notice took one of the following positions:

(a) The terrestrial carriers allege that the Satellite Act does not contemplate or permit ComSat to be authorized to provide service to any non-carrier entity, with the possible exception of the Government;

(b) The non-carrier entities allege that the Act contemplates that ComSat should be permitted to provide service to them and that the Commission should issue authorizations upon appropriate findings that the particular service sought would be in the public interest;

(c) The Administrator of General Services (GSA) alleges that ComSat is authorized by the Satellite Act to provide service directly to the Government without restriction or limitation whenever the Government desires to take such service;

(d) ComSat alleges that it should provide service to non-carriers when (i) the carriers fail to provide a requested service via satellite although capacity is available; (ii) there is a need for development of technology or provision of new satellite services and then only during the early developmental stage; and (iii) in which and any other case there is a finding that the public interest would be served by the authorization. ComSat also took the position that it is authorized by the Satellite Act to provide service directly to the Government in any instance when the Government requests service.

9. We note that the term "authorized users" appears twice in the Satellite Act. The first time is in the section setting forth the policy and purpose of the Act where, among other things, it is declared that "It is the intent of Congress that all authorized users shall have nondiscriminatory access to the system ..." (Section 102(c)). The second time is among the powers and purposes of ComSat when it is stated that ComSat is authorized "to contract with authorized users, including the United States Government, for the services of the communications satellite system ..." (Section 305(b)(4)). Reference is also made to another term "authorized entities" in Section 305(a)(2), which states that ComSat may "furnish, for hire, channels of communication to United States communications common carriers and to other authorized entities, foreign and domestic..." Neither the term "authorized user" nor "authorized entity" is defined in the Satellite Act, nor is the use of the different terms, "channels of communications" in 305(a)(2) and "service of the communications satellite system" in Section 305(b)(4), explained in the Act or the legislative history. In addition to those terms the Satellite Act makes reference to "authorized carriers," particularly in Section 201(c)(2) and (c)(7). This term is defined in Section 103(7) as part of the definition of "communications common carrier". 1/

1/ Communications Satellite Act of 1962, Section 103(7):

As used in this Act, and unless the context otherwise requires -- the term "communications common carrier" has the same meaning as the term "common carrier" has when used in the Communications Act of 1934, as amended, and in addition includes, but only for purposes of Sections 303 and 304, any individual, partnership, association, joint-stock company, trust, corporation, or other entity which owns or controls, directly or indirectly, or is under direct or indirect common control with, any such carrier; and the term "authorized carrier", except as otherwise provided for purposes of section 304 by section 304(b)(1), means a communications common carrier which has been authorized by the Federal Communications Commission under the Communications Act of 1934, as amended, to provide services by means of communications satellites.

The Contention That "Users" and "Entities" Are "Carriers".

10. AT&T contends that because there are different possible categories of "carriers" it was necessary "to recognize in the language of Section 305 that ComSat could deal with foreign entities authorized by the Commission to act as carriers here in the United States." (AT&T brief, Nov. 1, 1965, p. 13). AT&T also claims "it must be recognized that there are United States telecommunications entities which operate offices abroad, such as RCA Communications, Inc. and Globe Wireless, Ltd." (Ibid.) It is not explained why both classes of entities are not reasonably to be considered as included in the term "carriers", but AT&T concludes that because of the non-domestic status of these "carriers" they had to be referred to as "entities" or "users" in the Act. This contention completely ignores the language of Section 305(a)(2) and (b)(4) and the broad language of Section 102(c).

11. In particular, Section 305(a)(2) refers to "United States communications common carriers and to other authorized entities, foreign and domestic." In Section 305(b)(4) the Act provides that ComSat is authorized "to contract with authorized users, including the United States Government..." In these provisions it is clear that Congress contemplated that ComSat could be authorized to provide service directly to entities other than common carriers. We note that that finding is further supported by the declaration in Section 102(c) that, "It is the intent of Congress that all authorized users shall have nondiscriminatory access to the system" Since "authorized users" may include the United States Government, a non-carrier (Section 305(b)(4)), and since under the Act ComSat may be authorized to furnish channels for hire to carriers and "other authorized entities, foreign and domestic", the terms "authorized users" and "authorized entities" must include more than only "communications common carriers." We therefore reject the contention that the terms "carriers", "entities" and "users", as used in the Satellite Act, are synonymous, and must be read as synonymous.

12. ITT Worldcom contends that in view of the necessity for any "authorized user" to utilize earth terminal station facilities for access to the satellite system, and in view of the specific language of the Act, particularly Section 201(c)(7), limiting authorized construction and operation of satellite earth terminal stations to ComSat and "authorized carriers":

"the term 'authorized users' in Section 305(b)(4) can thus include only those authorized to use the satellite system to create telecommunications channels pursuant to authority to operate a satellite terminal. No one else: neither television networks, news wire services, nor other users of leased channels are or can be within the scope of the term." (Brief, October 29, 1965, pp. 7-8)

ITT is confusing authorized operation with access. Authority to operate satellite terminal stations is limited as ITT alleges. However, Congress differentiated between the two matters by its statement in Section 102(c) that: "... it is the intent of Congress that all authorized users shall have nondiscriminatory access to the system" (emphasis supplied). In view of this statement of intent and in the absence of any provision excluding any entity not an operator from access to the system, we reject ITT's contention that to be a user of the system one must be eligible to construct and operate a satellite terminal facility.

The Contention That the Commission is Empowered Only
To Authorize Carrier Access to the Satellite System.

13. AT&T, RCAC and others point out that, as a matter of law, the Commission may exercise only those powers expressly delegated to it by Congress. All concur that the Satellite Act empowers the Commission to authorize "carriers" to use and have access to the facilities of the satellite system. However, RCAC, after citing selected provisions of Section 201(c), contends that "these are the only provisions of the Satellite Act which grant the Commission the power to authorize use of the satellite system and, as is evident, they are limited to carriers." (Statement of RCAC, November 1, 1965, p. 4).

14. We agree that the provisions of Section 201(c) of the Satellite Act delegate to the Commission positive power to assure equitable and nondiscriminatory access to the satellite system by communications common carriers. We believe, however, that this provision was inserted because of the fact that ComSat was to serve primarily as a carrier's carrier. Heretofore, under the Communications Act of 1934, as amended, the rendering of service by a carrier to a carrier has not been considered a common carrier function subject to regulation in the same way as service to the public. Instead, such control as the Commission found essential has been exercised by the imposition of conditions in instruments of authorization. Congress was

fully aware of this situation and made both general and specific provisions to assure that the Commission had ample direct legislative authority to deal with the matter. In Section 401 of the Satellite Act it made the services rendered by one carrier to another a regulated service, and in Section 201(c)(2) specifically spelled out how this requirement was to be implemented in the case of access to earth terminals.

15. A similar situation does not obtain with respect to any possible service ComSat may be authorized to provide to non-carrier entities. The Satellite Act provides specifically (Section 401) that ComSat is deemed a common carrier within the definition of that term in the Communications Act and is fully subject to the provisions of Titles II and III of the Communications Act not inconsistent with the Satellite Act. Thus, any non-carrier entity whom ComSat might be authorized to serve is already guaranteed just and reasonable charges by Section 201(b) of the Communications Act and protected against unjust or unreasonable discrimination in charges, practices, classification, regulations, facilities or services by Section 202 of that Act. These provisions are further implemented by detailed requirements for tariff filing and powers given the Commission to prescribe charges and practices. Under these circumstances no additional provisions were necessary to protect the rights of non-carrier entities. The carriers would have us read Section 201(c)(2) of the Satellite Act as a directive to exclude all non-carrier entities from access to the system. The above discussion makes it clear that the carriers are attempting to convert a shield included by Congress to protect them against possible improper acts into a sword to strike down others who might seek to be given such access under other provisions of law. This is not what Congress meant by this provision. The Satellite Act must be read as a whole and administered to give effect to its general purposes. We therefore reject this contention of the carriers.

The Contention That the Commission Is Without Guidelines
Or Criteria To Authorize Non-Carrier Access.

16. The carriers contend that the Satellite Act contains no standards pursuant to which the Commission might authorize access to the system by any entity other than a communications common carrier. The Satellite Act and the expressly incorporated Communications Act provide for necessary determinations of this kind by the Commission. The Communications Act directs that the Commission, acting in accordance with the standard of public convenience, interest, or necessity, grant radio licenses (Section 307(a)); "prescribe the nature of the service to be rendered by each class of licensed stations and each station within any class" (Section 303(b)); study new uses for radio and generally encourage the larger and more effective use of radio in the public interest (Section 303(g)); and make such rules and regulations and prescribe such restrictions and conditions; not inconsistent with law, as may be necessary to carry out the provisions of the Act. (Section 303(r)).^{2/} Complementing these provisions, which are expressly incorporated into the Satellite Act (Section 401 of that Act), the Satellite Act itself contains the declaration that "It is the intent of Congress that all authorized users shall have nondiscriminatory access to the system; . . . [and] that the Corporation created under this Act be so organized and operated as to maintain and strengthen competition in the provision of communications services to the public. . ." (Section 102(c)). To implement this intent, the Commission is directed to "make rules and regulations to carry out the provisions of this Act." (Satellite Act, Section 201(c)(11)).

17. Congress thus specified the necessary broad standards or guidelines to be followed by the Commission in making requisite judgments. NBC v. U.S., 319 U.S. 190 (1943). It did not establish rigid or detailed criteria for regulation of new and dynamic techniques of communication. See Philadelphia Television Broadcasting Co. v. FCC, ____ U.S. App. D.C. ____, 359 F.2d 282, decided March 28, 1966. Rather, Congress left to the informed discretion of the Commission the establishment of the methods, procedures, and particular criteria for authorization of provision of services by communications common carriers to other carriers and the general public. The Commission is to make its judgment based upon an evaluation of the often changing situation and the Congressional concern with the public interest in (1) encouraging wider and more effective use of radio techniques; (2) assuring that competition is maintained and strengthened in the provision of communication services to the public; (3) assuring that

^{2/} Further, Section 201(b) provides that communications by wire or radio subject to this Act may be classified into such ". . . classes as the Commission may decide to be just and reasonable. . .".

access to the satellite system shall be available to all authorized users on a nondiscriminatory and equitable basis; and (4) assuring that the benefits of new technology shall be reflected in service made available to the public through both improvements in the quality of service and the realization of all possible economies. The standards established by the Communications Act for authorizing carriers to provide service to the public are applicable to satellite services as well as to other telecommunication services. The contention that the Commission cannot authorize ComSat to provide non-carrier users direct access to the satellite system because there are no guidelines or standards for such authorization is, therefore, without merit.

The Contention that the Legislative History Of the Act
Indicates Congressional Intent to Limit Access Exclusive-
ly to Carriers.

18. We think that the Act clearly empowers the Commission to authorize ComSat to provide service to entities other than carriers. The legislative history of the Satellite Act further supports this conclusion. ComSat was intended by Congress to serve primarily as a carrier's carrier, that is, ComSat is to use its licensed facilities primarily to provide satellite capacity to other carriers which in turn will utilize such capacity, together with all of their other facilities (e.g., cable, HF radio, scatter systems), to furnish service to the using public. But the legislative history of the Act indicates Congressional intent that entities other than communications common carriers could be authorized direct access to the satellite system under appropriate circumstances. In a speech made on the floor of the Senate immediately prior to Senate passage of the Satellite Act (108 Cong. Rec. 16920), Senator John O. Pastore explained that "... the satellite corporation under H.R. 11040 will serve mainly the carriers" (emphasis added). Significantly, he did not say that ComSat would serve exclusively as a carrier's carrier.

19. On February 7, 1962, President Kennedy submitted a proposal to the Congress calling for establishment of a privately owned communications satellite corporation in which carriers were to have a share of ownership. The President's letter of transmittal states that the administration's proposed bill sets forth "purposes and powers of the new corporation (which) would include furnishing for hire channels of communication to authorized users, including the U.S. Government." In the course of subsequent hearings, testimony was heard from all Government agencies concerned with the legislation, several Senators, communications common carriers, and other interested persons. The comprehensive and detailed Committee Report on the bill, delivered by Senator Pastore from the Senate Committee on Commerce on June 11, 1962, states:

It will be the purpose of the Corporation to plan, initiate, construct, own, manage and operate, in conjunction with foreign governments and business entities, a commercial communications satellite system, including satellite terminal stations when

licensed therefor by the Federal Communications Commission. It will also be its purpose to furnish for hire channels of communication to United States communications common carriers who, in turn, will use such channels in furnishing their common carrier communications services to the public. Provision is also made whereby the corporation may furnish such channels for hire to other authorized entities, foreign and domestic. (pp. 10-11) (Emphasis added).

Thus, both the President's message transmitting the bill to Congress, and the Report of the Senate Commerce Committee recognized that the Corporation could be authorized to render telecommunication services to entities other than communications common carriers. We conclude that it was the intent of Congress that the Commission could authorize ComSat to afford access to the satellite system by non-carrier entities upon a proper finding that such access would serve the public interest and comport with the purposes and policies of the Satellite Act.

Authorization of Non-Carriers to Deal With ComSat Must Be Regulated by the Commission and Be On A Specified Basis.

20. ComSat can thus be authorized to serve non-carriers directly. But it does not follow, as some of the non-carriers appear to contend, that such authorization is to be left unregulated -- that ComSat and the non-carriers are free to contract as they wish. Were that the case, ComSat could readily become, to a very substantial extent, a common carrier dealing directly with the public. But as stated (par. 18), and indeed acknowledged by all parties, ComSat was and is to serve primarily as a common carrier's common carrier.^{3/} Further, under unrestricted dealings between ComSat and non-carriers, large users might tend to contract directly with ComSat, while members of the general public are left to deal with the carriers. In such circumstances, it would be clearly impossible for the Commission to carry out its responsibility under Section 201(c)(5) to "...insure that any economies made possible by a communications satellite system are appropriately reflected in rates for public communication service." We also note here our responsibility under the Communications Act to conduct our regulatory activities in such fashion,

"...as to make available, so far as possible, to all the people of the United States a rapid, efficient, Nation-wide, and world-wide wire and radio communication service with adequate facilities at reasonable charges. . ."

^{3/} Senate Committee on Commerce, Report No. 1584, June 11, 1962, pp. 18, 28-29; see also remarks by Senator Pastore on the floor of the Senate, 108 Cong. Rec. 16920.

There is another basic tenet of the Satellite Act which would be violated by unrestricted dealings between ComSat and non-carriers. At least insofar as international common carrier communications services are concerned, ComSat is given a virtual statutory monopoly position with respect to the operation of the space segment of the commercial communications satellite system. See Sections 102(d) and 305(a)(1) of the Act. The Commission is not given authority to license any other United States carrier to operate the space segment of a satellite system to provide international communication service; instead, such carriers must procure the space segment facilities from ComSat. Clearly, if there were to be unrestricted dealings of ComSat with the public, it would mean that ComSat would be using its monopoly position to the detriment of the other carriers and, indeed, to deprive them of the opportunity to serve segments of the public under fair and equitable conditions.

21. Direct access by non-carriers to the satellite system must therefore be regulated in such manner as to insure consistency with the Acts' purposes and with ComSat's primary role as a common carrier's common carrier. There is no question but that such regulation is a function which the Commission must discharge. This follows from the provisions of the Communications Act and the Satellite Act cited in par. 16. Just as the Commission is to authorize the communications common carrier, so also it is the agency to specify the "other authorized" domestic entities referred to in Section 305(a)(2) (and see 305(b)(4)); indeed, the user must be "authorized" and no one can seriously argue, in light of the statutory scheme, that such authorization can stem from other than this agency. 4 / For, under Section 401 of the Satellite Act, ComSat is designated as a communications common carrier subject to the provisions of Titles II and III of the Communications Act. In the process of issuing authorizations to ComSat as a common carrier and reviewing its tariffs, the Commission is required, under the public interest standard, to take into account and specify the conditions under which ComSat can depart from its primary role as a common carrier's carrier and provide service directly to the public. 5 / Further, it is the Commission's

4 / Significantly, the "authorized user" provision in Section 305 is in the section setting forth "the purposes and powers of the corporation"; the corporation, in turn, is subject to the regulation of the Commission ("the FCC shall be responsible for the regulation of the corporation", Sen. Rept. 1584, 87th Cong., 2d Sess., p. 12).

5 / There is nothing unusual about the concept of a special purpose carrier. The Commission has, since its inception, licensed Press Wireless, Inc., except in unique circumstances, to handle only press traffic. The contention of ARINC and ATAA that "there would appear to be no need for the Commission additionally to undertake the unprecedented action of regulating users of ComSat" (Comments of ARINC and ATAA, November 1, 1965 p. 12), is thus based upon a misconception of the Commission's role.

responsibility to issue regulations or policy statements to insure that authorized users have nondiscriminatory access to the system. See Sections 102(c); 201(c) (11) of the Satellite Act. Finally, we note here that the intent of Congress was stated by then Deputy Attorney General Katzenbach in response to questions from Senator Kefauver regarding use of the services of ComSat for various purposes, including weather reporting:

"You have to have an agency [the Federal Communications Commission] which is going to control these users, which is going to act in the governmental interest . . ."⁶/

The Government's Position As Authorized
User - GSA's Contentions.

22. We turn now to consideration of the Government's position as an authorized user. There is no question but that the Government is to be included in the category of "authorized user". See Section 305 (b) (4). We disagree, however, with GSA's assertion that ComSat may provide direct satellite communications service to the Government, without any limitation or restriction. Rather, the Satellite Act makes clear that ComSat's direct dealings with the Government must be of such a nature as to be consistent with the Act's purposes and objectives. Thus, ComSat is authorized in Section 305 to furnish channels of communication " . . . to other authorized entities . . ." ((a) (2)) and "to contract with authorized users, including the United States Government . . .", in "order to achieve the objectives and to carry out the purposes of the Act" (emphasis supplied). These provisions must therefore be read in terms of the objectives and purposes of the Act. Section 102 (c) sets forth the following pertinent purposes:

" . . . It is the intent of Congress that all authorized users shall have nondiscriminatory access to the system; that . . . the corporation created under this Act be so . . . operated as to maintain and strengthen competition in the provision of communications services to the public . . ."

⁶ / Hearings before the Subcommittee on Antitrust and Monopoly of the Senate Committee on the Judiciary, 87th Cong., 2d Sess., pp. 55-56 (1962).

23. Some further brief comment upon the last listed statutory purpose is appropriate. Were ComSat to be operated as GSA urges -- unrestricted direct dealings with the Government -- the result, as we develop with specific figures (see par.), would not be to maintain or strengthen competition in the provision of communications services to the public. Rather, it would seriously weaken the competitive forces. Section 201 (a) (6) lends added support to the Congressional intent to maintain or strengthen competition in the provision of communications services to the public. The main thrust of that section is to insure that satellite facilities provided by ComSat will be utilized for general governmental purposes except where a separate system is required in the national interest. See Senate Report No. 1319, 87th Cong. 2d Sess., p. 4; 7/ Senate Report No. 1584, 87th Cong., 2d Sess., p. 15.

24. The foregoing considerations are thus consistent with the general concept pervading the Satellite Act of ComSat as a monopoly (insofar as the space segment of international communications is concerned) and as primarily a carrier's carrier, created to provide at least the space segment of international communications as part of an improved global communications network consisting of all means of providing such communications services, so that lower rates should be possible to all the using public. There is, we believe, every indication in the statute that the nature and extent of direct dealings between ComSat and GSA or any other government agency, in its role as a user, must be considered in the light of the effect of such dealings upon the statutory scheme, the rights of the other carriers in the face of ComSat's monopoly, the total global network of services, which includes cables, HF radio and other media as well as satellite facilities, and the quality of services or charges to the general using public.

7/ The Committee, which originated the provision essentially in the form in which it now stands, described the provision in the following terms: that the President is to ["t]ake necessary steps to insure utilization of the commercial system for general governmental purposes whenever there is no requirement for a separate communications system to meet unique governmental needs". Senate Report No. 1319, p. 4.

25. This does not mean that the Government does not have a special status under the Satellite Act. As shown by the provision in Section 305 (b) (4), it clearly does. We believe that the explicit specification of the Government as an authorized user stemmed from Congressional recognition of the special or unique nature of the communications needs that may arise in the Government's case, precisely because of the special or unique functions of the Government. We believe that the standard for direct dealings between ComSat and the Government is thus embodied in the Act in the sections dealing with the somewhat related question of a separate Government system -- namely, if such dealing "is required to meet unique governmental needs, or is otherwise required in the national interest" (Section 201(a) (6); Section 102 (d)). Clearly, if resort can be had to a separate governmental system in order to meet unique Government needs or if otherwise required in the national interest, a fortiori, such circumstances warrant departure from the carrier's carrier approach if that approach would not effectively meet the Government's unique needs or the national interest. In short, we stress our full recognition that in the Government's case, unique or national interest circumstances can and do arise where the needs of the Government cannot be effectively met under the carrier's carrier approach. The authorization to ComSat to meet the needs of NASA's Apollo project through a specially designed system is a current example of such unique circumstances. See also Bendix Aviation Corp. v. United States, 106 U.S. App. D.C. 304, 272 F 2d 533, cert. den., 361 U.S. 965. We emphasize that in all cases where such national interest circumstances exist, we shall act promptly to authorize ComSat to provide service directly to the Government at just and reasonable rates.

Basic Policy Issues

26. In reaching our basic policy determinations we are aware that in this instance we are not confronted by a normal competitive situation, namely, one where one entity through its initiative, ability or inventiveness produces a cheaper or better means of providing service and thus captures a market. Instead, we have a situation where there is an artificial restraint upon the terrestrial carriers. They cannot ordinarily be licensed to provide the essential space segment of the international satellite circuits and thus compete with ComSat on equal terms, but must rely on ComSat which was created to provide these facilities to them. Sound policy indicates that, absent a statutory requirement to the contrary, that they should not be required to depend solely on ComSat for satellite circuits while ComSat is simultaneously allowed to siphon the most profitable part of the business from them. Neither ComSat nor anyone else proposes that ComSat meet the needs of all users, i.e., message, TELEX, and all other switched services. Thus, this is not a situation where a proposed competitor would meet all or even a major portion of the essential public needs should it supplant the other carriers.

27. No lengthy discussion of the policy considerations is needed since we have already covered a number of these considerations in the foregoing treatment of Sections such as 102(c) and 201(c)(5) of the Satellite Act. In light of those considerations and the Act's basic concept of Comsat as primarily a carrier's carrier, we believe that it would be in derogation of the policy of the Act to permit Comsat to compete with the conventional carriers in furnishing to users those communication services and channels which customarily and conventionally are or can be furnished by such carriers within the framework of their general tariff offerings. In other words, Comsat would be authorized to deal directly with the users in only those instances where the requirement for satellite service is of such an exceptional or unique nature that the service must be tailored to the peculiar needs of the customer and therefore cannot be provided within the terms and conditions of a general public tariff offering. In this connection, a current example is the satellite service which Comsat has been authorized to furnish to NASA for support of the Apollo program. Of course, Comsat should also be permitted to furnish a satellite service or channel to a user in any case where the conventional carriers fail or refuse to meet reasonable demand therefor, although they are or would be otherwise capable of doing so in accordance with general tariff offerings.

28. The wisdom of this policy is evident from the serious adverse consequences that would result if Comsat were permitted without limitation to furnish service in competition with their principal customers for satellite services and channels - the conventional carriers. In this connection, we have reviewed the nature of the proposals before us from entities which seek to be "authorized users" and take service directly from ComSat. It is clear from the filings herein that the services sought are primarily leased channel services, i.e., service which customarily and conventionally are provided by common carriers within the framework of their general tariff offerings. ComSat does not

propose to, nor does anyone seek to have ComSat, provide message telegraph, message telephone, or any other exchange type of service. Yet these exchange-type services provide the bulk of the international or transoceanic services offered the public. In 1965 there were 24.2 million overseas telegrams which originated in, terminated in, or transited the United States. In the same year there were 7.9 million telephone calls between the United States and foreign or overseas points or transiting the United States between foreign points. Insofar as TELEX is concerned, in 1965 there were 3.9 million messages originating in, terminating in or transiting the United States.^{9/} On the other hand, in 1965 there were a total of about 200 voice-grade circuits (179 to U.S. Government agencies) and 400 telegraph-grade circuits (68 to U.S. Government agencies) leased between the United States and overseas points. Essentially, therefore, only a very small part of the using public using international communications facilities had sufficient traffic to justify or require leased circuit facilities.

29. When we turn to the revenue side of the picture, we find that revenues from leased circuits provide an important, if not indispensable, part of the carriers' total receipts. Thus, in 1965 all overseas carriers, voice and record, other than ComSat, reported that leased circuits provided about 16 per cent of total overseas revenues or some \$34,900,000 (\$25,300,000 from leases to U.S. Government agencies) out of a total of \$22,700,000. The importance of revenues from leased circuit traffic becomes manifest when such revenues are compared with the international record carriers' net operating revenues before federal income taxes. Reports to the Commission show that in 1965 these carriers, as a whole, had net operating revenues, before federal income taxes, of about \$20,300,000. Their revenues from leased circuit services for the same year were \$20,200,000 (\$11,083,000 from leases to U.S. Government agencies). Because of the relatively low non-fixed or variable costs associated with this service, the loss of such business could come close to wiping out completely the record carriers' earnings, unless the facilities could be immediately used for other services and produce substantial revenues, which appears unlikely.

30. Separate figures regarding net revenues or earnings of telephone carriers from overseas communication services are not readily available. However, data filed with the Commission indicate that total revenues for such services in 1965 were about \$116 million. Leased circuit services provided about \$14.7 million or 12.7 percent of these revenues. In the case of Hawaiian Telephone Company, the ratio of its leased circuit to total revenues is much greater, accounting for about one-third of its total gross overseas revenues.

^{9/} All figures exclude U.S.-Canada and U.S.-Mexico traffic.

3i. The danger of the loss by the terrestrial carriers of existing or additional leased circuit business to satellite facilities is not merely theoretical.^{10/} A recent complaint filed by ITT World Com, and a press release issued by Comsat in response thereto, indicate that ComSat would propose to charge both authorized users and carriers approximately the same amount for leased circuits and that the amount is substantially below current or recently proposed charges for leased cable circuits. Accordingly, the terrestrial carriers could reasonably be expected to lose a substantial share of their leased circuit revenues to ComSat. Under these conditions and in light of the data set forth above, it could very well be necessary to permit these carriers to increase rates charged other users in order to enable them to earn a fair return. Certainly such detriment to the vast majority of users for the apparent benefit of a few large users would be in derogation of the objectives of the Act.^{11/} The fact is that the Satellite Act requires the opposite result, namely, that the benefits of these lower rates be made available to all users.

10/ The situation here is not unlike that facing the international telegraph carriers when AT&T laid its trans-Atlantic high capacity cables which made voice-grade leased circuits feasible. During 1960 the government cancelled leases for circuits to Europe with Commercial Cable and Western Union's cable system resulting in a loss of revenues in that year of about \$0.5 million for each of the carriers as compared with 1959. The full annual effect of these cancellations was much greater. They could not compete effectively with AT&T because the latter proposed to lease voice-grade circuits to them at the same price as it leased these circuits to the ultimate users. The problems raised by this development were finally resolved in our TAT IV decision, American Telephone and Telegraph Company, 37 FCC 1151 (1964), wherein we required that the necessary cable facilities be owned jointly and excluded AT&T from all participation in future international voice-data leased business. This was done because of the effects that provision of such service could have on the ability of the international record carriers to provide efficient and economical record services to the public as well as the fact that the carriers could not be expected to obtain a meaningful share of the business in competition with AT&T.

11/ We say "apparent benefit" because we will show hereinafter that even most large scale users would probably suffer no economic detriment by a requirement that they take service from the carriers rather than directly from ComSat.

32. In light of GSA's contentions, we believe it appropriate to consider the revenue effects of ComSat providing service on an unlimited basis to the Government. We have analyzed above the potential effect of a loss of leased circuit revenues upon the terrestrial carriers. The Government as a user provided over 70% of total leased circuit revenues. In the case of voice-grade circuits which provide the bulk of such revenues, the Government is an even more important factor as it accounted for 90% of the total number of circuits leased by all users. The importance of revenues from Government leases to the international telegraph carriers and to the Hawaiian Telephone Company is shown by the table below:

Year 1965
(Thousands of dollars)

<u>Carrier</u>	<u>Total Revenues</u>	<u>Net Revenues Before F.I.T.</u>	<u>Total Leased Circuit Revenues</u>	<u>U.S. Gov't Leased Circuit Revenues a/</u>
ITT World Com	\$29,808	\$ 4,546	\$ 5,952	\$ 3,200
RCAC	51,054	11,512	11,438	6,433
WUI	18,124	2,543	1,924	1,407
Hawaiian <u>b/</u>	14,280	N.A.	4,741	4,606

N.A. - Not available.

a/ Partly estimated.

b/ Data are for overseas services only.

For each carrier, revenues from services to the Government are essential to a fair rate of return and provide a sizeable part of its total profit margin. Thus the loss of a substantial proportion of government leased circuit revenues could have serious adverse effect upon the carriers. Instead of being able to reduce rates to reflect the lower costs of satellite circuits, they would probably have to seek substantial rate increases.

33. It might be argued that in our discussion thus far we have ignored the interests of ComSat in our concern about the potential effects of direct service by ComSat to "authorized users." This is not so. It will be recalled that ComSat has a virtual monopoly in the provision of at least the space segment for international common carrier service. Thus, to the extent that any United States user desires to lease satellite circuits or to the extent that ComSat, by selling activities, induces users to demand such circuits, the carriers must come to ComSat for at least the space segment of the facilities. Since, as noted above, ComSat's proposed charges to the carriers and other users would be substantially the same, it should realize substantially the same revenues whether the carriers or others lease the circuits from it.

34. We now address ourselves to the question of the effect upon prospective users of any refusal to permit ComSat to lease circuits directly

to them. It appears to us that in general these users would also benefit from such a policy. We are mindful of the injunction in Section 204(c) of the Satellite Act that the Commission shall:

"insure that any economies made possible by a communications satellite system are appropriately reflected in rates for public communication services;"

Satellite circuits now becoming available should enable the carriers to secure facilities at lower costs in relation to terrestrial facilities and thereby permit them to reduce rates to reflect such cost reductions. We therefore expect the common carriers promptly to give further review to their current rate schedules and file revisions which fully reflect the economies made available through the leasing of circuits in the satellite system. Failure of the carriers to do so promptly and effectively will require the Commission to take such actions as are appropriate. Even though satellite circuits are not now and will not for some time be available to all points to which users presently lease circuits from terrestrial carriers, implementation of this policy by the carriers should also reduce charges to many points to which satellite circuits are not now available. Furthermore, major users, require redundancy and diversity in their facilities and thus would normally be expected to use a combination of terrestrial and satellite facilities to the same points to provide such redundancy. These users may very well find that the average charge per circuit will be less if the terrestrial carriers supply all their needs than if ComSat were to be permitted to lease satellite circuits to them at lower rates, while the other carriers meet their needs for diversity and redundancy at rates reflecting the higher cable costs associated with conventional facilities such as cable and high frequency radio.

35. Aside from the foregoing considerations we note that entities which have sufficient traffic to require the lease of circuits are also large users of other international services such as message telephone, message telegraph and TELEX. To the extent that loss of leased circuit revenues might require upward adjustments or prevent contemplated reductions in rates for other services, such large users could very well find their total international communications bills increased if ComSat were to be permitted to provide leased service directly to them without limitation.

36. We therefore conclude that only in unique or exceptional circumstances should non-carrier entities deal directly with ComSat. We believe that the ascertainment of such circumstances must be left to a case-by-case approach, since it is dependent upon the nature of the particular service requested. We can state, however, that refusal or failure of the terrestrial carriers to provide, upon reasonable demand, satellite leased circuit facilities, otherwise available, would, in absence of a valid explanation, constitute exceptional circumstances. Similarly, we believe it our duty to encourage development of new uses of satellite facilities and will, upon application, issue authorizations which are best designed to further such ends. Finally, as already set forth more fully in paragraph 26, we again stress the special position of the Government, and specifically, that in the Government's case, unique or national interest circumstances can and do arise where the needs of the Government cannot be met under the carrier's carrier approach.

CONCLUSIONS

37. We have reached the following policy conclusions:

- (a) The terrestrial carriers cannot under existing law themselves be licensed to operate the space segment of the international system and therefore cannot compete effectively in furnishing satellite service to the public.
- (b) ComSat is not and does not propose to be a full service carrier meeting directly the needs of the vast majority of users of international services for all classes of communication services.
- (c) If ComSat were to be permitted to provide leased channel services directly to users, other than in unique or exceptional circumstances, the basic purposes of Congress in enacting the Satellite Act -- reflection of the benefits of the new technology in both quality of service and charges therefor -- would be frustrated.
- (d) A requirement that, except in unique and extraordinary circumstances, users take service from the terrestrial carriers should not have adverse effects upon either ComSat or the users but instead should make it possible to reduce rates for all classes of users.

38. Our ultimate conclusions are:

- (a) ComSat may as a matter of law be authorized to provide service directly to non-carrier entities;
- (b) ComSat is to be primarily a carrier's carrier and in ordinary circumstances users of satellite facilities should be served by the terrestrial carriers;

- (c) In unique and exceptional circumstances ComSat may be authorized to provide services directly to non-carrier users; therefore, the authorization to ComSat to provide services is dependent upon the nature of the service, i.e., unique or exceptional, rather than the identity of the user. The United States Government has a special position because of its unique or national interest requirements; ComSat may be authorized to provide service directly to the Government, whenever such service is required to meet unique governmental needs or is otherwise required in the national interest, in circumstances where the Government's needs cannot be effectively met under the carrier's carrier approach.

39. We do not now propose to set forth specific procedures. However, any request by ComSat for authorization to provide service directly to any user desiring to take such service in particular circumstances should include showings by ComSat as to:

- (i) Whether the proposed service via satellite is available from terrestrial carriers, including evidence of request made therefor and the response of the carriers;
- (ii) Whether the facilities to provide this service are available, and, if not, a description of the new or expanded facilities required as well as the cost thereof;
- (iii) A statement showing why the circumstances involved are so unique and exceptional as to require service directly from ComSat or what the national interest requirements are that indicate that service cannot be provided under the carrier's carrier approach.
- (iv) Any other facts which would indicate that the public interest would be served by a grant.

The above required information shall be set forth in support of the applications for modification of the applicable earth station and/or satellite station licenses as well as for authorization to acquire units of satellite utilization which ComSat shall file in each case in which it is requested to provide a particular service directly to any non-carrier users. Unless and until such authorizations are granted, ComSat shall not provide services to any non-carrier entity. In addition ComSat, of course, must also have an effective tariff on file before it can provide service directly to any non-carrier entity it may be authorized to serve.

40. This inquiry was instituted under authority set forth in Section 403 of the Communications Act of 1934, as amended; the policies and procedures set forth herein are adopted pursuant to authority contained in Sections 4(i), 4(j), 201(b), 303 and 307 of the Communications Act of 1934, as amended, and Sections 102(c), 201(c)(11), 305(a), 305(b) and 401 of the Communications Satellite Act of 1962.
41. Accordingly, IT IS ORDERED, This 20th day of July, 1966, That the Statement of Policy set forth in this Memorandum Opinion and Order IS ADOPTED and that the proceeding IS TERMINATED.

FEDERAL COMMUNICATIONS COMMISSION

Ben F. Waple
Secretary

Released: July 21, 1966

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF TELECOMMUNICATIONS MANAGEMENT
WASHINGTON, D.C. 20504

OFFICE OF THE DIRECTOR

January 31, 1967

The Honorable Rosel H. Hyde
Chairman
Federal Communications Commission
Washington, D. C. 20554

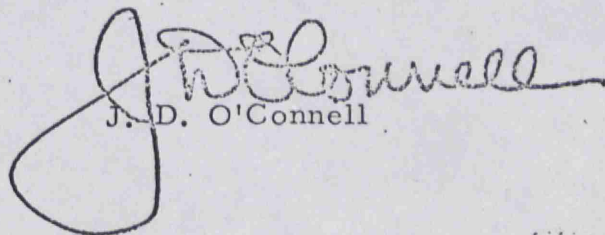
Dear Mr. Chairman:

This is in reference to the pending application by the Communications Satellite Corporation for the furnishing of 30 satellite circuits in the Pacific.

It is requested that ComSat be given appropriate authorization to proceed with implementation of the Department of Defense requirement. Upon establishment of composite rates which afford substantial savings on a global basis, and upon the completion of suitable discussion with and approval by the foreign entities involved, the contract with ComSat for the provision of this service will be assigned to one or more of the carriers shortly after the date of initiation of service. However, prompt action on the ComSat application is called for so that ComSat may make any arrangements necessary to facilitate the provision of this vitally needed communications service.

Finally, in the circumstances, it is also requested that the Commission promptly grant the pending applications of the carriers for authorization to lease and operate the channels required to furnish the service in question. It is understood that any authorizations would establish the applicability of the reduced rates to this service (e.g., the basic \$7,100 composite rate figure).

Sincerely,



J. D. O'Connell

FEDERAL COMMUNICATIONS COMMISSION

WASHINGTON

OFFICE OF
THE CHAIRMAN

February 2, 1967

General James D. O'Connell
Director of Telecommunications Management
Office of Emergency Planning
Executive Office Building
Washington, D. C. 20504

Dear General O'Connell:

I am writing in light of the action taken today on the "30 circuits" and "authorized user" matters. I want to express my appreciation for your efforts in resolving these important matters. The actions taken were possible largely because of the assurance in your letter that in view of the \$7100 composite rate already put into effect by the carriers in the Pacific, the assignment clause would be exercised by DOD shortly after the initiation of service.

As you know, there are also lower rates in the Atlantic, with plans for still further reductions on the institution of 24-hour satellite service. I want to assure you that lower composite rates, wherever satellite service is instituted, are a fundamental aspect of the Commission's regulatory policies in this area.

I believe that this experience again points up the soundness and wisdom of our joint efforts to understand each other's problems and to work together to get the solution best serving the national interest.

Sincerely yours,

Rosel H. Hyde
Chairman

FEDERAL COMMUNICATIONS COMMISSION



95477

PUBLIC NOTICE --C

February 2, 1967

WASHINGTON, D. C. 20554

AUTHORIZATIONS FOR DOD PACIFIC SATELLITE CIRCUITS; FURTHER DECISION IN AUTHORIZED USER PROCEEDING

The Federal Communications Commission has issued authorizations to Hawaiian Telephone Company, ITT World Communications Inc., RCA Communications, Inc., and Western Union International, Inc., to acquire voice-grade satellite circuits from the Communications Satellite Corporation (ComSat) to meet requirements of the Department of Defense (DOD) for thirty such circuits between Hawaii and the Far East. At the same time a short-term temporary authorization to furnish such channels to DOD was granted to ComSat at the request of the Director of Telecommunications Management (DTM) in order to permit it to make any arrangements necessary to facilitate the provision of the service. The Commission was advised by the DTM that the circuits will be assigned to the conventional carriers shortly after the initiation of service through ComSat.

At the same time the Commission acted upon petitions for reconsideration filed by various parties with respect to its Memorandum Opinion and Order and Statement of Policy (Docket No. 16058) released on July 21, 1966 dealing with the circumstances under which ComSat may be authorized to furnish satellite channels and services to entities other than the conventional common carrier. Among other things, the Commission clarified certain aspects of its earlier opinion concerning requests by ComSat for authorization to provide service directly to the U. S. Government.

The foregoing actions were taken by the Commission by the adoption of Memoranda Opinions and Orders.

- FCC -

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D. C. 20554

FCC 67-163
94724

In the Matter of the Applications of)

ITT WORLD COMMUNICATIONS INC.)
WESTERN UNION INTERNATIONAL, INC.)
RCA COMMUNICATIONS, INC.)
HAWAIIAN TELEPHONE COMPANY)

File Nos. T-C-2014
T-C-2025
T-C-2030
P-C-6440

To lease from the Communications Satellite Corporation 30 satellite voice-grade circuits between Hawaii and INTELSAT II for the provision of leased channel alternate voice/data service to the Defense Communications Agency between Hawaii, on the one hand, and Japan, Thailand, and the Philippines, on the other hand.)

In the Matter of the Application of)

COMMUNICATIONS SATELLITE CORPORATION)

File No. T-C-2032

To provide directly to the Defense Communications Agency 30 satellite voice-grade circuits between Hawaii, on the one hand, and Japan, Thailand, and the Philippines, on the other hand.)

MEMORANDUM OPINION, ORDER AND CERTIFICATE

By the Commission:

1. The Commission has before it applications of four overseas carriers filed pursuant to Section 214 of the Communications Act of 1934 for authority to acquire from the Communications Satellite Corporation (ComSat) circuits to meet a Department of Defense (DOD) requirement for leased channel services between Hawaii and three Far Eastern points. ITT World Communications Inc. (ITT) applied (File No. T-C-2014) on August 24, 1966; Western Union International, Inc. (WUI) applied (File No. T-C-2025) on September 14, 1966; RCA Communications, Inc. (RCA) applied (File No. T-C-2030) on September 15, 1966; and Hawaiian Telephone Company (HTC) applied (File No. P-C-6440) on September 19, 1966. All the applications request authorization to lease from Comsat thirty satellite circuits between the earth station at Hawaii and the Pacific satellite, Intelsat II, to meet the DOD requirement. 1/ The circuits will be

1/ WUI also requested authorization to lease satellite circuits unrelated to the 30-circuit requirement of DCA. By separate applications, the other carriers have applied for satellite circuits unrelated to the DCA requirements for 30 circuits. We are not treating these requests herein.

interconnected via the satellite with ten voice-grade satellite circuits from an earth station in Japan, ten voice-grade circuits from an earth station in Thailand, and ten voice-grade satellite circuits from an earth station in the Philippines, so as to provide through alternate voice/data leased channel service between Hawaii and each of these three foreign countries. Authority is also requested to acquire necessary connecting facilities in Hawaii.

2. Pursuant to our decision in the so-called Authorized User Case, Docket No. 16058, ComSat on September 6, 1966 applied (File No. T-C-2032) to us for authorization to provide such service directly to DOD, as well as for related authorizations. Thus, ComSat requests authority to acquire, from the International Telecommunications Satellite Consortium, thirty full-time units of satellite utilization in Intelsat II, to acquire from the respective foreign communications entities ten full-time voice-grade circuits between the satellite and each of the three foreign points and to provide through service to DOD by combining such units and circuits into thirty full-time alternate voice/data circuits. ComSat based its application on an order for such circuits from DOD, acting through DCA, pursuant to its procurement regulations. The DCA order, it should be noted, is made through a Communications Service Authorization (CSA) which contains a clause permitting DCA to assign the order to a carrier or carriers other than ComSat.

3. According to information before us, Thailand and the Philippines will be able to participate in the desired service by April 1, 1967, through transportable earth stations now being installed. Japan, which is presently modifying its earth station at Ibaraki, will be in operation to provide the service some months later.

4. Initially, both DOD and ComSat, in pleadings filed with the Commission, opposed the grant of the authorizations requested by the carriers. ComSat requests that we dismiss or defer consideration of the carriers' applications. It urges, among other things, that it has a contract to furnish the 30 circuits to DOD and that no action should be taken upon the carriers' applications until its own application has been disposed of. It also refers to its pending petition for reconsideration in the Authorized User Case, in which we determined the conditions under which ComSat may be permitted to furnish services directly to the Government and others. DOD originally opposed a grant of the carriers' applications on the ground, among others, that, since it has chosen ComSat to provide the service, there is no need for a grant of other applications.

5. In our Memorandum Opinion and Order (concomitantly being issued with this document) on petitions of ComSat, General Services Administration, and RCAC for reconsideration of our determinations in the Authorized User Case regarding the circumstances under which ComSat may be authorized to serve the Government directly, we point out that the DTM is "the focal point for the judgment of the Executive agencies as to the national interest," and that "in all cases where ComSat seeks to deal directly with the Government we shall act promptly after receipt of advice from the DTM."

6. We have received advice from the DTM concerning this matter. In a letter dated January 31, 1967, DTM has stated:

"It is requested that ComSat be given appropriate authorization to proceed with implementation of the Department of Defense requirement. Upon establishment of composite rates which afford substantial savings on a global basis, the contract with ComSat for provision of this service will be assigned to one or more of the carriers shortly after the date of initiation of service. However, prompt action on the ComSat application is called for so that ComSat may make any arrangements necessary to facilitate the provision of this vitally needed communications service. Finally, in the circumstances, it is also requested that the Commission promptly grant the pending applications of the carriers for authorization to lease and operate the channels required to furnish the service in question; it is understood that any authorizations would establish the applicability of the reduced rates to this service (e.g., the basic \$7,100 composite rate figure)."

7. In view of the particular circumstances of this matter, its history and posture and the representations made by DTM on behalf of the Executive branch, it appears that the objections heretofore raised by the parties are moot and that we should act to grant the regular authorizations to the carriers and the short term temporary authorization to ComSat. As to the latter, the short term temporary authorization to ComSat will, we believe, facilitate both the provision of this vitally needed service and an orderly transition from ComSat to the other carriers, and is thus consistent with our policies in this area. As to the former, there is now the express representation that this service will be assigned to one or more carriers shortly after date of the initiation of the service; we recognize, of course, that DCA will determine to which carrier or carriers any particular assignment should be made. In this connection, it is to be noted that the \$7100 composite rate referred to by the DTM has in fact been implemented in tariff schedules which became effective January 20, 1967.

ACCORDINGLY, IT IS HEREBY CERTIFIED, That the present and future public convenience and necessity require the grant of the applications as conditioned below or the denial thereof as also set forth below:

IT IS ORDERED, This 1st day of February, 1967, that ComSat is granted a short term temporary authority to provide, with the respective entities in Japan, the Philippines and Thailand, to the Defense Communications Agency acting on behalf of the Department of Defense, 10 voice-grade satellite circuits between Hawaii and Japan, 10 voice-grade satellite circuits between Hawaii and the Philippines, and 10 voice-grade satellite circuits between Hawaii and Thailand, for alternate voice/data leased channel service;

IT IS FURTHER ORDERED, That the short-term temporary authorization granted to ComSat by this Order and Certificate is subject to termination, without hearing, upon such notice as may be specified;

IT IS FURTHER ORDERED, That ComSat shall file with the Commission a separate tariff applicable to the service to be provided pursuant to the temporary authorization granted by this Order and Certificate, on not less than thirty days' notice to the public; that this tariff shall take into account the standards heretofore established by the Commission with respect to this matter, and that this tariff shall provide that it expires on the date the temporary authorization granted herein is terminated;

IT IS FURTHER ORDERED, That, except for the temporary authorization granted to ComSat by this Order and Certificate, and the previous authorization granted to ComSat to acquire units of utilization to provide the 30 circuits by the Commission's letter of January 26, 1967, the application of ComSat filed on September 6, 1966, File No. T-C-2032, IS DENIED.

IT IS FURTHER ORDERED, That ITT World Communications Inc., Western Union International, Inc., RCA Communications, Inc., and Hawaiian Telephone Company are each authorized to lease and operate up to 30 voice-grade circuits between Hawaii and the INTELSAT II (F-2) satellite in order to furnish up to ten circuits for alternate voice/data leased channel service to the Defense Communications Agency acting on behalf of the Department of Defense between Hawaii and each of the following points: Japan, Thailand, and the Philippines; Provided, however, (1) that the actual number of circuits that any such carrier may lease and operate pursuant to this authorization shall not exceed the number of circuits ordered from such carrier by the Defense Communications Agency; and (2) that the initial tariff rate for each such circuit between Hawaii and the INTELSAT II (F-2) satellite shall not exceed \$7,100 per month;

IT IS FURTHER ORDERED, That the carriers may file tariffs on not less than one day's notice to provide the services to those points when they receive orders from the Defense Communications Agency;

IT IS FURTHER ORDERED, That as circuits to a particular point (Thailand, the Philippine Republic, or Japan) are ordered by the Defense Communications Agency from a carrier in lieu of ComSat, the short-term temporary authorization herein granted to ComSat shall terminate without further action by the Commission upon the institution of service by such carrier;

IT IS FURTHER ORDERED, That ComSat and the carrier applicants are authorized to acquire any necessary connecting facilities in Hawaii so long as their respective authorizations are in effect; and

IT IS FURTHER ORDERED, That each of the carrier applicants shall notify the Commission of the acquisition, by that applicant, of any of the circuits herein authorized within five days of such acquisition.

FEDERAL COMMUNICATIONS COMMISSION

Ben F. Waple
Secretary

Released: February 3, 1967

In the Matter of

Authorized entities and Authorized
users under the Communications Satellite
Act of 1962

)
)
) Docket No. 16058
)
)

MEMORANDUM OPINION AND ORDER

By the Commission:

Preliminary Statement

1. We have before us several petitions for reconsideration and clarification of our Memorandum Opinion and Statement of Policy released July 21, 1966, in this proceeding. These petitions, which vary as to the relief sought, were timely filed on August 22, 1966 by the Communications Satellite Corporation (ComSat); the Administrator of General Services (GSA); and RCA Communications, Inc. (RCAC). Oppositions to either or both the Comsat and GSA petitions were filed on September 16, 1966, by the American Telephone and Telegraph Co. (AT&T); ITT World Communications Inc. (ITT WorldCom); Hawaiian Telephone Co. (HTC); Western Union Telegraph Co. (WU); Western Union International, Inc. (WUI); Aeronautical Radio, Inc., and the Air Transport Association of America, jointly (ARINC and ATA); and RCAC. Comsat on September 16, 1966 filed a response to the RCAC and GSA petitions, opposing the former and supporting the latter. It filed a reply to the oppositions to its own petition on October 14, 1966.

2. The document to which the petitions are addressed grew out of our inquiry into, among other things, the extent to which Comsat may be authorized to provide channels or services to persons other than communications common carriers, and the extent to which Comsat should, as a matter of policy, be so authorized by the Commission. In essence, we held, for the reasons set forth in our decision that, although Comsat may lawfully be authorized to provide service to non-carriers, it was primarily a carrier's carrier and should serve non-carriers directly only in unique or exceptional circumstances. The petitioning parties express widely divergent views. RCAC seeks more specific procedural controls on ComSat's negotiations with the various entities, including foreign users; GSA seeks clarification of the unique position of the government as a user; ComSat seeks broader authority to deal with users other than common carriers, including the Government itself.

3. We shall deal first with the contentions directed to the Government's position as a user (See Part I, below). We shall then deal with the other contentions, and, in particular, those of ComSat as to the alleged restrictive effects of our decision (Part II) and of RCAC as to the need for certain procedural revisions (Part III). Any contention not treated in the following discussion is rejected for the reasons set forth in our prior report.

Part I. The Contentions With Respect to the Government's Position as Authorized User

4. GSA and ComSat filed petitions for reconsideration with respect to that portion of our decision dealing with the Government's position as an authorized user. As to some of the matters raised, our prior decision already sets forth our position, and we will not, therefore, here repeat the discussion in that decision. However, we agree with GSA that clarification of our July 21 decision in some important respects is called for.

5. First, we shall, as requested by GSA stress again the wide area of agreement. We agree -- and so stated in our decision of July 21 -- that the Government has a special status under the Satellite Act. See par. 25 and discussion therein; Section 305(b)(4) of the Satellite Act. We also agree that with respect to this matter the Director of Telecommunications Management (DTM) has a special role and responsibility, in view of the special duties assigned to the DTM by the President in the telecommunication field (e.g., Executive Order 11191). We pointed out in our July 21 decision that in certain instances the Government has a special position because of its unique and national interest requirements, and that ComSat may be authorized to provide service directly to the Government whenever such direct service is in the national interest. Clearly, in view of the foregoing, the DTM is the focal point for the judgment of the Executive agencies as to the national interest. Finally, we recognize that the determination of communications services needed because of defense requirements in the national interest is a matter peculiarly within the province of the Executive. Cf. Bendix Aviation Corp. v. U.S., 272 F. 2d 533, 106 U.S. App. D.C. 304, cert. den., 361 U.S. 965.

6. Accordingly, we have concluded that our prior decision, and particularly Paragraphs 38(c) and 39, did not appropriately delineate the situation with respect to the Government as an authorized user and the procedures applicable thereto. We recognize that Comsat may be authorized to provide service directly to the Government whenever such direct service is in the national interest, and that paragraph 39 should

not be applicable to service to the Government. While no specific procedures or criteria (other than the national interest) are proposed with respect to this governmental facet, in all cases where ComSat seeks to deal directly with the Government we shall act promptly after receipt of advice from the DTM. In acting on requests by Comsat for authorization to provide service directly to the Executive, it is the DTM, and not Comsat, to whom the Commission may turn with respect to the critical national interest facet. Our decision is hereby amended to the extent of reflecting the foregoing revisions.

Part II. Comsat's Contentions Concerning the Alleged Effects of our Policy.

7. Comsat states that, apart from direct service to the Government, its statutory mission may be best accomplished by affording the conventional carriers full opportunity to provide satellite service, reserving the opportunity to provide direct service to users in justified and enumerated circumstances when necessary to spur development and utilization of satellite communications. Specifically, it says, it has urged that we recognize its right to serve users directly (a) where conventional carriers fail to make a desired satellite service available on reasonable terms; (b) where a new satellite service is provided on a developmental basis; and (c) where such service to a user or class of users would in a particular case be in the public interest. While it feels that we have adopted these suggestions in principle, it is concerned that we may in practice adopt an unduly restrictive approach which may undermine the salutary effect of defined exceptions to the "carrier's carrier" policy. In particular, it is gravely disturbed by what it considers an adoption by us of a composite rate approach, under which satellite economies are realized by users only through reduction in charges made for services provided over all media, which, it seems to feel, militate against separate rates for satellite services.

8. As Comsat points out, the approach we have taken is consistent with its own thinking as to the role of being primarily a carrier's carrier, dealing directly with users as an exception to that general principle. We are, of course, well aware of our responsibilities for encouraging the development and use of satellite communications, as well as for seeing that needs of users are effectively met. The point we were stressing, however, was that this should not be at the undue expense of the vast majority of users, who would not be in a position to go to Comsat directly. We also have a general responsibility to the public, which necessarily must be harmonized with our particular responsibilities for satellite communications, to assure adequate service at

reasonable charges and to take steps to assure that the conventional carriers responsible for general service can meet this obligation. The concern expressed in our decision was over the danger implicit in competition between Comsat, having a favored position with respect to a more economical medium, and conventional carriers who are at a disadvantage in not being able to acquire such a favored position. Unless closely and wisely regulated to harmonize the statutory responsibilities above, this unequal position could result in an overall deterioration in public communications services. The approach we took on rates was a consequent corollary of these considerations, and does not, of course, preclude the establishment of satellite rates, as distinguished from a composite rate, where in the public interest.

Part III. Suggested Procedural Revisions

9. The parties have filed petitions for reconsideration and clarification in this proceeding concerned with the lack of formalized procedures to be followed by Comsat in requesting authorization to serve directly non-carrier entities. As to the case of procedure with respect to direct service to the Government, this matter is discussed in par. 6, supra. With respect to RCAC's contentions, we believe that no revisions are called for at this time, in light of the policies established in our prior decision and in this Memorandum Opinion and in light of the fact that the Commission receives regular monthly reports of foreign negotiations in this area. Further experience is necessary to enable the Commission to determine what, if any, changes are required. The Commission will remain cognizant of the petitioners' contentions in this regard and reassess the procedures now established from time to time in light of experience gained.

10. ACCORDINGLY, IT IS ORDERED, This 1st day of February, 1967, that the Petitions for Reconsideration cited above, and the replies and responses thereto, are granted to the extent set forth above in paragraph 6 and are otherwise denied.

FEDERAL COMMUNICATIONS COMMISSION

Ben F. Waple
Secretary

Released: February 3, 1967

Department of Justice

Washington

APR 20 1969

LEGAL ADVISER

Mr. Leonard C. Meeker
Legal Adviser
Department of State
Washington, D. C.

APR 30 1969

DEPARTMENT OF STATE

Dear Mr. Meeker:

This responds to your letter of February 18, 1969, in which you have asked for our opinion on two questions concerning the authority of the National Aeronautics and Space Administration (NASA) to provide launch services to a foreign government for a domestic communications satellite system. Your questions are:

- (1) "Under existing domestic law is there any legal obstacle or impediment to the provision of launch services by the National Aeronautics and Space Administration to a foreign government having a foreign operational domestic communications satellite system?
- (2) "If NASA has authority to provide such services under our law may it do so independently of the Communications Satellite Corporation, whether acting as an independent United States corporation or as an agent for Intelsat?"

Although not specifically so stated in your letter, I understand your questions assume that such launch services would be provided on a 100% reimbursable basis. In these circumstances, it is our opinion that (1) there is no legal impediment to the provision of launch services by NASA if the President should direct such action; and (2) that launch services pursuant to such Presidential directive may be furnished independently of the Communications Satellite Corporation (Comsat).

1

We have considered the legal memoranda submitted by NASA and Comsat concerning these questions. Those memoranda discuss NASA's authority to engage generally in activities of a purely operational nature. No opinion is expressed herein on that issue because we find sufficient specific authority in the pertinent legislation to dispose of the questions presented without reaching the broader questions discussed by NASA and Comsat.

I.

The determination of the authority of NASA to provide launch services for foreign operational domestic communications satellite systems calls for construction of the National Aeronautics and Space Act of 1958, 72 Stat. 426, as amended, 42 U.S.C. 2451 et seq. ("Space Act") and the Communications Satellite Act of 1962, 76 Stat. 419, 47 U.S.C. 701 et seq. ("CSA").

The Space Act provides, in § 102(c) (42 U.S.C. 2451(c)), that -

"The aeronautical and space activities of the United States shall be conducted so as to contribute materially to one or more of the following objectives: * * *

(7) Cooperation by the United States with other nations or groups of nations in work done pursuant to this Act and of the peaceful application of the results thereof . . ."

Section 205 (42 U.S.C. 2475) provides that:

"The [National Aeronautics and Space] Administration, under the foreign policy guidance of the President, may engage in a program of international cooperation in work done pursuant to this Act, and in the peaceful application of the results thereof, pursuant to agreements made by the President with the advice and consent of the Senate."

The quoted provisions constitute a clear mandate for NASA to engage in international cooperation, not only in research, but also in the application of the results of aeronautical and space activities. 1/ The legislative history of § 205 makes it clear that such cooperation is to be under the guidance of the President. 2/ The only question as to NASA's authority under this section is whether such international cooperation may only be carried out pursuant to agreements made by the President with the advice and consent of the Senate.

President Eisenhower stated with respect to § 205 at the time he signed the Space Act that he did not construe that section as prescribing the only permissible form of international cooperation:

"The new Act contains one provision that requires comment. Section 205 authorizes cooperation with other nations and groups of nations in work done pursuant to the Act and in the peaceful application of the results of such work, pursuant to international agreements entered into by the President with the advice and consent of the Senate. I regard this section merely as recognizing that international treaties may be made

1/ There is also some evidence that § 203(b)(6), 42 U.S.C. 2473(b)(6), which authorizes NASA to cooperate with other government and public and private agencies was intended to include foreign governments. See H. Rep. No. 1770, 85th Cong., 2d Sess. p. 9 (referring to the predecessor paragraph 302(a)(6) in an earlier bill).

2/ The section that eventually became § 205 as it was first passed by the House provided that international cooperation should be "under the foreign policy guidance of the State Department." H. Rep. No. 1770, 85th Cong., 2d Sess. p. 25. The Conference Report (H. Rep. No. 2166, 85th Cong., 2d Sess. p. 21) states that the conferees adopted a revised version "specifying that the Administration would act under the foreign policy guidance of the President rather than the State Department."

in this field, and as not precluding, in appropriate cases, less formal arrangements for cooperation. To construe the section otherwise would raise substantial constitutional questions." Press Release of July 29, 1958, Public Papers of the Presidents of the United States: Dwight David Eisenhower 1958, par. 185, p. 573.

In addition to this ground for not holding agreements with the advice and consent of the Senate to be necessary for international cooperation in all cases, Congress has subsequently provided detailed guidance for purposes of international cooperation by the United States with respect to communications satellites. The Communications Satellite Act of 1962 (76 Stat. 419, 47 U.S.C. 701 et seq. (CSA)) sets forth the applicable policy objectives and limitations on executive actions, and clearly does not require that such international cooperation be limited to agreements entered into with the advice and consent of the Senate. The meaning of section 205 of the Space Act must be construed in the light of this subsequent, and definitive, legislation on the subject of international cooperation by the United States in the field of communications satellites.

The Communications Satellite Act provides in § 102(a) and (b) (47 U.S.C. 701(a) and (b)) that "it is the policy of the United States to establish, in conjunction and in cooperation with other countries . . . a commercial communications satellite system as part of an improved global communications network . . ." and that "in effectuating this program care and attention will be directed . . . toward efficient and economic use of the electromagnetic frequency spectrum. . .".

Section 201(a) (47 U.S.C. 721(a)) directs that, in order to achieve the objectives and carry out the purposes of that Act, the President shall --

"(3) . . . coordinate the activities of governmental agencies with responsibilities in the field of telecommunication, so as to insure that there is full and effective compliance at all times with the policies set forth in this Act;

"(4) exercise such supervision over relationships of the Corporation [Comsat] with foreign governments or entities or with international bodies as may be appropriate to assure that such relationships shall be consistent with the national interest and the foreign policy of the United States;

"(5) insure that timely arrangements are made under which there can be foreign participation in the establishment and use of a communications satellite system; . . .

"(7) so exercise his authority as to help obtain coordinated and efficient use of the electromagnetic spectrum and the technical compatibility of the system with existing communications facilities both in the United States and abroad."

Although the CSA was enacted for the purpose of establishing an international communications satellite system, the issues raised by any proposal for United States cooperation in the establishment of a foreign communications satellite system are inseparable from those relating to the success of the international system "as part of an improved global communications network."

The CSA is a very broad mandate to establish a global network of satellite communications on the basis of international agreements to be negotiated in the future. When the CSA was enacted it was generally believed that for both technical and economic reasons any communications satellite system would be international in character, and that duplicate systems would present serious problems of

economic feasibility and technical interference in the use of the electromagnetic spectrum. ^{3/} While it was anticipated that communications satellites might also be used for domestic communications, the feasibility of separate systems for this purpose was not considered a likely prospect for the near future. Congress could not and did not attempt to foresee what specific organizational form domestic communications by satellite would have in relation to international communications. It did, however, make clear the objective of the United States that an international communications satellite system be established soon, and on the basis of international agreement that would protect the system from technical interference in the use of the electromagnetic spectrum as well as uneconomical competition with competing systems. To these ends, the Act authorized the President, among other things, to insure that arrangements be made for foreign participation in the system and to use his authority to obtain coordinated and efficient use of the electromagnetic spectrum.

Whether, and to what extent, domestic communications satellite systems established by other nations should be integrated with or operate separately from the international system is a question that is inextricably related to the issues involved in the establishment and operation of the international system. The authority to determine the U.S. position and to enter into agreements dealing with such questions must be deemed included within the broad authority conferred upon the President by the CSA.

The broad range of possible forms of international cooperation intended to be made possible by the CSA include the conclusion of international arrangements through

^{3/} See, e.g., S. Rep. No. 1584, 87th Cong., 2d Sess. (1962) p. 8; Hearings before the House Committee on Interstate and Foreign Commerce on H.R. 10115 and H.R. 10138, 87th Cong., 2d Sess., part 2, p. 422 (1962).

less formal devices than a treaty, as exemplified by the various agreements on which the Intelsat system is based. 4/

The clear legislative intention of the CSA is to vest in the President control of the activities of NASA and other government agencies, as well as of Comsat, when engaging in programs of international cooperation in satellite communications. I therefore conclude that the only requirement of domestic law that must be satisfied before NASA may provide reimbursable launching services for a foreign operational domestic communications satellite system is the specific approval of the President.

II.

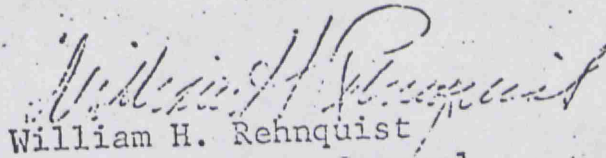
The foregoing analysis also provides the answer to your second question. Since the authority for NASA to provide such launch services is to be found (a) in NASA's general authority under the Space Act, and (b) through the approval of the President under his authority in both § 205 of the Space Act and § 201(a) of the CSA, I can find no requirement that Comsat be involved in any way in the provision of such services. 5/

4/ The Intelsat system is governed by three separate agreements. The International Telecommunications Satellite Consortium of August 20, 1964 (TIAS 5646) is an intergovernmental (executive) agreement. In addition, a "Special Agreement" (also TIAS 5646) is an agreement between the operating entities, including Comsat. A separate arbitration agreement was concluded subsequently between these operating entities.

5/ Section 201(b)(5) of the CSA (47 U.S.C. 721(b)(5)) which directs NASA to furnish reimbursable launch services to Comsat, is not inconsistent with this conclusion. That section is simply a direction making it mandatory that NASA provide such services. See, e.g., (Cont'd.)

I trust that the foregoing answers your questions.

Sincerely,



William H. Rehnquist
Assistant Attorney General
Office of Legal Counsel

5/ (Cont'd.) testimony of NASA Administrator James E. Webb in hearings before the Senate Commerce Committee on S. 2814, 87th Cong., 2d Sess., p. 143, and before the House Commerce Committee in hearings on H.R. 10115 and H.R. 10138, Pt. 2, pp. 608-9. There is no indication, either in the CSA, or in its legislative history, that section 201(b)(5) was intended as a limitation on the specific form of arrangements that might be negotiated for a global network of satellite communications. Indeed, section 305(a)(1) expressly recognizes that Comsat's ownership interest in an international system may be either by itself "or in conjunction with foreign governments or business entities."

Comsat

May 13, 1969

MEMORANDUM FOR GENERAL O'CONNELL

The Communications Satellite Act appears to give the President substantial authority and responsibility relevant to the characteristics of a domestic satellite system. Could you please advise on how these provisions provide authority for the President to take an initiative in defining the broad characteristics of domestic satellite policy and of a domestic satellite system. This should include how the Act may limit what the President can do, how it has been interpreted, and the extent to which a Presidentially stated interpretation could clarify such issues.

Could you also forward a summary of the "30-circuits" case to include the issues as defined by the FCC, their ruling, and the provision for DTM certification that procurement of the circuits from COMSAT is in the national interest.

Signed

Clay T. Whitehead
Staff Assistant

cc: Mr. Whitehead ✓
Central Files

CTWhitehead:ed

NASA

June 19, 1969

MEMORANDUM FOR GENERAL O'CONNELL

Thank you for your memorandum of June 16th regarding correspondence between your office and NASA on the procurement of communications satellite service to support the Apollo program.

Your position seems eminently reasonable with regard to the timing of a conference with the terrestrial carriers. However, I still have reservations about the authorized user question and the question of certification of national interest. I would like to discuss this with you before a final decision is reached in this matter.

Clay T. Whitehead
Staff Assistant

cc: Mr. Flanigan
Mr. Whitehead
Central Files

CTWhitehead:ed

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF TELECOMMUNICATIONS MANAGEMENT
WASHINGTON, D.C. 20504

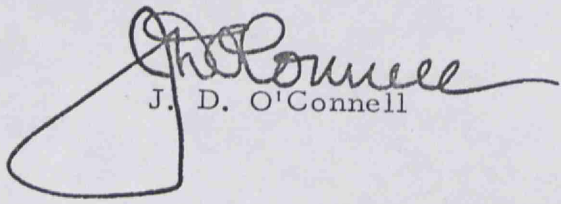
OFFICE OF THE DIRECTOR

June 16, 1969

MEMORANDUM FOR MR. CLAY T. WHITEHEAD

Attached, for your information, are copies of an exchange of correspondence between my office and NASA regarding the procurement of communications satellite service to support the NASA Apollo program.

Since the correspondence seems self-explanatory, I will not restate the problem in this memorandum. I would simply state that NASA shares our concern that the terrestrial carriers be afforded a hearing. In conversations at the staff level we have been advised that NASA intends to confer with the terrestrial carriers about this procurement, and the only unresolved problem seems to be timing. We feel that it would be in the Government's best interest for NASA to have the hearing at the outset rather than after this office should approve the procurement.



J. D. O'Connell

Attachments

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF TELECOMMUNICATIONS MANAGEMENT
WASHINGTON, D.C. 20504

OFFICE OF THE DIRECTOR

June 13, 1969

Mr. Willis H. Shapley
Associate Deputy Administrator
National Aeronautics and Space Administration
Washington, D. C. 20546

Dear Mr. Shapley:

This is in response to your letter of June 6, 1969, requesting my approval for the direct procurement from the Communications Satellite Corporation (Comsat) of satellite communications circuits in support of the NASA Apollo program. These circuits would be between commercial earth stations in the United States and NASA tracking ships and earth stations on Grand Canary and Ascension Islands and at Carnavon, Australia. Service to these points is now being provided under direct contracts entered into in 1966 between NASA and Comsat, and the appropriate foreign carriers.

The principal reason given in your letter that a direct procurement would be in the national interest is that these communication services are critical to the success of manned missions, and a direct procurement not involving an intermediate terrestrial carrier would allow a greater margin of safety for the astronauts and create a greater probability for success of the Apollo missions. It is NASA's belief that contracting with the terrestrial carriers for its future requirements for the manned space flight program would introduce an unnecessary element of risk into the program and that this would not be in the national interest.

As I told you in our telephone conversation of June 10, I fully appreciate the inherent dangers involved in the manned space program, and I accept NASA's conclusion in this respect, because NASA is the agency with the responsibility for the safety and success of the Apollo program. One aspect of this which causes me some concern, however, is my understanding that if this direct procurement is authorized, NASA would

then discuss the matter with the terrestrial carriers with a view toward permitting them to show that procurement through one of them might be in NASA's best interest. If there is a possibility that such a presentation might persuade NASA that indirect procurement of this satellite service through one of the terrestrial carriers would be in NASA's best interest then I would suggest that the terrestrial carriers be heard by NASA before any action is taken by this office, or the FCC. It would not seem appropriate for me to send a letter to the FCC advising that a direct procurement is necessary for safety reasons and then have NASA take a position later that the same, or an adequate, margin of safety can be achieved through indirect procurement.

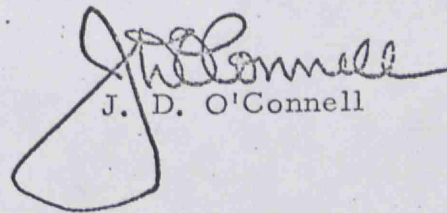
Even if there is no possibility that the terrestrial carriers can persuade NASA that indirect procurement would meet NASA's requirements, it would seem that NASA would be placed in a difficult position if no discussions are held in response to their request, or if such discussions are held after a NASA-DTM-FCC determination upon which the terrestrial carriers have had no prior opportunity to comment. It seems clear that either the FCC, NASA, or the DTM must give the terrestrial carriers a technical explanation of the reasons why NASA has concluded that a direct procurement of this service is in the national interest. The most appropriate place for this discussion is at NASA, which has the facts first hand and the responsibility for the Apollo program, and the most appropriate time is before a determination is made by the Executive Branch that a direct procurement would be in the national interest.

There is a statement in your letter that NASA will probably save at least 15% in the charge for this service if there is a direct procurement which eliminates the intermediate carrier. As you are well aware, I am sure, the rate permitted by the FCC to be charged for a particular communication service is not always directly related to the cost of providing that service. The FCC has established a composite rate policy with regard to international service which reflects the lower cost of providing some types of service by satellite; and the United States Government, as a major user of both cable and satellite circuits, benefits from this. As a matter of fact, at the time that the 30 circuit matter was pending, the Department of Defense estimated to the Holifield Committee that as a result of the consolidated rates which were scheduled to be put into effect by the FCC in 1966, the annual savings to DOD would be \$6.3 million. The Committee Report stated, "These savings contrast with the \$1.6 million annual savings which would have been realized by dealing with Comsat directly on the 30 circuit procurement." (See Seventh Report by the Committee on Government Operations, H. Rept. No. 613, 90th Cong., 1st Sess., pp 9-10.)

It does not appear, therefore, that the contention that there would be a 15% cost saving is an acceptable basis for concluding that direct procurement would be in the national interest. A conclusion based on that premise would be completely counter to the FCC policy on composite rates, and would mean that every specific procurement of satellite service by a Government department or agency would necessarily be in the national interest. The effect on departments and agencies, such as the Department of Defense, which depend on both satellites and cables to meet their requirements could be uncertain and possibly adverse.

I would appreciate your advising me, therefore, as to how NASA proposes to handle the matter of affording a hearing to the terrestrial carriers. After that procedural matter is resolved and I receive a firm and unchangeable statement that NASA considers direct procurement to be in the national interest, I intend to furnish appropriate advice promptly to the FCC.

Sincerely,



J. D. O'Connell



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
WASHINGTON, D.C. 20546

JUN 6 1969

OFFICE OF THE ADMINISTRATOR

Honorable James D. O'Connell
Director of Telecommunications
Management
Executive Office of the President
Washington, D. C. 20504

Dear Mr. O'Connell:

As you are aware, in 1966 NASA entered into contracts with the Communications Satellite Corporation, and with three foreign carriers, for satellite communications services as part of the NCS/NASCOM communications network supporting the Apollo Program. These contracts will expire on September 30, 1969, and must be renewed or new contracts entered into for similar services.

For the past several months we have been conducting an intensive review of NASA's future requirements for communications support of Apollo and follow-on programs. In connection with identifying future requirements, we have also sought to determine the contractual scheme most appropriate for fulfilling them, taking into account the "authorized user" opinion of the Federal Communications Commission dated July 20, 1966, as amended by a further opinion dated February 1, 1967. NASA has concluded that it would be desirable for Comsat to continue to furnish the satellite communications services now being provided to NASA, subject to certain changes which will be discussed below, under direct contractual arrangements with NASA, and it is the purpose of this letter to request your approval of such arrangements.

The need for your approval of the continuation of NASA's direct contractual relationship with Comsat arises out of the position taken by the FCC regarding the authority of Comsat

to contract directly with an agency of the United States Government for the provision of communications satellite services. In its July, 1966 opinion, the FCC stated that Comsat would be authorized to deal directly with U. S. Government users:--

" . . . in only those instances where the requirement for satellite service is of such an exceptional or unique nature that the service must be tailored to the peculiar needs of the customer and therefore cannot be provided within the terms and conditions of a general public tariff offering."

The services which Comsat had been authorized to furnish to NASA for support of the Apollo Program were cited specifically by the FCC as a case in which a direct relationship between Comsat and the Government user was appropriate.

In its February, 1967 amendment to the "authorized user" opinion, the FCC broadened the criteria for determining those circumstances in which Comsat may deal directly with a Government agency. The FCC noted that its previous opinion had pointed out that " . . . Comsat may be authorized to provide service directly to the Government whenever such service is in the national interest." The FCC further stated that "Clearly, in view of the foregoing, the DTM is the focal point for the judgment of the Executive agencies as to the national interest." And, in emphasizing that it would rely heavily on the advice of the DTM in this regard, the FCC added that:--

"While no specific procedures or criteria (other than the national interest) are proposed with respect to this governmental facet, in all cases where Comsat seeks to deal directly with the Government we shall act promptly after receipt of advice from the DTM."

Thus, it appears that NASA will be able to continue its direct contractual relationship with Comsat for the services, provided you approve such an arrangement as being in the national interest, and so advise the FCC.

The services which Comsat is presently providing under its contract with NASA can be divided into two distinct categories: (1) service via satellites between U.S. earth stations and U.S. Navy-operated range instrumentation ships located in the Atlantic, Indian, and Pacific Oceans, and (2) service between U.S. earth stations and satellites located over the Atlantic and Pacific Oceans, which links up, respectively, with service provided by foreign carriers to earth stations located on Grand Canary Island (Spain) and Ascension Island (United Kingdom), and at Carnarvon, Australia.

With respect to the service between U.S. earth stations and the range instrumentation ships, the existing contract with Comsat provides for service from the Comsat earth station at Brewster, Washington, to a ship in the Pacific Ocean Area, and from the Comsat earth station at Andover, Maine, to two ships in the Atlantic/Indian Ocean Area. Service to the Pacific ship is provided on a full-time basis, while service to the Atlantic and Indian Ocean ships is provided on a shared basis with the earth stations on Grand Canary and Ascension Islands.

Experience in the use of the service to the ship stations, and the plans for future Apollo flights, have enabled NASA to reduce its requirements to actual use of only one ship at one time in the Atlantic/Indian Ocean Area and one ship at one time in the Pacific Ocean Area. Thus, although two ships may be physically located in the Atlantic/Indian Ocean Area, only one of them will actually be providing communications service at any given time. Similarly, if either of these ships is moved to the Pacific, which may be done in connection with certain missions, only one of the two ships then located in the Pacific will be actually providing communications service at any given time, although both may be utilized alternately in the course of the same mission. It is also a

possibility that all three ships will be located in the same ocean area at one time, with alternate use of one ship at any given time.

In addition, it is NASA's intention to reduce all of the communications service to and from the U.S. earth stations and the ships to part-time availability, with actual use amounting to approximately twenty days, on each of not more than four occasions a year. Government operation of the communications facilities aboard each of the three Government ships will continue.

The reduction of the ship service to actual use of only one ship at one time in the Atlantic/Indian Ocean Area and one ship at one time in the Pacific Ocean Area, and even that on a part-time basis, will create a variety of novel technical and operational problems. For example, channels will have to be switched rapidly from one ship to another in the same ocean area. Continuous coordination between Comsat and each of the Government ships will be required in order to assure the quality and reliability of the circuits. Furthermore, it is envisioned that Comsat will have to distribute these circuits to different satellites for different missions.

Because of the complex and constantly changing interfaces between the satellites and the Government-operated ship stations, and the need for close coordination between Comsat and the Government regarding differing requirements, a direct contractual relationship between Comsat and the Government will clearly meet the unique or exceptional circumstances test propounded by the FCC in its original authorized user decision. In addition, a direct relationship between NASA and Comsat should result in substantial cost savings to the Government. Although an approximate amount for such savings cannot readily be predicted at this time, because there is no basis for estimating the rates for the part-time service that Comsat and the commercial carriers might offer to fulfill NASA's future ship-service requirements, we believe it can be assumed that the differential in rates will be at least 15%, as discussed further below.

For the reasons, therefore, that NASA's requirements for satellite communications service to the range instrumentation ships are unique in nature, and that they could probably be furnished by Comsat at a significantly lower cost to the Government, NASA submits that the provision of such services by Comsat under a contract directly with NASA would be in the national interest.

NASA's requirements for communications satellite service to the earth stations at Carnarvon, Australia, and at Grand Canary Island and Ascension Island, will remain substantially the same, except that it has not yet been determined whether the service to the latter two stations will be required on a full-time, part-time, or shared basis. In determining whether NASA should contract for the U.S. portion of these services through Comsat, or through a commercial U.S. carrier or carriers, careful consideration was given first to the operational problems that might arise as a result of the interjection of commercial carriers between the NASA operating center and Comsat, as the operator of the earth stations and manager of the space segment. NASA's loss of direct access to Comsat could become a critical factor to the success of a manned mission, and the safety of the astronauts, in the event of a service outage during the launch, initial orbit determination, or trans-lunar insertion phases of the mission, when immediate restoration of the service would be vital. NASA believes, therefore, that contracting with commercial carriers for its future requirements would introduce an unnecessary element of risk into the manned space flight program, and that this would not be in the national interest.

NASA has also considered the relative cost of obtaining the U.S. portion of the services to the three foreign stations from Comsat and from a commercial carrier or carriers. Although we have not attempted to solicit quotations for these services from commercial carriers, other experience indicates that there would probably be a minimum differential of at least 15% between the rates offered by Comsat, and by a commercial carrier. On the basis of Comsat's present rates

to NASA for the U.S. portion of the services to these three stations, this 15% factor would result in about \$94,500 a year in additional costs to NASA for procuring the same type of service from a commercial carrier. In view of the budgetary limitations now confronting the U.S. space program, we believe that it would be decidedly in the national interest if NASA could avoid these additional costs by continuing to contract directly with Comsat for these services.

In the light of the above, it is requested that you approve, as being in the national interest, the continuation of the direct contractual relationship between Comsat and NASA for the provision of the service between the U.S. earth stations and the tracking ships, and of the U.S. portion of the service to the three foreign earth stations. We would also appreciate your prompt action on this matter, because of the comparatively short time remaining before the present contracts expire.

Sincerely yours,

Willis H. Shapley

Willis H. Shapley
Associate Deputy Administrator