SEP 14 1972

Honorable Dean Burch
Chairman
Federal Communications Commission
1919 M Street, N.W.
Washington, D.C. 20554

Dear Dean:

I have enclosed for your information a copy of a speech I'll be making in San Francisco today. The main thrust of my remarks concern the increase in network reruns and the decrease in original programming.

As I make public in the speech, the President has expressed his concern about the rerun problem in a letter to John Gavin of the Screen Actors Guild, and has asked me to look into the matter and see if OTP can recommend any solution.

We should coordinate on this problem, as long as you feel this would be consistent with the Commission's own responsibilities with respect to this aspect of network operations. If appropriate, such coordination should probably be handled handled through our respective General Counsel's offices and I shall proceed on this basis unless you have some other suggestion.

Sincerely,

signed
TOM
Clay T. Whitehead

Enclosure

cc: DO Chron
DO Records
Mr. Whitehead (2)
GC Chron
GC Subject
HGoldberg

HGoldberg:csh:9-13-72

J

APR 17 1972

Honorable Charlotte T. Reid
Defense Commissioner
Federal Communications Commission
Washington, D.C. 20554

Dear Charlotte:

I am pleased that necessary revisions to the Emergency Broadcast System have been worked out which are acceptable to the industry and which meet the requirements of the White House. However, I am frankly concerned that the NIAC not be placed in the position of determining those procedures, facilities, or other aspects of EBS operations which must remain within the control of the White House or the Executive Branch of the Government. Accordingly, we are reviewing your letter to me of April 3, 1972, and the attached recommendations of the NIAC, to see whether any of the actions and conditions set forth therein are unnecessarily restrictive.

If we have any problems in this regard I will let you know.

Sincerely,

signed
TOM

Clay T. Whitehead

cc: DO Record
DO Chron
Mr. Whitehead
LTC Beery
CCJoyce-Subj File -EBS ✓
CCJoyce-Chron File -

CCJoyce/njs/4-14-72

T7-12

April 5, 1972

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

Dear Mr. Chairman:

This is with reference to your letter of March 2, 1972, on proposed actions of the Commission with respect to radio receiver performance characteristics.

The actions you describe in your letter, instituting rule-making proceedings for receiver performance characteristics, could be a major step forward. Manufacturers and purchasers of receivers alike would have readily available the information needed for sound manufacturing and purchasing decisions, and progress toward a systems engineering approach for better spectrum usage would be significantly advanced.

We are concerned, however, that type acceptance procedures usually entail mandatory compliance in the manufacture of equipment. In most cases, this would be undesirable for receivers. There may often be sound reasons of economy, performance, or operational flexibility for using receivers with characteristics different from those assumed by the Commission in its frequency allocation and assignment decisions. If all parties involved have the information necessary to make sound decisions on manufacture and purchase, there is no reason for the Government to forbid the purchase or use of such "non-standard" receivers so long as this fact and the consequences are known at the time of purchase.

We believe that procedures similar to type acceptance to establish nonmandatory standards, combined with a labelling requirement to indicate compliance with FCC standards or the lack thereof, could afford the necessary information and guidance without unnecessarily circumscribing customer choice and without establishing an undesirable precedent of receiver regulation. In short, we feel that a self-regulating mechanism offers many advantages in the field of receiver performance characteristics.

We will be pleased to work further with the Commission on this matter.

Sincerely,

Clay T. Whitehead

WDeanJr/dtb 3/28/72
cc: DO Chron
DO Records ✓
FMD
Dir OTP (2)

retyped: 4/4/72

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

For further information,
contact Mr. Brian Lamb,
395-4990

FOR RELEASE
6 P.M. April 4, 1972

OTP ANNOUNCES CHANGES IN EMERGENCY BROADCAST SYSTEM

Clay T. Whitehead, Director of the Office of Telecommunications Policy, today announced changes to improve the reliability of the Emergency Broadcast System. The changes are a result of an intensive review of the system which was undertaken by OTP at the request of the White House following a test failure on February 20, 1971. They are designed to restore public confidence in the operation of the System.

"The Emergency Broadcast System will be used only to permit the President to address the American people in extreme emergencies on short notice," Mr. Whitehead said. "After the President has spoken, State and local governments may be able to use their portions of the network to broadcast urgent information affecting the local populace," he added.

The emergency system will no longer be used as a backup system for warning the nation in case of enemy attack.

Mr. Whitehead explained: "The primary warning system to alert the public in case of national emergency is now and will continue to be the National Warning System operated by the Office of Civil Defense and by State and local governments. This system includes telephones, teletypes, and sirens interconnected throughout the U.S.

"We will ensure that the broadcast media receive immediate warning announcement to deliver to radio and television audiences. To do this, additional warning facilities are planned to take effect at the same time as the EBS changes," Mr. Whitehead stated.

Plans for improvements and additions to the Emergency Broadcast System were developed by the Office of Telecommunications Policy, working with the Department of Defense, the Office of Emergency Preparedness, the Federal Communications Commission, and the communications industry. The FCC, working with its National Industry Advisory Committee, will issue simplified instructions for all broadcast stations defining the procedures the stations will follow when the Emergency Broadcast System is activated.

APR 3 1972

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

Dear Mr. Chairman:

By letter of February 9, 1972, this Office was requested to comment on a "Further Modification of Petition" in RM-1801 on behalf of McDonnell Douglas Corporation for a Collision Avoidance System (CAS). This modification proposes to eliminate the frequencies 1610 and 1615 MHz from operation by CAS, the objective being to eliminate interference between military altimeters and operational CAS. The petition also looks forward to removal of the "provisional" limitation now contained in the FCC frequency allocation of the 1592.5-1622.5 MHz band.

This matter was referred to cognizant Government agencies for reevaluation of interference potentialities. The conclusion reached as a result of technical analysis is that, while the separation distances at which interference could be expected are reduced as the result of elimination of the top two CAS frequencies, the modification does not eliminate the possibility of interference; minimum separation distances in some cases remaining in excess of ten nautical miles.

In view of the above, and while supporting the reservation of the band 1592.5-1622.5 for collision avoidance functions, I consider that the position taken in my letter of January 5, 1972, remains valid, i.e., it would be unwise to provide for regular licensing and type acceptance of Collision Avoidance Systems at this time, and in the interim, there would be no objection to continuation of experimental/developmental-type frequency authorization in order that CAS experience may be obtained on a voluntary and unprotected basis. No other course of action would seem appropriate until such time as a national standard for CAS has been agreed upon. It is noted that the Federal Aviation Administration, Department of Defense, and National Aeronautics and Space Administration are actively looking toward the selection of a future national standard.

Sincerely,

Clay T. Whitehead

WDean:alh:28Mar72
cc: DO Records ✓
DO Chron
FMD
Dir OTP (@2)
Dep Dir OTP

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

March 29, 1972

DIRECTOP

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

Dear Mr. Chairman:

By letter of August 19, 1971, I advised that the band 223-225 MHz could, with certain limitations, be made available on a shared basis for Citizens Band use. By letter of January 12, 1972, your staff requested comments on a draft Notice of Proposed Rule Making on this matter and asked for a review of the necessity for a geographic restriction in the Texas and New Mexico areas. I have attached a statement of the restrictions necessary for military reasons.

In view of the many non-Government interests (citizens band, radio amateurs, and business radio) vying for use of this spectrum resource, we feel that favorable consideration should be given to establishing a new radio service. For example, using the two megahertz of spectrum offered by my letter of August 19, 1971, eighty FM radio channels could be made available for a General Public Radio Service, having as its prime objective the satisfaction of many currently unfulfilled communication needs of a nation on the move--travelers, sportsmen, hobbyists, and quasi-business activities. Propagation characteristics of 225 MHz, coupled with carefully developed FCC rules, could afford a high fidelity, orderly communications service, responsive to the needs and interests of the private citizen. Additionally, estimates of the industrial activity contribution of such a service suggest a market size as large as 300 to 500 million dollars per year.

While the spectrum involved (223-225 MHz) is allocated currently to the Radio Amateur Service, in addition to Government Radiolocation, the three megahertz remaining (220-223) would seem adequate for current and likely future radio amateur operations. Radio amateurs could continue to use the 223-225 MHz band provided they complied with the rules applicable to the new radio service. Although we are greatly reluctant to reduce any frequency allocations now devoted to amateur use, we feel the large public need for this new radio service justifies this action.

In summary, there is a need for a disciplined radio service responsive to the needs of the general public and, properly handled, such a service could be provided responsive to the needs of all potential users.

We look forward to working further with you on this matter.

Sincerely,

Clay T. Whitehead

Enclosure

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS UNITED STATES AIR FORCE
WASHINGTON, D.C.

REPLY TO ATTN OF: PRCF

SUBJECT: Citizens Radio Service Operations in the 220-225 MHz Band

TO: Mr. W. Dean, Jr.

1. Several months ago when the military departments reviewed the FCC proposal for allocating a portion of the 220-225 MHz band to CRS operations, comments were based on limited impact information immediately available. Urgency of the FCC requirement was apparent. Assistance to the FCC was necessary to the limit that current military operational needs would permit. Since first consideration of the proposal, additional investigation and study have been accomplished to determine beyond reasonable doubt what impact unrestricted CRS operations would have on military test ranges.

2. Proposed CRS operations represent a significant interference hazard to military test operations in the vicinity of WSMR, NMex and part of the Gulf test range in northwest Florida. It has been determined that unrestricted CRS operations within interference radius of these important test areas will totally impair acquisition of certain vital test data. CRS communications will result in much greater density of spectrum use much closer to instrumented test areas than is normally experienced with amateur activities. Unless protective restrictions are imposed to prohibit CRS operations from these areas, resulting interference is expected to require expensive adjustments in instrumentation.

3. In view of CRS history of undisciplined operations, uncontrolled sharing of the frequency resource under consideration is not feasible. It is imperative that existing caveats applicable to the 220-225 MHz band be retained for CRS operations. In addition, a note similar to NG 13 must be imposed against CRS operations in Gulf and Franklin Counties, Florida and their contiguous water areas extending 30 miles into the Gulf of Mexico. This will provide minimum acceptable protection for active off shore test operations adjacent to these counties. A proposed footnote similar to NG 13 is as follows:

> NG In those portions of the States of Texas and New Mexico in the area bounded on the south by parallel 31° 53' N, on the east by longitude 105° 40' W, on the north by parallel 33° 24' N and on the west by longitude 106° 40' W and in the State of

Florida the counties of Gulf and Franklin and the contiguous water areas of the Gulf of Mexico extending to 30 miles off shore, the frequency band 224-225 MHz is not available for use by class E citizen Radio Service stations between the hours of 0500 and 1800 local time Monday through Friday inclusive, of each week.

WILLIAM R. SELL, Colonel, USAF
Chairman, J/FP

FOR IMMEDIATE RELEASE

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

March 17, 1972

NEWS RELEASE

OTP RELEASES DOMESTIC SATELLITE STUDIES

The Office of Telecommunications Policy today released the results of three studies on domestic satellite communications. The studies, conducted for OTP by the Stanford Research Institute, Ross Telecommunications Engineering Corporation, and the Commerce Department's Office of Telecommunications, address technical and economic aspects of the several applications for domestic satellite systems now pending before the FCC, and the implications of these factors for the organization, operation, and regulation of the domestic satellite industry.

Walter Hinchman, OTP Assistant Director, noted in releasing the studies that their findings further support the Administration's view that multiple domestic satellite systems can be economically viable on a competitive basis and can be made technically compatible with one another and with existing and future terrestrial systems, with minimal regulatory controls.

Summary conclusions from the three OTP reports are attached. The complete texts of these reports may be examined at the OTP offices, and copies will be available from the National Technical Information Service, U.S. Department of Commerce near the end of April 1972. For those interested in obtaining further information or copies, the exact titles are:

"Economic Viability of the Proposed United States Communications Satellite Systems," Stanford Research Institute.

"A General Analysis of Domestic Satellite Orbit/Spectrum Utilization," Policy Support Division, Office of Telecommunications, U.S. Department of Commerce, Boulder, Colorado.

"Analysis of Earth Station Siting for the Proposed Domestic Satellite Systems," Ross Telecommunications Engineering Corporation.

March 17, 1972

OTP Studies* on Domestic Satellite Communications
Principal Conclusions

ECONOMIC

- The data presented in the FCC applications for the several systems proposed show no clear indication of substantial economies of scale that would suggest a tendency to natural monopoly. Indicated unit costs are comparable for large and small systems of the same type and there are apparent economies of specialization for several of the proposed services which would offset any claimed economies of scale. Systems of substantially different types differ in function, performance, and probability of successful deployment and thus are not directly comparable on an economic basis.

- The potential market for domestic satellite services in the near future, though substantial, will probably support several but not all of the proposed systems as presently envisioned. There is an apparent near-term market for 89-163 broadband satellite channels (transponders), whereas the total operational capacity of all proposed systems would be 336 transponders, with additional back-up capacity of 252 transponders.

- The total market includes several sectors that are relatively insulated from one another (e.g., public message telephone traffic, broadcast and cable video interconnection, and various leased-line services), each of which could be served economically by a different operator.

- More than one satellite operator may be expected to compete on a continuing basis for the leased line market, and to a more limited extent for the other market sectors.

- Under a policy of open entry at least two, and probably three or more, separate systems would likely be established, having a combined capacity in excess of 100 channels (transponders) plus 50 or more back-up transponders. Each of these systems would likely incorporate an independently viable basic service offering (e.g., PMTS, video interconnection, etc.) combined with competitive leased-line offerings.

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* "Economic Viability of the Proposed United States Communications Satellite Systems," Stanford Research Institute.

"A General Analysis of Domestic Satellite Orbit/Spectrum Utilization," Policy Support Division, Office of Telecommunications, U. S. Department of Commerce, Boulder, Colorado.

"Analysis of Earth Station Siting for the Proposed Domestic Satellite Systems," Ross Telecommunications Engineering Corporation.

- A policy of open entry can be expected to result in a viable competitive industry, with return on capital commensurate with risks. However, there is little solid evidence regarding the specific structure this industry would take, which will be affected by differences in technology, design concept and configuration, comparative market strategies, and consortia arrangements not readily apparent at this time.

TECHNICAL

- The average spacing of 3.7^{o} required to accommodate all 23 of the initial U. S. and Canadian satellites in the relevant sector of the geostationary orbit (i.e., 53^{o} - 138^{o} W) is not inconsistent with the spacings proposed and analyzed in the applications.

- A general analysis indicates that 23 satellites with characteristics typical of those proposed could be accommodated, although minor adjustments in some system parameters might be necessary in the unlikely event that all systems were fully deployed.

- The ultimate capacity of the available geostationary orbit using (and reusing) 2000 MHz of spectrum vastly exceeds the indicated initial demand; thus, scarcity of this resource is not a compelling issue in policy determination.

- The siting of earth stations near large metropolitan areas in the manner proposed by the various applicants is feasible from an interference standpoint.

- Although the applicants did not coordinate specifically for off-path interference, this type of potential interference has been taken into account to some degree in the coordination for possible great-circle interference, since the terrestrial microwave facilities most likely to cause both types of interference are the same.

- For all cases of great-circle interference problems as represented by the applicants, there are viable techniques available for controlling the level of interference within acceptable limits.

- The installation of earth stations for several applicants in a certain area would not produce accumulative interference effects beyond those anticipated in the development of acceptable interference criteria by the CCIR.

February 11, 1972

MEMORANDUM FOR

Mr. Bernard Strassburg
Federal Communications Commission

As you know, we have a continuing interest in the development of appropriate policies and regulatory principles for the establishment and operation of domestic satellite communication systems. We have thus commissioned several independent studies of the technical, economic, and regulatory issues which have been raised during the lengthy debate on this matter. Enclosed for your consideration are the results of these studies (attachments 1-4).

The principal conclusions of the studies may be summarized as follows:

ECONOMIC

- The data presented in the FCC applications for the several systems proposed show no clear indication of substantial economies of scale that would suggest a tendency to natural monopoly. Indicated unit costs are comparable for large and small systems of the same type and there are apparent economies of specialization for several of the proposed services which would offset any claimed economies of scale. Systems of substantially different type differ in function, performance, and probability of successful deployment and thus are not directly comparable on an economic basis.

- The potential market for domestic satellite services in the near future, though substantial, will probably support several but not all of the proposed systems as presently envisioned. There is an apparent near-term market for 89-163 broadband satellite channels (transponders), whereas the total operational capacity of all proposed systems would be 336 transponders, with additional back-up capacity of 252 transponders.

1

- The total market includes several sectors that are relatively insulated from one another (e.g., public message telephone traffic, broadcast and cable video interconnection, and various leased-line services), each of which could be served economically be a different operator.

- More than one satellite operator may be expected to compete on a continuing basis for the leased line market, and to a more limited extent for the other market sectors.

- Under a policy of open entry at least two, and probably three or more, separate systems would likely be established, having a combined capacity in excess of 100 channels (transponders) plus 50 or more back-up transponders. Each of these systems would likely incorporate an independently viable basic service offering (e.g., PMTS, video interconnection, etc.) combined with competitive leased-line offerings.

- A policy of open entry can be expected to result in a viable competitive industry, with return on capital commensurate with risks. However, there is little solid evidence regarding the specific structure this industry would take, which will be affected by differences in technology, design concept and configuration, comparative market strategies, and consortia arrangements not readily apparent at this time.

- The economic effect of internal subsidization of one service by another is higher prices to consumers, lower output, and a deadweight loss to the economy which cannot be recaptured. The achievement of a "public dividend" through hidden subsidization of public broadcasting, education, etc., by other satellite services is thus a misconception: it achieves its purpose at greater cost to the economy than need be while introducing undesirable market and institutional distortions, and thus really creates a "public loss." Direct subsidization of such meritorious services from general tax revenues, which does not introduce these distortions, is thus preferable to internal subsidization.

TECHNICAL

- The average spacing of 3.7° required to accommodate all 23 of the initial U. S. and Canadian satellites in the relevant sector of the geostationary orbit (i.e., 53° - 138° W) is not inconsistent with the spacings proposed and analyzed in the applications.

- A general analysis indicates that 23 satellites with characteristics typical of those proposed could be accommodated, although minor adjustments in some system parameters might be necessary in the unlikely event that all systems were fully deployed.

- The ultimate capacity of the available geostationary orbit using (and reusing) 2000 MHz of spectrum vastly exceeds the indicated initial demand; thus scarcity of this resource is not a compelling issue in policy determination.

- The siting of earth stations near large metropolitan areas in the manner proposed by the various applicants is feasible from an interference standpoint.

- Although the applicants did not coordinate specifically for off-path interference, this type of potential interference has been taken into account to some degree in the coordination for possible great-circle interference, since the terrestrial microwave facilities most likely to cause both types of interference are the same.

- For all cases of great-circle interference problems as represented by the applicants, there are viable techniques available for controlling the level of interference within acceptable limits.

- The installation of earth stations for several applicants in a certain area would not produce accumulative interference effects beyond those anticipated in the development of acceptable interference criteria by the CCIR. (See Multiple Interference Cases on Tables 4.3-4.6 Enclosure 3.)

These findings further support the Administration's view that multiple domestic satellite systems catering to both separate and overlapping markets can be economically viable on a competitive basis, and can be technically compatible among themselves and with existing and future terrestrial systems. The potential impact on the overall market structure of natural monopoly services (e.g., message telephone) not subject to competitive entry can be regulated through existing procedures with minimal pre-operational conditions. Further restrictions at this time on entry, market structure, or service and price competition will serve only to limit consumer choice for new, expanded, or lower cost services while imposing further delays and economic burdens on prospective suppliers of satellite services.

We hope that this information, and the more comprehensive analyses contained in the attachments, will be useful to you in resolving any remaining uncertainties regarding the feasibility and merit of a fully open entry policy, and that you will find the opportunity to bring this information to the attention of the Commission. If there is any way in which we can be of assistance in clarifying or elaborating on these studies and results, we will of course be pleased to do so.

SIGNED

Walter R. Hinchman
Assistant Director

Attachments

WRHINCHMAN:dc
DO Records
DO Chron
Mr. Whitehead -2
Dr. Mansur
Subj.
RF.

Attachments: SRI report, "Economic Viability of Proposed U.S. Communications Satellite Systems"
Ross Telecom report, "Analysis of Earth Station Siting for the Proposed Domestic Satellite Systems" Feb. 4, 1972
B. Owen paper: Cross Subsidies in Common Carrier Faciliti
D. Hatfield paper: "Domestic Satellite Orbit/Spectrum Util.

T7-4

JAN 18 1972

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

Dear Mr. Chairman:

This is in response to a request from the National Science Foundation (NSF) dated December 10, 1971, for a determination by this Office on behalf of the Executive Branch that the procurement by NSF of certain satellite communications services from the Communications Satellite Corporation (Comsat) would be in the national interest, and therefore should be authorized by the Commission. As explained below, we have determined that such direct service would not be appropriate at this time, and have so informed NSF. However, we recommend that the tariffs established by the Commission to provide the necessary services appropriately reflect the responsibility assumed by the authorized carrier.

The Office of Polar Projects, NSF, in conjunction with Stanford University, proposes to conduct an experimental program to monitor geophysical conditions in Antarctica during the forthcoming austral winter (February through November, 1972), utilizing a small, NSF-owned, unmanned earth terminal stationed near McMurdo Sound. This earth terminal will observe weather and related conditions during this period of extreme climactic conditions, and transmit data continuously through Intelsat facilities to the Jamesburg, California, earth station, with a terrestrial connection to Stanford. Periodic command communications will be transmitted as well to the Antarctic earth terminal when required.

A preliminary testing period to determine the workability of

the Antarctic earth terminal prior to the onset of severe conditions was approved by Intelsat earlier, and is now being conducted. This testing phase will be completed January 20, 1972. Recently, Comsat has requested from the Commission authority to provide services directly to NSF for the balance of the experimental period, and has filed proposed tariffs to that end. It should be noted, however, that Comsat would assume no responsibility for the satellite-Antarctica link. (See Proposed Comsat Tariff FCC No. 5, part C, original page 7.) Responsibility for the maintenance of a communications path to accommodate the continual data flow from Antarctica to the satellite, and risk for the establishment of a command communications path from the satellite to Antarctica will be assumed by the NSF.

In our view, neither the nature of this NSF experiment nor its communications requirements can be characterized as "exceptional or unique" within the context of the Commission's Authorized User decision. Direct service to NSF by Comsat does not appear warranted at this time, and the communications requirements for this program appropriately may be satisfied by an authorized, international full service carrier.

While we have no specific recommendation to the Commission with respect to tariff structures and rates, we believe that tariffs for this service should fully reflect the absence of carrier responsibility for the maintenance and establishment of the satellite-Antarctica link.

Sincerely,

Clay T. Whitehead

Mr. Whitehead (2)
Dr. Mansur
DO Records
DO Chron
Mr. Robinson
Mr. Thornell's Files

JAN 2 0 1972

JThornell/pm/Jan 17, 1972

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

January 5, 1972

DIRECTOR

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

Dear Mr. Chairman:

By letter of June 2, 1971, the Commission requested comments on a petition by the McDonnell Douglas Corporation to permit regular licensing and type acceptance of Collision Avoidance Systems (CAS) in the band 1592.5-1622.5 MHz and removal of radio altimeters from the band 1600-1625 MHz.

This matter raised several issues of concern to the Executive Branch which have been studied in cooperation with the Departments of Transportation and Defense. The following is provided to assist the Commission in its deliberations:

1. The FAA does not expect to be able in the immediate future to certify a CAS system upon which national standardization can be effected. Questions involving operational, technical, and economic considerations must be answered prior to standardization on a specific system design. It is noted that the DOD does not expect to make a decision on the installation of CAS in military aircraft until a national standard has been adopted.

2. Interference protection criteria for CAS cannot be developed until such a standard is established.

3. Tests instigated by this Office confirmed that time-frequency CAS's of the type currently pending before the Commission are susceptible to harmful interference from certain military radio altimeters operating in the band 1600-1660 MHz. The DOD considers that it would be premature to replace radio altimeters in military aircraft until such time as a national standard is established, noting that over $60 million would be involved for complete replacement of the current inventory (some 4000 installations).

4. A technical group of FAA, NASA, and DOD has been established under FAA chairmanship to formulate and recommend a national collision avoidance policy leading to the choice of techniques for a future national standard.

5. It is planned that the primary responsibility for collision avoidance will continue to rest with the FAA-operated ATC system and that CAS will function as a back up.

In view of the foregoing, it would be unwise to provide for the regular licensing and type acceptance of collision avoidance systems at this time. Rather, the concerted efforts of all aviation interests should be focused on the development of a national plan for collision avoidance. In the interim, there would be no objection to continuation of an experimental/developmental type frequency authorization in order that CAS experience may be obtained on a voluntary and unprotected basis.

I look forward to further coordination with the Commission on this important subject.

Sincerely,

Clay T. Whitehead

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

DEC 30 1971

DIRECTOR

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

Dear Mr. Chairman:

As a result of your letter of November 16, 1971, and comments received from the Office of Emergency Preparedness and the Department of Defense, the Emergency Broadcast System Review Group has made several minor revisions to their report. A copy of the revised findings and recommendations, as well as the answers to the questions raised by your letter, are enclosed.

I have now completed my review and agree in general with the findings and recommendations of the EBS Review Group. To implement their recommendations I have determined that the following major steps must be taken.

My Office will develop a new directive entitled "Procedures for Activation, Termination and Testing the Emergency Broadcast System." This manual will deal primarily with actions to be taken by government agencies but must of necessity consider the requirements of the broadcast industry as well. To accomplish this task I am forming a small working group and would appreciate your nominating a member to assist me in this effort.

While this action is in progress I request that your staff prepare the documents to replace the "Basic Emergency Broadcast System Plan" which will provide the broadcast industry with necessary guidance and operating procedures. This guidance should incorporate appropriate recommendations made by the EBS review.

Both of these efforts must go forward simultaneously in order to meet the cutover date contained in the enclosed implementation schedule. The work of the two groups must be fully coordinated to insure all documents are completely compatible. I have assigned

Lieutenant Colonel Raymond Beery of my Office the responsibility for assuring this compatibility. In this regard he will be working closely with your staff and will submit the final drafts to me for review prior to publication.

The removal of attack warning from the EBS makes necessary the satisfaction of the Office of Civil Defense warning requirements by a new method. Although the Administration's policy for warning the public has been determined, procedures must be established to permit use of the wire services until such time as a new warning system is operational. This will be accomplished by my Office in conjunction with OCD and AP/UPI. A copy of the National Policy for Use of Telecommunications to Warn the General Public is forwarded for your information.

I am confident that implementation of the recommendations made by the EBS review and promulgated in the documents I have described above will result in a more reliable system responsive to the needs of the President.

Sincerely,

Signed

Clay T. Whitehead

Enclosures

RESPONSES TO QUESTIONS RAISED ON EBS REVIEW GROUP RECOMMENDATIONS

December 15, 1971

The responses listed below are keyed to the questions raised by the NIAC and contained in the attachment to Chairman Burch's letter of November 16, 1971.

TASK TWO

I. ACTIVATION AND DEACTIVATION

Problem 1, page 2.

Concur with interpretation offered by the NIAC. Recommendation has been changed to read ". . . and should provide positive control by the White House."

Problem 2, page 2.

The White House has stated a requirement "for the creation of an authentication procedure that will ensure the President, and only the President," has activated the EBS. To provide the credibility that such is the case the White House has indicated that some means must be developed to provide "final" confirmation of the authenticity of an EAN. One such means has been looked at, the use of WWV, and has been discarded as undesirable because of cost to the broadcast industry. The OTP, assisted by FCC and industry, will initiate development of a system, controlled by the White House, which will provide each broadcast station with a means of authenticating an EAN.

Problem 3, page 4.

In reply to the first question raised by the NIAC, it is a matter of interpretation of "method." It appeared to each member of the Review Group that a "method" should be complete unto itself. The NIAC is correct in that certain steps are required to activate the system, but each step does not constitute a method of activation. In the revised terminology there will be only two methods of activation with each method composed of several steps.

The next question raised by the NIAC regarding sufficient redundancy as proposed by the new Method ONE is valid. The Review Group did not attempt to design a system but did outline a concept. Any new system must provide sufficient redundancy to insure maximum reliability under degraded communications.

The final question in this area addresses the rationale for upgrading the teletypewriter circuits from the existing 60 wpm to 100 wpm. There are two reasons for upgrading the Government circuits used in activating the EBS: first, the standard teletypewriter circuits used by the Government operate at a minimum of 100 wpm, and 100 wpm equipment is readily available; second, it is essential that the time to activate be reduced, and the increased speed of operation will aid in this effort.

Problem 8, page 8.

The word "audio" does mean "voice confirmation" and a change has been made in the revised EBS Review.

The term "random testing" does mean "random closed circuit testing" and a change has been made in the revised EBS Review.

Regularly scheduled tests of the voice confirmation and teletypewriter circuits from USAICA and CINCONAD are planned, as stated in the discussion. It was the feeling of the Review Group, supported by AP and UPI, that random testing of those circuits was not necessary or desirable. Sufficient training of station personnel should result from the increased number of random closed circuit tests.

II. EBS BROADCAST

Problem 1, page 1.

It was the feeling of the Review Group that all broadcast stations on the air at the time of activation should remain on the air for a Presidential broadcast. However, there may be overriding factors which dictate against such action; therefore, a short study should be conducted by the FCC, in cooperation with industry, OCD, and OTP, to determine the number of stations that should remain on the air for Federal and Presidential programming.

Problem 2, page 2.

The "dial-up make-good" procedure recommended by the Review Group is intended to supplant the pre-planned program line now used for NIAC Orders 3 through 63.

The 5 kHz program feeds are being replaced in favor of 3 kHz channels.

III. PROGRAMMING

Problem 1, page 1.

The primary responsibility for programming the EBS rests with OEP and the White House. If the question of state programming is addressed in this area the FCC will indeed become involved; however, the Review Group felt the FCC was more properly involved in the second recommendation of Problem 2 as indicated.

Problem 2, page 2.

FCC has been added as a participating agency as requested.

IV. LIVE TELEVISION

Problem 1, page 1.

Accomplished by Mr. Whitehead's letter of March 5, 1971, to Commissioner Wells.

Problem 2, page 2.

The revised "Statement of White House Requirements" is mute on whether the President would appear on TV with or without radio participation. Therefore, the Review Group felt that both eventualities must be covered in planning.

Problem 3, page 2.

The existing EBS provides for use of the audio portion of the TV network, and in order to implement the revised and improved EBS as quickly as possible the Review Group felt the video portion should be restricted to Presidential use. The OTP recognizes the possible benefits to be gained by releasing video for use by others; however, Federal, State, and local requirements must be defined. The OTP, assisted by appropriate departments and agencies, will undertake this definition.

It is not felt that an inconsistency has been introduced by recommending a study to determine how the long-haul circuits of the EBS may be effectively utilized for other than EBS purposes without system deactivation. It is recognized that if the EBS is deactivated control of the system reverts to industry; however, it may be desirable to retain

White House control but release portions of the long-haul circuitry to make good other critical circuits. Such arrangements would have to be closely coordinated between the White House and industry, and the system would have to be available to the President on short notice if a subsequent broadcast is required. The OTP will take action to determine feasibility of utilizing the long-haul circuitry of the EBS, and will ask for assistance in this effort from industry.

77-12

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

DIRECTOR

December 9, 1971

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

Dear Mr. Chairman:

By letter of October 21, 1970, I pointed out certain difficulties being experienced by government agencies due to deficiencies in the design of commercial radio receivers from the standpoint of their susceptibility to interference. I suggested that we appoint a joint group to study the matter and recommend procedures and actions which might be taken, short of mandatory regulations, to ensure that receiver characteristics are given increased consideration.

Your reply of November 30 supported the foregoing need but recommended that joint efforts be held in abeyance until the Commission could codify the receiver performance characteristics which are currently assumed for the respective radio services. In the early part of this year, it was understood that the Commission's staff was proceeding with codification for the land and maritime mobile services, to be followed by television broadcasting.

I would appreciate being advised as to the current status of receiver performance characteristics codification and when the Commission would be prepared to proceed in a joint undertaking.

Sincerely,

Clay T. Whitehead

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

DEC 2 1971

DIRECTOR

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

Dear Mr. Chairman:

Correspondence received in my Office over the past year has impressed on me the potential of communications and electronics techniques for improving the lives of millions of hearing impaired citizens in the United States.

Not long ago, Dr. Edward E. David, Jr., the President's Science Adviser, informed me of his strong interest in petitions before the Commission looking toward the use of radio frequency devices as auditory training aids for persons with severely impaired hearing. While not endorsing any particular product, petition, or technique, we agreed to inform you that the Administration strongly supports activities to accommodate and foster new technologies, devices, and aids for the handicapped. Particularly noteworthy also are actions which foster the interest of the broadcast industry, such as was done by the Commission's Public Notice (FCC 70-1328), in offering telecasts that provide a means whereby warnings and emergency bulletins and other services could be made available to viewers with impaired hearing.

I understand that the Commission has an open docket on the matter of electronic training aids for the hearing impaired which undoubtedly will provide additional benefits. We want to encourage the Commission and the industry to continue their fine efforts in this important field.

Sincerely,

Clay T. Whitehead

NOV 2 1 1977

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

Dear Mr. Chairman:

This letter is to follow up discussions between representatives of our staffs on spectrum allocations for U.S. amateur operations.

The proposed expansion of sub-allocations for amateur radiotelephone operations in certain high frequency bands is a matter of concern. Such expansion, if granted, would be at the expense of traditional non-voice amateur activities.

While the use of CW radio telegraph communications has been replaced in most radiocommunications services with more sophisticated techniques over the years, this is not considered sufficient reason to justify the curtailment of such operations among U.S. amateurs. Knowledgeable communicators agree that when other types of high frequency radiocommunications fail, CW transmissions are likely to get through. Thus, even though other techniques might be relied on first, it still would be wise to retain a pool of U.S. citizens skilled in CW operations as a resource in reserve. Amateur operators, with their past superb record of serving the public interest when needed, are considered the best means for preserving this skill.

I also believe that there are other valid reasons for preserving CW operations in the amateur service, namely:

(a) From a spectrum conservation and utilization standpoint, CW permits more amateur activity.

(b) Non-voice services have been an integral part of the tradition of the amateur service--particularly in the case of the amateur who is innovative, constantly working to improve his equipment, and who experiments frequently with new techniques.

(c) In international amateur operations, language is a consideration, and CW provides a common ground for person-to-person communication that is important in fostering international goodwill among citizens of different countries.

(d) Amateur bands are generally shared on a worldwide or regional basis; a change in U.S. allocations would impact on the amateur operations of other countries, where there is great interest in CW operations.

In view of the foregoing, it is urged that the current requirements for licensing of amateur operators be maintained and that spectrum allocations for CW operations not be reduced. If pressures continue for the expansion of sub-allocations for U.S. amateur radiotelephone operations, it is recommended that actions taken be limited to bands above 144 MHz. This recommendation is based on Para. 1563 of the ITU Radio Regulations which permits certain waivers for amateurs above 144 MHz.

This Administration is very much aware of the many roles of U.S. amateur radio operators and their contributions to the country. As a matter of national policy, I would like to assure that every opportunity is provided in the future for the radio amateur service to maintain its traditions and fine record of service.

Sincerely,

Clay T. Whitehead

LRRaish:avr:19Nov71
Revised: CTWhitehead:avr:23Nov71
cc: Dep Director
DO Records
DO Chron
FMD ✓

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

November 15, 1971

DIRECTOR

Honorable John O. Pastore
United States Senate
Washington, D.C. 20515

Dear Senator Pastore:

You have asked me to provide you with the Administration's views on the FCC's cable television proposals, as well as Administration recommendations resulting from the work of the special Cabinet Committee on broadband cable. Since the Committee will not address specifically the FCC's proposed conditions of distant-signal carriage, and since it will in any event not complete its work for several more weeks, I am replying separately to your first request.

The Administration's views on the FCC proposals can be summarized as follows:

(1) It is highly desirable that the "freeze" on cable development in the major markets be eliminated, and that the new medium be permitted to proceed with its growth as soon as possible in an atmosphere conducive to stability and cooperation among the various interests involved in providing program services to the public.

(2) Those matters pertaining to cable retransmission of broadcast television signals which the FCC has addressed (i.e., permissible distant signals, definition of local signals and "anti-leapfrogging") involve the type of substantive determination which, within broad limits, is best resolved by an administrative agency. Those proposals should be supplemented, however, with provisions applicable to radio signals and with restrictions upon importation of copyrighted programming.

(3) The balance of the proposals, including the division of federal-state authority over broadband cable services are predicated on unclear authority and address issues of major national concern which will ultimately determine the form and structure of the new industry. Implementation of these proposals should not be allowed to preclude thorough Congressional review of the fundamental policy questions which the Cabinet Committee is considering.

The Supreme Court has affirmed the FCC's authority to impose those regulatory requirements on cable television that are "reasonably ancillary to the effective performance of the Commission's various responsibilities for the regulation of television broadcasting." The FCC's proposals dealing with carriage of television broadcast signals clearly fall within this authority. Accordingly, there is no question of the FCC's power to resolve such issues as the definition of "local" signals, the appropriate number of distant signals to be carried by cable systems, and restrictions on the points of origin of distant signals (i.e., "anti-leapfrogging").

We have no substantive comments on these aspects of the proposed rules. These provisions are intended to provide cable with an opportunity for immediate growth, while protecting the economic viability of our "over-the-air" television broadcast system. They involve judgmental determinations of the type which, within broad limits, Congress must of necessity leave to the discretion of its regulatory agencies. What is essential, as far as the broadcast-carriage proposals are concerned, is that there be prompt adoption of a regulatory approach which will receive general acceptance, thereby enabling the sound growth of the industry to proceed.

There are, however, several problems which these broadcast-related proposals leave unresolved: first, there is the problem of the importation of distant radio signals, and second, the problem of exclusivity protection for copyrighted television programming.

Leaders of the affected industries have recently reached an agreement regarding provisions that deal with these concerns and also involve minor modifications of some broadcast-related items already included in the Commission's proposals. If reflected in the Commission's final rules, this agreement would fully meet our concerns regarding radio and copyright. Absent this accord on the final rules, there is serious risk that an end to the freeze will be delayed by challenges in the courts and Congressional hearings on these matters. We believe the public interest would not be served by such developments.

Turning now to those aspects of the proposals which go beyond the conditions of cable retransmission of over-the-air signals, relating to broadband cable as a communications medium in its own right: These aspects of the proposed rules (together with existing rules and further contemplated rulemakings) involve such matters as Federal preemption of state and local control, the extent of FCC supervision of programming, limitations on numbers of channels, flexibility with respect to new services, and prescribed channel usage. These and other matters of like

importance will shape the economic structure, and indeed the character, of the new medium. They are the subject of the Cabinet Committee's work and will ultimately require careful Congressional consideration. The Commission itself has noted that the recent Midwest Video case casts doubt upon the legality of this type of regulation, and it has requested Congressional clarification. Similarly, we believe the 1934 Communications Act provides inadequate guidance for the regulation of broadband cable communications. Therefore, while we favor immediate implementation of the proposed rules in order to permit the growth of cable television, our recommendation is based upon the hope and expectation that Congress will address these fundamental aspects of broadband cable policy at an appropriate time, before the economics of the industry and the character of the medium have become irreversibly set in the mold contemplated by the Commission.

As you have stated, cable television involves many fundamental and complex policy matters of national importance. Until they can be resolved by due Congressional deliberation, we believe the public interest will best be served by ending the cable "freeze" through adoption of the FCC proposals. This course of action will enable the Congress to give its full attention at a later time to the major issues involved in the future of broadband communications services without further delaying the expansion of cable television service for the American people.

Sincerely,

Clay T. Whitehead

October 22, 1971

MEMORANDUM FOR

Brigadier General James D. Hughes, USAF
Military Assistant to the President

The EBS review has been completed and the attached is the resulting report. Most of the recommendations have been informally coordinated with representatives of WHCA but there has been no other coordination within the White House.

I have forwarded copies of the report to General Lincoln, Chairman Burch, and Mr. Solomon, and asked for their views prior to November 5, 1971. After receiving their views and reviewing it myself, I will take appropriate action.

I would appreciate any views you care to express on the report before I complete my review.

Clay T. Whitehead

cc: Mr. Whitehead
Dr. Mansur
Mr. Joyce
Capt. Babcock
DO Chron
DO Records

Babcock/Whitehead:jm

T7-5/2

October 22, 1971

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

Dear Mr. Chairman:

I appreciated your letter of September 17th assuring me that any changes to the Emergency Broadcast System would be held in abeyance until I have had the opportunity to review the matter further.

Attached are the findings and recommendations of the Emergency Broadcast System Review Group which were forwarded to me today. I plan to review these findings and then arrive at a decision on the actions which should be taken.

If the Federal Communications Commission has any views on the Review Group's deliberations I would appreciate receiving them by November 5. At that time I also expect to receive comments from the Office of Emergency Preparedness and the Department of Defense. Within a week or ten days thereafter I will let you know my final views on the matter.

Sincerely,

Clay T. Whitehead

Attachment

cc: DO Records
DO Chron
Captain Babcock

CC/Joyce:clt:10/22/71

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

DIRECTOR

October 13, 1971

Honorable John O. Pastore
United States Senate
Washington, D.C. 20515

Dear Senator Pastore:

In January of this year, I wrote to you to express our hope that my Office would be able to submit recommendations on international communications policy to you by mid-year. I am writing to tell you of our progress and the efforts which we have underway.

Early this year, OTP initiated a review of procedures connected with construction of new international communications facilities. This review led to enunciation of the Administration policy in May -- a policy which we believe will provide a sound basis for future planning and evaluation of proposals for new facilities.

Following completion of the facilities policy, we initiated a review of the broader policies which are germane to the international communications industry. As you well know, the international and domestic industries are interrelated in a complex way, and we have concluded that a study of all the policy issues with our somewhat limited resources would, at best, be dangerously superficial. Accordingly, we are focusing on those policies which influence the structure of the transmission sector. I have informed the major U.S. international carriers and interested Government departments of our intention, and they have indicated a desire to cooperate closely.

I expect to complete our preliminary evaluation in November and will be able to appraise you informally of its results at that time. This will make it possible for us to make our final proposals early next year.

I recognize the importance you attach to this area and the need for a prompt resolution of the policy confusion that has existed so long. I can assure you that our time schedule is the fastest that is consistent with the responsibility and orderly examination this field deserves. I would be pleased to review with you at any time our thinking on this subject and to have whatever views you and your committee may have.

Sincerely,

Clay T. Whitehead

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

DIRECTOR

October 5, 1971

Honorable Dean Burch
Chairman
Federal Communications Commission
1919 M Street, N.W.
Washington, D. C. 20554

Dear Dean:

It is my concern -- and one I know you share -- that government regulation of broadcasting be no more extensive than is necessary to protect the public interest. Government regulation risks government control; and where free speech and free press are so intimately involved, that risk should not be assumed without serious reason.

To some extent, the necessary degree of regulation depends upon the economic and competitive situation of the broadcast medium involved. As you have noted recently, radio more closely approaches the free enterprise system than any other segment of the broadcast industry. In large cities, there are many radio stations and competition is vigorous. Costs of access, both for speakers and listeners, are low. And the "scarcity" justification for content regulation does not exist.

I would like to suggest that the FCC and OTP cooperate in the development of a pilot program to test the feasibility of substantial de-regulation of commercial radio. The details of the project can be worked out within the limits of the FCC's power to conduct experimental programs. One possibility might be to select one or more large cities for which all radio assignments and transfers would be made on the basis of the "short form" (Form 316) application. The programming section of renewal and other applications could be amended to delete reference to programs and commercial practices. This could be supplemented with elimination of FCC-imposed and FCC-enforced requirements of the Fairness Doctrine. Statutory and constitutional rights of

access could be left to enforcement by the courts, except for the political broadcasting provisions of section 315. Commercial practices could be left entirely to regulation by the Federal Trade Commission.

I recognize the difficulties that would be involved in such a pilot project. It is to my mind worth the effort, however, if it can lay the basis for removal of government control from a field where government control is most dangerous. It is my hope that the program could lead to legislative recommendations for more extensive de-regulation within the radio field.

Sincerely,

Clay T. Whitehead

Cables - European

SEP 30 1971

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

Dear Dean:

As we discussed last week, the revised agenda proposed by the European PTT representatives for your September 30 meeting includes several items having long-term implications of concern to the Administration and Congress. I refer in particular to questions of long-term "parity" between cables and satellites, of advance commitments to future transatlantic facilities, and of U. S. commitments to the use of foreign-owned and operated facilities (e. g. CANTAT-2 cable between Canada and Europe).

In my May 21 memorandum on the subject of international communication facilities, I presented the Administration's view that the ratio between cable and satellite circuits should be allowed to evolve in response to operational needs and economic considerations. I also noted that enforcement of an arbitrary ratio will in general raise the overall cost to the using public and lessen the vigor with which industry pursues improvements in both technologies. We suggested a number of specific factors to be considered in the authorization of new cable or satellite facilities, and a plan for alleviating the concerns of our European communications partners by allowing each nation a free choice of transmission mode (cable, satellite, or other) for its outgoing circuits, on a reciprocal basis.

I have reviewed the proposed agenda in light of these views, and have concluded there is no present basis for a U. S. consensus on the items specified by the Europeans. Furthermore, any commitments or near-commitments on these matters at this time could foreclose or render more difficult any necessary restructuring of the U. S. industry or its policy framework. As you know, my Office is presently developing recommendations on this subject in response to the Senate Commerce Committee.

In view of these considerations, I recommend that these discussions be clearly identified as informal in nature, with no commitments expected or received. I have asked Walter Hinchman to represent the OTP on this basis, although I am personally available to meet briefly with the Europeans separately or in concert with the Commission, should this be desired.

Sincerely,

Clay T. Whitehead

WRHINCHMAN:dc 9/29/71
Mr. Whitehead
Dr. Mansur
DO Chron
DO Records
WRH SUbj
RF

Mr. Joyce
Ltr. Book

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

September 24, 1971

DIRECTOR

MEMORANDUM FOR

Brigadier General James D. Hughes, USAF
Military Assistant to the President

Your memorandum of September 15, 1971 asked this Office to evaluate the EBS test of September 14 to determine what went wrong and the changes required in existing procedures.

The attachment to this memorandum provides the initial results of my evaluation of the test, and discusses several changes which will improve the present operation of the EBS. You will note that the majority of the changes relate to the government area of responsibility. We have asked the Federal Communications Commission to provide us with any information related to problems encountered in industry during the test, and I have been assured their report will be available shortly after September 30. I will advise you of any additional proposed changes as soon thereafter as feasible.

The attached report contains recommendations which effect WHCA and other government agencies. I recommend that you implement those recommendations which pertain to WHCA and my Office will assure implementation of the remainder.

As you know, I have been conducting a complete review of the EBS and several of the changes which I will propose will further improve interim operation of the system. That review will be completed by October 22. My current feeling is that there are fundamental problems which will not be resolved by the review and accordingly I believe that other changes may be necessary in the long term.

J Mancuso, Deputy
for Clay T. Whitehead

Attachment

cc: Commissioner Dean Burch, FCC
Mr. Jerry Warren, The White House

EBS TEST OF 14 SEPTEMBER 1971

EVALUATION AND RECOMMENDATIONS

1. The White House Communications Agency (WHCA) "Trip Officer" established a fixed and predetermined schedule for conducting the test of the Emergency Broadcast System (EBS). The schedule was based on the stated requirement for a five minute activation time and did not take into account any delays on the part of other participants.

Discussion:

The White House Statement of Requirements states that "Current commercial radio and television network procedures suggest that an availability within five (5) minutes following notification is a realistic capability." The activation time of five minutes is a target which all concerned should strive to meet. However, in an actual activation coordination will be required between the Trip Officer and the local AT&T toll test center to insure the networks are prepared to receive the broadcast. If the Trip Officer permits the broadcast to begin prior to being notified that the networks are ready to accept it, there is no assurance that the broadcast will be received by the networks and the member broadcast stations. The test on September 14 was conducted on the WHCA fixed schedule which allowed five minutes from notification to start of "talk up", and an additional five minutes of "talk up" to start of the "live" broadcast. There were delays encountered in transmission of the Emergency Action Notification and the NIAC order, and as a result the networks and the broadcast stations were unaware that a broadcast had been made until well after the "live" broadcast had been completed.

Recommendation:

That the WHCA Trip Officer coordinate with the local AT&T toll test to insure the networks are prepared to receive the broadcast prior to commencing the five minute "talk up".

That the WHCA Trip Officer check a local AP or UPI printer, if either is available, to determine whether the Emergency Action Notification has been received. This latter action would provide additional assurance that broadcast stations are in receipt of the notification of EBS activation.

That the WHCA Trip Officer prepare a test schedule which permits flexibility in starting times for the various steps required to successfully complete the test. As proficiency of participants increases the time allowed for a completion of each step should decrease.

2. The WHCA Duty Officer had difficulty in notifying the USAICA Duty Officer of his intention to activate the EBS.

Discussion:

A delay of approximately three (3) minutes was encountered when the WHCA Duty Officer was unable to contact the USAICA Duty Officer because USAICA telephones were busy. Four phone numbers and routes were tried unsuccessfully by two WHCA operators for three minutes before an open phone was found. This delay contributed to the problems encountered in conducting the test within acceptable time limits.

Recommendation:

That USAICA make available a telephone number for EBS activation only. This same arrangement should be established at NWC-1 as well to avoid encountering a similar problem.

That the WHCA Trip Officer use AUTOVON with the appropriate level of preemption, if available, as a back-up method of contacting USAICA or NWC-1.

3. In-station handling times at the USAICA location were excessive.

Discussion:

Present procedures state that the WHCA Trip Officer will contact the USAICA Duty Officer. He in turn must contact the NWC-3 Warning Officer for release of the Emergency Action Notification, and the USAICA Communications Center for release of the NIAC order on the "500 wire". Each of these calls takes time to accomplish, and every minute lost adds to delays in activation of the EBS. As a by-product of a recommendation to be made by the EBS Review Group, convened by the Director of Telecommunications Policy, the NWC-3 will no longer be included as a participant in the activation of the EBS. This will eliminate the necessity

for one of the phone calls, and will make Communications Center personnel responsible for transmission of both messages. Because this is a major change to existing procedures, considerable coordination and reassignment of functions is required. The resulting arrangements will, however, simplify EBS activation procedures and reduce in-station handling time.

Recommendation:

That present in-station handling procedures be continued until such time as OTP can effect the necessary coordination and reassignment of functions to eliminate the Warning Centers from the EBS activation procedures.

4. A total of thirty-four (34) minutes was required to successfully transmit the NIAC order on the "500 wire".

Discussion:

The USAICA Duty Officer advised the Communications Center to transmit the appropriate NIAC order at 2:07 pm. At 2:17 pm the Communications Center notified the USAICA Duty Officer that transmission had been completed but no receipts had been received. Investigation by the Communications Center personnel uncovered the fact that shortly after the start of transmission the operator accidentally and unknowingly switched the teletypewriter machine to local operation, thereby completely cutting off transmission to the outgoing circuit. At 2:37 pm the error was discovered and retransmission was commenced. At 2:41 pm WHCA acknowledged receipt of the message, and all other receipts followed.

Recommendation:

The Commanding Officer, USAICA, has made changes to all teletypewriter machines in his command to prevent recurrence. In addition he has made internal procedural changes to provide for immediate telephone checks with addressees if receipt of the message is not immediately forthcoming. No further recommendations are offered.

5. The Associated Press reported receiving the EAN in a garbled condition. As a result no retransmission was made, and no check was made with the originator to clear up the garbles.

Discussion:

A check was made with David Bowen, AP Director of Communications, and he advised that the last line of the message was received garbled. He was asked whether this would have prevented retransmission in the event of an actual EBS activation. He replied that it definitely would not have prevented retransmission. Present procedures call for AP to check with the WHCA Duty Officer on receipt of an activation message to confirm its validity. The time required to accomplish this check was felt to be unnecessary by the EBS Review Group, and the final report of the Review Group will propose a ring down telephone line between the origination points and both AP and UPI to accomplish three things: first, to confirm the message is valid; second, to assist in clearing up any problems with the message such as garbles; and third, to reduce the time now required to check with the WHCA Duty Officer. Mr. Bowen was quick to point out that if such a line had been installed the garbles could have been cleared up immediately. In this case his statement is an excuse since procedures are available which would have permitted the garbles to be cleared. Further discussion with Mr. Bowen revealed that AP believed this test was the start of twice a week random tests, as proposed by the NIAC and the FCC in Mr. Torbet's letter of August 31, 1971. AP does not agree to the proposal of testing the EANS twice weekly on a random basis, and it appears they used this opportunity to make their position known.

Recommendation:

That the present policy of conducting a random test at least once every three months but not more often than once each month be revised to provide for a random test of the EBS once per month, and that AP and UPI be assured that twice a week random testing of the EANS is not being considered.

6. It has been reported that USAICA contributed to delays in handling times by preparing the NIAC order message for transmission on the "500 wire" and by poking the tape.

Discussion:

Investigation revealed that the standard procedures in the USAICA Communications Center call for a tape to be prepared ahead of time,

but the tape must be further edited when the NIAC order is known, the proper authenticator is added, and the date/time group is added. In this particular instance the operator was slow in accomplishing his duties, and did contribute to the abnormal time required for final tape preparation.

Recommendation:

That OTP request OEP to review USAICA procedures for tape preparation to ascertain whether certain of the required steps can be expedited.

7. It was reported in several newspapers and magazine articles that the wrong authenticator was used when the EAN was sent to AP and UPI.

Discussion:

A careful check of the outgoing message and the authenticator list indicates that the correct authenticator was used. There is no indication where this report originated.

Recommendation:

None.

SEP 21 1971

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

Dear Chairman Burch:

Attached for your review and comment is a draft order for issuance by this Office to establish plans, policies, and procedures under which governmental and private entities will be furnished private line service in national emergencies. If adopted, it will replace the Director of Telecommunications Management Order of January 15, 1967 (32 F.R. 791 (1967), 47 CFR S201 (1970)).

I would appreciate receiving any comments you may have on this order by October 8, 1971.

Sincerely,

Signed

Clay T. Whitehead

Attachment

cc: Mr. Whitehead
Dr. Mansur (Info)
Mr. Joyce
DO Records
DO Chron

KRobinson:bss:9-20-71

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

DIRECTOR

September 15, 1971

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

Dear Mr. Chairman:

I have received two letters from Mr. John M. Torbet, Executive Director, dated August 31, 1971. The first proposes to revise Section 73.906 of the FCC Rules and Regulations, and the second addresses corrective measures concerning the Emergency Action Notification transmitted in error on February 20, 1971. Action by the Commission, as proposed in these letters, will result in major changes to the Emergency Broadcast System (EBS).

I have directed that a complete review of the EBS be conducted with the primary purpose of recommending measures to improve its operation and credibility. This review will be completed on 22 October 1971. The EBS Review Group, in which the Commission is represented, has been working closely with the White House Communications Agency, the Department of Defense and designated representatives of the communications industry. I have been advised that many of the changes proposed by Mr. Torbet's letters are in conflict with changes to be proposed by the EBS Review Group.

To avoid making unnecessary and contradictory changes, I request that FCC action effecting changes in the EBS and its

supporting systems be held in abeyance until the end of October, so that I may review the current EBS investigation and provide the appropriate guidance to the FCC before any major changes in operation are undertaken.

Sincerely,

Clay T. Whitehead

cc: Honorable George A. Lincoln, OEP
Mr. David L. Solomon, NCS
Brigadier General James D. Hughes

SEP 9 1971

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

Dear Dean:

I noted with considerable concern the Commission's Notice of Proposed Rulemaking for regulating TV cameras, cartridges, and video player systems. While I recognize the need to assure that such equipment does not leak radiation which would cause harmful interference, it is not at all apparent that this goal is best achieved by detailed Federal intervention in the design of equipment through mandatory-type acceptance. Could not the same result be obtained by creating appropriate definitions of harmful interference, supplemented by voluntary-type acceptance or review in private laboratories?

As you know, we generally favor giving new technologies the maximum feasible freedom to develop before imposing regulations that might reduce the vigor of innovative activity and rapidity with which new applications of technology are marketed and costs reduced. For these reasons, I am concerned with the apparent suggestion in Docket 19281 that there is a need for even limited regulation of home video recorders, players, and similar nonbroadcast devices. I fully recognize that this is initially a relatively limited technical regulation, but it seems unnecessary and provides a preliminary step on the road we have walked so many times in the past -- namely, from limited technical oversight to increasingly detailed regulation of applications and economics.

Perhaps it is appropriate to undertake a comprehensive review of the overall type acceptance policy and procedures, as they apply to equipment of all kinds. But in the meantime, it seems desirable to avoid further extension of government type acceptance to devices whose primary function is not radiation.

This, of course, does not imply any opposition to the establishment of such interference standards as do seem appropriate.

Sincerely,

(s/) Tom

Clay T. Whitehead

Mailed
SEP 13 1971

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

August 19, 1971

DIRECTOR

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

Dear Mr. Burch:

After reviewing Government usage of the 220-225 MHz band, I have concluded that the reallocation action proposed in your letter of July 12, 1971 is not feasible at this time.

The Department of Defense has a continuing need for spectrum in the vicinity of 200 MHz in support of radiolocation operations, many with high power, at several sites in the continental United States and aboard naval vessels. Reassessment of the matter in the 1975-1980 time frame would seem appropriate, depending on advances in technology and the nature of defense requirements at that time.

Realizing, however, the increasing interest in expansion of the Citizen's Band Service, I believe that some sharing to accommodate additional operations of this type is practicable. Subject to certain caveats, 2 MHz of the 220-225 MHz band (i.e., 223-225 MHz) could be made available on a shared basis for Citizen's Band use. Such use would, of course, have to be on a secondary basis to the radiolocation operations of the Department of Defense and Citizen's Band users would need to be cautioned of the possibility of receiving interference from such operations, particularly in coastal, North Central, and the Northwestern areas of the United States.

If the foregoing appears to the Commission to be worthy of pursuit, perhaps Messrs. Spence and Dean of our respective staffs could treat the details involved.

Sincerely,

Clay T. Whitehead

FEDERAL COMMUNICATIONS COMMISSION

WASHINGTON, D. C. 20554

JUL 12 1971

IN REPLY REFER TO:

6300

The Honorable Clay T. Whitehead
Director
Office of Telecommunications Policy
Executive Office of the President
Washington, D. C. 20504

Dear Dr. Whitehead:

The Commission has before it several petitions which seek the allocation of additional frequency spectrum for specific uses. Such requests involve new allocations to alleviate requirements for land mobile, citizens band, radio positioning and location, and other similar purposes. In order that such requests may be appropriately accommodated, your views are requested in regard the feasibility of the reallocation of the 220-225 MHz band for non-government primary use.

The Commission, at this time, does not have any definite plan for sub-allocating the above band; however, the urgent needs of the land mobile services, the citizens radio service, and others would be thoroughly considered before a final determination is made. Accordingly, the Commission is desirous of ascertaining the availability of the 220-225 MHz band for use in resolving these critical communication requirements.

An early reply, at your convenience, would be appreciated.

Sincerely,

Dean Burch
Chairman

VT

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

DIRECTOR

August 12, 1971

Honorable Robert Wells
Defense Commissioner
Federal Communications Commission
Washington, D. C. 20554

Dear Bob:

The Military Assistant to the President has agreed that the Office of Telecommunications Policy should assume responsibility for the continued development of the Emergency Broadcast System. We view our role as one of reviewing periodically the structure and performance of the system and assuring that the overall design best utilizes the capabilities of private and governmental communications facilities to meet the President's requirements. Based on these reviews we would provide guidance and tasking to the agencies involved in managing the system on a day-to-day basis, and would review the plans, procedures and directives prepared by those agencies to implement the system. The Military Assistant to the President continues to be responsible for determining the requirements of the President, and for activating, de-activating and testing the EBS.

We would like to have the Federal Communications Commission continue its important roles in the implementation of the EBS. The FCC has obtained the cooperation of the communications industry and has provided the administrative support which is so important to the EBS effort. Your National Industry Advisory Committee has provided valuable technical advice and has assisted in the drafting of changes to the basic EBS Plan and supporting documents. Each of these functions is important to the maintenance of a system responsive to White House needs.

In addition, we would appreciate your participation in our periodic reviews of the status and future plans for the system. I hope you can assure me that the FCC will continue to perform these important functions, and will support the system with the necessary FCC Rules and Regulations.

Sincerely,

Clay T. Whitehead

THE WHITE HOUSE

WASHINGTON

11 August 1971

MEMORANDUM FOR DR. CLAY WHITEHEAD

SUBJECT: Letter of Appreciation on EBS Management

The attached letter to the Honorable Dean Burch is forwarded for your information.

JAMES D. HUGHES
Brigadier General, United States Air Force
Military Assistant to the President

THE WHITE HOUSE

WASHINGTON

4 August 1971

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

Dear Chairman Burch:

As you know, the Federal Communications Commission has been deeply involved in the development of the Emergency Broadcast System (EBS). Under the invaluable leadership of the FCC, its staff, and the supporting National Industry Advisory Committee, the EBS has become a vital and viable system to support the President in periods of national emergency.

With the creation of the Office of Telecommunications Policy in the Executive Office of the President, it has become necessary to realign some of the telecommunications functions previously assigned to other departments and agencies. While retaining the responsibility for establishing requirements and directing the activation, termination, and testing of the EBS, I have asked Mr. Clay Whitehead as the Director of Telecommunications Policy, to continue the development of the EBS and to assure this vital system realizes its full potential. In this regard, he is authorized to task federal departments and agencies as may be required, conduct planning review, and co-ordinate national telecommunications resources as authorized by Executive Order No. 11556.

I wish to take this opportunity to extend to you, on behalf of the President, my sincere appreciation for the outstanding work that has been accomplished during the past ten years. In particular, I would appreciate your giving my personal thanks for a job exceptionally well done to Defense Commissioner Robert Wells, and to Mr. Kenneth Miller and his staff of outstanding professionals who have devoted so much of their time and efforts to insure the EBS satisfied the White House requirements. Additionally, the NIAC must be recognized as a vital factor in the success of the EBS -- without their help and the contributions of the communications industry which they represent, development of such a system would have been extremely difficult if not impossible.

I have been assured by Mr. Whitehead that he intends to continue to rely on the support of the FCC in the future evolvement of the EBS. I am certain that you will provide him continuing support in this vital Presidential communications area.

Sincerely,

JAMES D. HUGHES
Brigadier General, United States Air Force
Military Assistant to the President

JUL 8 1971

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

Dear Dean:

As you may be aware, there have been long-standing disagreements among Defense, the former OTM and the Commission on the handling of matters relating to emergency preparedness. I see no problems in this area which cannot be reasonably solved provided we are willing to approach the matter with open minds. I recently wrote to Bob Wells on this matter (copy attached) and I believe that we have reached agreement to do just that.

A couple of days ago I received for comment from the Executive Director a proposed revision of the Commission's order governing priorities for restoration of intercity private line services. The proposed revision is reported to have been approved by the NIAC, although the carriers may not be in full agreement with the result. In any event, the adoption of this proposal by the Commission would abrogate the currently agreed upon restoration priority system which has been working reasonably well for several years. The proposal serves no purpose other than to assert the authority of the Commission to establish priorities until such time as the President's war emergency powers are invoked. I don't question the Commission's authority in this area, but I see no need for such an assertion, and feel that it can only result in the onerous burden of maintaining two systems, one for peacetime and one for war. This can be avoided by cooperation and I believe that it is our responsibility to see that a sincerely cooperative effort is undertaken.

I have asked Charles Joyce, an Assistant Director in my office, to provide to your Executive Director our views and those of the executive agencies of the government. In general, we are opposed to this proposed revision and believe that the underlying issues should be resolved in the

7/9 - Arlene sent this out

manner I suggested to Bob Wells. I would appreciate it if you would take steps to terminate any further proceedings to revise the restoration priority system until we have had a chance to work out with the Commission staff a common approach in this area.

Sincerely,

Clay T. Whitehead

Attachment

cc: Hon. Robert Wells
Defense Commissioner
Federal Communications Commission

✓ Subj file -- ~~Restoration Priority~~ FCC
Chron

CCJoyce:clt

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

DIRECTOR

June 29, 1971

Honorable Robert Wells
Defense Commissioner
Federal Communications Commission
Washington, D. C. 20554

Dear Commissioner Wells:

The telecommunications industry must receive clear and unified guidance concerning the priorities for the employment of scarce resources in emergencies. Such guidance must be consistent with, and fully support, priority and program decisions in other resource areas.

There are several plans and procedures in being or under development for various emergency situations. However, I am not certain that there has been sufficient policy guidance for these plans, or that the procedures for activating and coordinating the plans are fully understood throughout government and the industry.

I intend to review the overall policies and responsibilities for telecommunications emergency preparedness. Because the Federal Communications Commission has an important role in this area, I would appreciate it if the Commission would participate fully in the review. It would be most helpful if you would designate a senior representative to work with Charles Joyce, who will coordinate the review within my office, and if you would arrange for those elements of the FCC staff concerned with these matters to provide information and assistance.

As you know, a special working group of the NIAC is drafting a revision of FCC Order 70-291 concerning the use and restoration of leased intercity private lines. I recognize the importance of taking action to assign suitable priorities to industry under the restoration priority system, and believe that the NIAC group can

contribute significantly to that end by completing its recommendations. I would appreciate it, however, if any action on this matter by the Commission, including the announcement of any public inquiry or hearings, would be held in abeyance until I have had an opportunity to review the NIAC recommendations in the context of the broader issues which will be raised by the emergency preparedness review.

Sincerely,

Clay T. Whitehead

~~CONFIDENTIAL~~

APR 14 1971

MEMORANDUM FOR:

Honorable Dean Burch
Chairman
Federal Communications Commission

As you know, both the Administration and Congress are deeply interested in the establishment of effective policy guidelines for the operation of our international communications industry. The policies which are adopted with regard to the planning and deployment of satellite and cable facilities are a very important part of these overall guidelines. This Office is currently engaged in a thorough study of this matter.

Our initial analyses of cable and satellite economics and reliability have been completed and subjected to industry review. These were also provided to the Commission for information and possible comment. We are now completing our review of national security and international considerations with the view of having a comprehensive Administration statement on this issue by April 20. We expect the final results will show, among other factors, that there is not sufficient justification for any near-term addition to capacity beyond that which is already authorized, nor for a prescribed ratio of satellite and cable facilities.

We appreciate that the Commission is under considerable pressure to reach a decision. We believe, however, that the results of our studies will be of value in the resolution of these issues. We are also concerned about the possible impact of any Commission decision at this time on the U. S. position in the current INTELSAT negotiations.

I hope the Commission will withhold final action on this matter until the Administration's position and supporting documentation can be considered and the impact of an early decision on our INTELSAT position can be fully evaluated.

Clay T. Whitehead

WHINCHMAN;dc
Mr. Whitehead -2
Dr. Mansur
Subj; RF → FCC
Satellites/Cable

~~CONFIDENTIAL~~

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

January 7, 1971

PRESS RELEASE

NIXON ADMINISTRATION ANNOUNCES POLICY ON AERONAUTICAL SATELLITE COMMUNICATIONS

Clay T. Whitehead, Director of Telecommunications Policy, announced today the release of a "Statement of Government Policy on Satellite Telecommunications for International Civil Aviation Operations." The policy provides the framework for the development of aeronautical satellite programs during the 1970's.

This policy was established by the Director after a study conducted within the Executive Office of the President with participation by interested agencies in the Executive Branch. The Deputy Director, OTP, George F. Mansur, chaired the study group and coordinated the OTP policy formulation.

The highlights of the policy statement are:

- Due to the limitations of existing communications and the projected increase in air traffic in the oceanic areas, the United States promotes pre-operational deployment of satellite communications in the Pacific in 1973 and Atlantic in 1975.

- The Department of Transportation/Federal Aviation Administration, which has the statutory responsibility for air traffic control, assumes program management responsibility within the government for pre-operational and operational systems and services.

- The Department of State, in conjunction with the Department of Transportation, will seek international utilization of the pre-operational system and initiate cooperative efforts with other nations to establish an operational system by 1980.

- The Government will utilize commercial communications facilities and services to the maximum extent feasible.

- The Government will utilize the UHF frequency band near 1600 MHz in both pre-operational and operational satellite air traffic control communications.

- Experimental evaluation of independent surveillance by satellite should begin with initial system deployment in the Pacific and should be followed by pre-operational evaluation in an air traffic control environment sometime after 1975.

- A unified program to satisfy both Government and airline requirements in the Pacific and Atlantic Ocean areas should be adopted to provide the economic benefits of a single program.

The United States has primary responsibility for air traffic control in the Pacific basin and other oceanic routes through agreements with the International Civil Aviation Organization. Because of the rapid increase in aircraft density on international routes and the limitations of existing communications systems, improved communications services must be employed to assure aircraft safety and to efficiently control air traffic.

Although satellite systems offer the most promising method to meet these communications requirements, there have been extended delays in reaching the decisions necessary to initiate an appropriate program. The policy statement resolves the major issues that have been responsible for the delays and establishes guidelines that will ensure orderly progress of a national program. Periodic program reviews will be established to evaluate the progress being made to meet the objectives of the policy statement.

Government use of commercial communication facilities and services helps to lower costs and agrees with the Administration's policy of encouraging the vitality of the private sector in developing and providing communication services. This policy envisages that the FAA will contract for services on a lease basis in contrast to government procurement and ownership of systems.

The President, in his statement on space of March 7, 1970 stated:

- "We should hasten and expand the practical applications of space technology. . . ."
- "We should encourage greater international cooperation in space. . . ."

This policy furthers those objectives by bringing about the timely and useful applications of American space technology for an important purpose in a way that will benefit all nations.

# # # # # #

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

STATEMENT OF GOVERNMENT POLICY ON SATELLITE TELECOMMUNICATIONS FOR INTERNATIONAL CIVIL AVIATION OPERATIONS

January 7, 1971

The rapid increase in aircraft traffic densities, the introduction of larger passenger aircraft on international overseas routes, and the limitations of existing communications channels make it increasingly clear that improved telecommunications will be required for air traffic control to speed the flow of traffic and to assure aircraft safety.

The Federal Aviation Administration (FAA) has defined and stated the general quantity and quality of the telecommunication services that will be needed to support expected future air traffic control operations. Specific requirements have been established for voice and data communications and for automatic reporting of aircraft position information over both the Atlantic and Pacific Oceans in the early 1970's. The FAA also anticipates an operational requirement for independent surveillance in the late 1970's or early 1980's.

It is clear that the provision of these services is in the public and national interest. There is broad consensus in both government and the private sector that satellites offer technically and economically the most practicable method to meet the requirements in a reliable way. This policy statement is provided to establish guidelines that will permit the effective, efficient, and orderly progress of a national program to provide the needed services.

OBJECTIVES

The objectives of this policy are to:

1. Assure the safety, efficiency, and economic viability of international civil aviation.

2. Promote the timely and useful application of technological advances to assure adequate, reliable, and economic telecommunications for air traffic control, operational control, and search and rescue.

3. Assure that program institutional arrangements are responsive to the requirements of the users, compatible with the evolving National Aviation System, and consistent with the foreign policy objectives and commitments of the United States.

4. Encourage international cooperation in research, development, and applications programs within an institutional framework which assures effective utilization of resources.

5. Facilitate early deployment of advanced applications such as independent surveillance and navigation.

6. Minimize duplication of Federal facilities and programs and encourage the use of facilities available from the private sector.

TECHNICAL AND OPERATIONAL ARRANGEMENTS

Pre-operational use and evaluation of voice communications should be implemented in the Pacific in 1973 and Atlantic in 1975. Pre-operational deployment of data link communications and automatic reporting of aircraft position will be promoted in the Atlantic and Pacific in 1975. Feasibility demonstration of independent surveillance in an Air Traffic Control environment will be promoted in the Pacific in 1973, with subsequent transition to a pre-operational evaluation in the Pacific and Atlantic in the post-1975 time period.

It is the Government's policy to promote use of the UHF frequency band near 1600 MHz in the operational system. This will alleviate serious spectrum congestion at VHF frequencies, permit early achievement of the benefits of independent surveillance, and accords with foreign Administration preferences. Use of UHF rather than VHF in the pre-operational system will avoid economic, technical, and operational difficulties -- both domestic and international -- which would result from a later transition from a VHF system to the UHF band. In support of this objective, the Government will utilize UHF for air traffic control purposes in the pre-operational system.

To assure orderly growth and efficient deployment of aeronautical satellite systems, implementation of initial systems should be compatible with long-term objectives. Communications in the wide sense and reliable knowledge of aircraft position will continue to be essential parameters in the air traffic control system. The Federal Aviation Administration's National Aviation System Ten-Year Plan (1971-1980) and studies recently completed by the President's Science Advisory Committee suggest that the long-term role of communications in air traffic control will involve automatic data collection, data processing, control, and display utilizing digital data links and digital processing techniques. Pre-operational satellite communication and surveillance systems in the Pacific and Atlantic oceanic areas should be

designed and phased in coordination with the domestic plan to assure interoperability between the international and domestic systems with the consequent economies and operational advantages.

MANAGEMENT ARRANGEMENTS

Development of an effective national program requires unambiguous leadership. Accordingly, the Department of Transportation (DOT), as the Federal agency with statutory operational obligations, is to be the lead management agency and to assume responsibility for defining requirements, program budgeting, and management of pre-operational and operational systems activity.

In order to assure that the broad spectrum of space activities supported by the Government is effectively utilized and not duplicated, the National Aeronautics and Space Administration (NASA) is expected to conduct independent research and development on technologies which have broad application and, under the management and budget of the Department of Transportation, to provide other technical support unique to transportation applications. Both the DOT and NASA should give consideration to the desirability of conducting fundamental research on competing technologies in order to assure that continuing system development is making full and economic utilization of technological possibilities.

Because the program heavily involves the international community and must be conducted in accord with treaty obligations and other pertinent inter-governmental agreements, the Department of State will exercise its responsibility to assure effective and timely coordination with foreign Administrations and international organizations. Through the Department of State, the Department of Transportation as the management agency should seek international utilization of the pre-operational system and should initiate cooperative activity with other nations to establish an operational system in the Atlantic and Pacific oceanic areas by 1980.

It is possible that a single system combining the functions of communications and position fixing to support both maritime and aviation services would permit economic benefits in a worldwide operational system. The DOT should work with appropriate government agencies to explore the feasibility and desirability of such an approach.

ECONOMIC ARRANGEMENTS

The two broad classes of potential users of an aeronautical satellite system are the aviation administrations responsible for air traffic control in the various International Civil Aviation Organization world regions and the airlines flying international oceanic air routes. Substantial economic resources are required to develop and deploy an aeronautical satellite system, and there are economic benefits to be derived from combining government and airline requirements in both the Atlantic and Pacific ocean areas into a single program. The DOT should actively encourage arrangements for use of a common system by all segments of the aviation community which distributes financial responsibilities equitably among users.

The Government shall utilize commercial telecommunications facilities and services to the maximum extent feasible in both pre-operational and operational systems.

DEFINITIONS

Telecommunication

The term telecommunication means any transmission, emission or reception of signs, signals, writings, images, and sounds or intelligence of any nature by wire, radio, optical, or other electromagnetic systems.

Aeronautical Telecommunication Services

The provision of voice and data communication, surveillance and/or navigation functions in ground-air-ground networks using radio transmission including relay via an active earth satellite.

Automated Air Traffic Control

The acquisition, transfer and display of flight information and, eventually, command and control guidance in an air traffic control environment by means of automatic data processing and other telecommunication techniques.

Independent Surveillance

Independent Surveilance by satellites means computation of a position fix utilizing equipment which is remote from the vehicle and is based on range measurements from two or more satellites. Usually a cooperative vehicle is inferred but it is not implicit in the term.

Navigation

Navigation by satellites means computation of a position fix utilizing equipment which is self-contained within the vehicle and is based upon the time of arrival of signals from two or more satellites whose ephermerides are known.

The terms used to define various aeronautical satellite systems are taken from the ICAO ASTRA Panel Second Meeting and include the following:

"Experimental Systems. These relate to experimental work on space techniques in general. Insofar as the interests of ASTRA are concerned, they would place

emphasis on, but not necessarily be limited to, the solution of problems that would assist in the development of characteristics for aeronautical satellite systems. Examples would be the NASA Application Technology Satellites (ATS).

NOTE: In some States, participation by airlines could be expected provided it was not identified as experimental on their part.

Pre-Operational Systems. These would be primarily aeronautical systems with emphasis on performing operational as well as technical evaluations. For the purpose of their evaluation they would need to operate in parallel with conventional communication and/or radio-determination systems serving Air Traffic Control. It is understood that carriage of the airborne elements of such systems would be on a voluntary basis. It is also understood that while such systems might often be designed as potential operational systems, they might also provide only some of the functions that would be required ultimately in an operational system.

Operational Systems. These would be systems capable of being used on a primary basis to satisfy the aeronautical operational requirements established at a given time in a given area."

STATEMENT OF HONORABLE CLAY T. WHITEHEAD
DIRECTOR, OFFICE OF TELECOMMUNICATIONS POLICY
EXECUTIVE OFFICE OF THE PRESIDENT
FOR THE SPECIAL SUBCOMMITTEE OF THE
HOUSE ARMED SERVICES COMMITTEE
FOR THE INVESTIGATION OF THE
DEPARTMENT OF DEFENSE COMMUNICATIONS

NOVEMBER 19, 1970

STATEMENT OF HONORABLE CLAY T. WHITEHEAD
DIRECTOR, OFFICE OF TELECOMMUNICATIONS POLICY
EXECUTIVE OFFICE OF THE PRESIDENT
FOR THE SPECIAL SUBCOMMITTEE OF THE
HOUSE ARMED SERVICES COMMITTEE
FOR THE INVESTIGATION OF THE
DEPARTMENT OF DEFENSE COMMUNICATIONS

Mr. Chairman and Congressman Hall:

I welcome this opportunity to describe to you the functions of our new office, and our relationship with the Department of Defense and with the Assistant to the Secretary of Defense for Telecommunications.

Since the passage of the Communications Act of 1934, the President has used various arrangements to provide advice and assistance, particularly with respect to his responsibilities for the assignment of radio frequencies to Federal departments and agencies. In 1962, this function was established under an Assistant Director of the Office of Emergency Planning (OEP) who was titled "Director of Telecommunications Management" (DTM). In 1963, the DTM was given additional responsibilities for overseeing the newly established National Communications System (NCS). In this role, the DTM was designated as Special Assistant to the President for Telecommunications. His responsibilities were to be carried out primarily by providing policy guidance to the Secretary of Defense, who was designated Executive Agent for the NCS.

When President Nixon assumed office in 1969, there was a recognized need for stronger central policy formulation and management in the telecommunications area. The General Accounting Office, in its report on the NCS in 1969, recommended stronger central management of the NCS, and specifically suggested that the DTM be established separately from OEP as a new entity. In addition to these concerns about the Federal government's own communications, the accelerated impact of economic and technological change in the communications industry has raised a host of issues requiring the development of new or more definitive national policies for telecommunications generally.

Accordingly, on February 9, 1970, President Nixon transmitted to the Congress Reorganization Plan No. 1 of 1970, which became effective in April 1970. This plan established within the Executive Office of the President a new and independent Office of Telecommunications Policy. This office assumes the previous responsibilities of the DTM, consolidating this authority with the responsibility to formulate policy recommendations on national telecommunications policy generally.

Subsequently, the President issued Executive Order 11556, which set forth in more detail the responsibilities of the office. Broadly, these responsibilities are: to serve as the President's princial telecommunications

advisor; to coordinate the telecommunications activities of the Executive Branch of the Federal Government, to manage Federal Government use of the radio spectrum, and to enable the executive branch to speak with a clearer voice and to act as a more effective partner with the Federal Communications Commission and the Congress in the development of national telecommunications policies.

There is virtually no area of our society or economy not touched importantly by telecommunications. The emphasis is shifting from meeting simple and well-defined communication "needs" to dealing with an increasing interaction among the communications systems capabilities and the problems and potentials in the Federal departments and in society and business. The new office will delve into more substantive issues of communications policy than did the former Office of Telecommunications Management. To make this possible, the routine activities performed by the Secretariat of the Interdepartmental Radio Advisory Committee have been transferred to the Department of Commerce where the work will be conducted under the policy guidance and broad supervision of my office. We are in the process of assembling a staff of personnel with the experience and expertise in the disciplines that are needed to cope with the problems that will arise in light of the new perspective of the office.

I am, of course, concerned that the Federal Government have effective communication under all foreseeable circumstances. Responsibilities assigned to me by Executive Order 11556 include: formulating policies and standards for executive branch telecommunications, evaluating the ability of these systems to meet national security and emergency preparedness needs, reviewing telecommunications programs to evaluate their efficiency, and coordinating emergency preparedness activities in the telecommunications area. In view of these responsibilities, I must be concerned with the effectiveness and efficiency of the telecommunications activities of the Department of Defense which constitute a major fraction of the Government's total telecommunications effort.

I am aware of the criticisms which have been levelled at the management of defense communications by the General Accounting Office and the Blue Ribbon Defense Panel. Some of these have been acted on -- for example, the consolidation of responsibilities within the Office of the Secretary of Defense under the Assistant to the Secretary of Defense for Telecommunications. Also, I understand that moves to strengthen the Charter of the Defense Communications Agency are under consideration. Certainly, fragmentation in the management of Defense Communications has been a problem, and I think these steps which have been taken are in the right direction.

One of the most critical deficiencies in the management of both the Defense Communications System and the National Communications System has been the lack of adequate planning and analysis capabilities. Too often, management decisions on common-user systems and other system design issues have been based on abstract principles or roles and missions, rather than on sound technical and economic analysis. Despite several years of study, we still lack a sound basis for deciding the merits of further unification of government communications systems. Qualitative, operational and management arguments can be provided for both sides of this issue -- but hard facts are missing. We must continue to seek ways to increase the level of competence in system planning and analysis within the Government, and to provide organizational arrangements under which the necessary evaluations can be carried out free from bureaucratic pressures and obstacles.

We intend to take a look at the present organizational arrangements for the NCS to see if changes are needed. I am not now convinced that further centralization of powers in my office, as suggested by the General Accounting Office, is warranted. Before deciding on organizational matters, I hope to arrive at clearer answers to three other questions raised by the GAO. These are: (1) the degree of system unification which is desirable, (2) the soundness of the integrated trunking system

concept, and (3) the appropriate means of interconnecting or combining AUTOVON and the FTS. We are now starting on a review of these questions. In addition, I hope to determine what substantive management principles should be applied in developing the management structure for government communications.

In fulfilling the responsibilities assigned to me, I will look for assistance and cooperation to the Secretary of Defense as both Executive Agent of the NCS and as the largest single Federal communications user.

I also look forward to close working relationships between my staff and appropriate DoD staffs, particularly that of the Assistant to the Secretary for Telecommunications. We have mutual interests in the effectiveness and efficiency of defense communications, and in the soundness of the national telecommunications system.

I am relatively new in this job, having been sworn in on September 22, 1970, At the present time, we are limited by budgetary constraints and I am having some difficulty in assembling the type of staff I need because of that. This will seriously limit our ability to address these important issues and implement needed changes. I hope that this will be resolved in the next fiscal year. This Office has direct responsibility for the areas I have been discussing and I am pleased to work with this Committee now and in the future.

STATEMENT BY

CLAY T. WHITEHEAD, DIRECTOR

OFFICE OF TELECOMMUNICATIONS POLICY

before the

Subcommittee on Treasury, Post Office, and General Government
The Honorable Joseph M. Montoya, Chairman
Appropriations Committee
United States Senate

May 19, 1971

WITNESS LIST

OFFICE OF TELECOMMUNICATIONS POLICY

before the

Subcommittee on Treasury, Post Office, and General Government
The Honorable Joseph M. Montoya, Chairman
Appropriations Committee
United States Senate

May 19, 1971

1. Clay T. Whitehead, Director
2. George F. Mansur, Deputy Director
3. Wilfrid Dean, Jr., Assistant Director
4. Walter R. Hinchman, Assistant Director
5. Charles C. Joyce, Jr., Assistant Director
6. Antonin Scalia, General Counsel

Mr. Chairman and Members of the Committee:

I appreciate this opportunity to appear before you to review the budget estimates of the Office of Telecommunications Policy.

We are requesting total appropriations of $2,702,000. An appropriation of $1,702,000 is requested for salaries and associated expenses; this will enable us to grow at a uniform rate over the fiscal year to a level of 65 full-time positions. An appropriation of $1,000,000 is requested for necessary studies that can be carried out more economically by contract or require highly specialized expertise rather than by in-house staff. Our budget estimates for Fiscal Year 1972 are based on the requirements foreseen at the time the Office of Telecommunications Policy was established, as modified by our first few months of actual operation.

You have before you our budget estimates for Fiscal Year 1972. Since the Office of Telecommunications Policy is new to this Committee--since, in fact, we are rather new to everyone--I think it would be useful in this presentation to discuss briefly what the Office is and what it does.

Essentially, it is our responsibility to develop overall communications policy. First, the Director of the Office is the President's principal adviser on electronic communications policy. Second, the Office enables the Executive Branch to speak with a clearer voice on communications matters and to be a more responsible partner in policy discussions with Congress, the FCC, the industry, and the public. Third, the Office formulates new policies and coordinates operations for the Federal Government's own very extensive use of electronic communications.

I. HISTORY OF OTP

Electronic communications at this point in our history can no longer be considered a novelty. The first commercial telephone service in this country was initiated almost a century ago, the first commercial radio broadcasting a half-century ago. Congressional regulation of the field began as early as 1866, and the Federal Communications Commission has been in existence since 1934. Until 1970, however, there was no agency within the Executive Branch responsible for establishing executive policies in the communications field or for coordinating the communications activities of the Federal Government itself.

Over recent years, the need for such an agency became increasingly apparent. Communications has rapidly become such an important part of the national economy and of the Federal Government's own operations that it requires continuing and coordinated attention on the part of the Executive Branch. During the last twenty years, the communications industry's contribution to national income increased by over 500 percent. That growth is almost double that of the economy as a whole during the same period and even more in excess of the rate for such important areas as transportation and trade.

(Chart #1) Communications is, moreover, an industry which requires a constantly increasing share of our national capital investment--$10 billion of new investment in 1970, compared with approximately $6 billion for transportation and $3 billion for mining. (Chart #2)

Such figures demonstrate the economic importance of the industry. They do not suggest its social importance. Communications is no longer just a technology; it is no longer just a service; it is a social force of the first magnitude, affecting what our children learn, how our political processes operate, where our business and industry locate, what our people know and perhaps what they believe in. There is virtually no area of our life which it does not touch.

It is, moreover, a force which is constantly changing, and in changing, it creates a series of new and important policy problems and issues. This era of change is not coming to an end; it seems to be barely beginning. A graphic representation of the dates that principal communications innovations first entered into commercial use will show most of them crowded into the last 25 years. (Chart #3) The rate of innovation is accelerating. It was only in 1956, for example, that we were first able to make transatlantic telephone calls by submarine cable; prior to that, the calls were subject to the poor quality and unreliability of shortwave radio transmission. Yet less than 10 years later, we were making transatlantic calls by satellite.

Presidents Truman and Eisenhower conducted studies of this accelerating trend and the need for improved Executive organization. President Kennedy ordered a limited reorganization for emergency communications in 1963. President Johnson established a task force on communications policy that proposed, as one of its major recommendations, the establishment of a new entity within the Executive Branch--"a long-range planning, policy-formulating and coordinating, and mission-support capability which can serve to integrate the various roles in which the Executive Branch is presently engaged." When the present Administration took office, it initiated extensive discussions on this subject among representatives of Government and industry, and carefully examined the merits of alternative reorganization forms. Last year President Nixon submitted, and the Congress approved, Reorganization Plan No. 1 of 1970, establishing the Office of Telecommunications Policy. The functions of the Office were further specified in Executive Order 11556.

II. FUNCTIONS

The specific responsibilities assigned to OTP are set forth in the Reorganization Plan and the Executive Order, copies of which I submit for the record and will be happy to distribute if you wish. You already have our budget estimates before you which go into our specific programs in some detail. For the balance of this presentation I would like to give you some examples of the

matters which currently occupy our attention in the three major subject areas with which we deal.

A. Government Communications:

We are responsible for establishing policies and procedures for the management of the Federal Government's own communications systems. Federal communications systems serve a variety of purposes, ranging from telephone service communication between fire prevention personnel in national forests to command and control of our strategic missile systems. It has been estimated that the Government's investment in communications equipment is almost $50 billion. The annual expenditure for these systems is somewhere between $5 and $10 billion; the imprecision of this estimate is testimony to the absence, prior to OTP, of any agency which could focus upon overall Government expenditures.

Some of the major policy issues with which we are presently concerned in the field of government communications are the following:

(1) National Warning and Alert Systems:

It is imperative that the nation have a warning system, available for use in the event of attack or natural disaster, in which the public can have absolute confidence. The recent failure of the Emergency Broadcast System (EBS) has shaken that confidence, and has raised serious questions about our ability to respond to major emergencies. This Office is now in the process of subjecting both EBS and our National Warning System to an intensive review to assure their reliability and responsiveness to varying needs.

(2) Oversight of Federal Communications Expenditures:

As the expenditures of the Federal Government for communications--including research and development in the field--have grown to their current level, it has become both increasingly important and increasingly difficult to avoid duplication and waste. An example is the relationship between AUTOVON and FTS: The Federal Telecommunications System (FTS) is a voice and data communications system, managed by the General Services Administration and used by all Federal Government agencies. In addition, the Department of Defense maintains a separate voice communications network (AUTOVON) and a separate data communications network (AUTODIN). Interconnection between FTS and AUTODIN has been achieved, but at the present time the Department of Defense voice system has no access to, and is not accessible from, the voice communications systems serving the rest of the Government. This situation is not only inconvenient but perhaps very costly. This Office, working with the General Services Administration, the Department of Defense and the Office of Management and Budget has undertaken to determine what improvements and economies can be achieved.

(3) Spectrum Allocation Procedures:

Approximately half of the radio frequency spectrum is now allocated to the Federal Government and used by the various agencies of the Federal Government. I am responsible for the appropriate allocation of this Federal Government use of the spectrum, and in carrying out that responsibility, I rely heavily upon the advice and assistance of the Interdepartment Radio Advisory Committee composed of representatives of 17 Federal agencies that make extensive use of the spectrum. The spectrum is a limited--and therefore valuable--resource. Highly complex and very difficult decisions must be made about who will be allowed to use what frequencies, for what purposes, where. As the demands on the spectrum for various public and private uses multiply new methods of spectrum planning and management will be required. OTP is exploring such methods jointly with the FCC which allocates the spectrum to non-Federal users.

B. Private Domestic Communications:

The United States has the largest communications industry in the world. Our per capita expenditure on communications services of all kinds exceeds the total per capita income of many nations. Almost 5% of our gross national product is devoted to electronic communications. Except for health services and education, it is the most rapidly growing sector of our economy. OTP is responsible for clarifying the significant policy issues concerning electronic communications and for formulating and presenting the Administration's positions in this field to the Congress, the FCC, and the public. Some of the current and important issues are the following:

(1) Specialized Carriers:

Advances in electronic technology have created the need for, and made possible, many new kinds of communications services in addition to the familiar telephone and telegram services. Having quantities of data and methods of doing business at the disposal of small companies may equalize the competitive advantage held by larger corporations. Microwave relay and satellite systems can carry enormous amounts of information, including television signals, computer data, and facsimile; new low-cost information machines make these large quantities of data and information widely available. Such new systems present the nation with the policy question whether the common-carrier monopoly historically held by telephone companies should be extended to some or all of these new fields; whether new common or quasi-common carriers should be allowed to enter this field; or whether competition should be allowed. If competition is to be allowed, we must decide what pricing limitations should be imposed upon the protected-monopoly common carriers.

(2) Mobile Communications Services:

Ours is a mobile society. As a result, our communications systems must become mobile as well. This is already a reality in the area of broadcast communications--the car radio, the pocket radio, and the TV set small enough to take to the beach. There are increasing demands for similar flexibility in our person-to-person communications--personal paging devices such as many doctors now have, radio-dispatched vehicles for the small businessman, and pocket or car telephones for everyone. Mobility, however, stretches the capability of the wire; most of these new services must utilize the radio frequency spectrum. A pressing issue at the present time is how space is to be found for mobile person-to-person communications on an already crowded radio frequency spectrum.

Even more importantly for the long run we must develop a sound technological and institutional framework that will permit a substantial growth in mobile communications not possible under current arrangements.

(3) The Fairness Doctrine:

In exercising its responsibility to insure that broadcasting meets the "public interest, convenience and necessity," the FCC has over the years developed the "Fairness Doctrine." This refers to what is becoming an increasingly detailed and confusing set of rules and decisions, intended to assure that broadcasters present fairly both sides of controversial issues of public importance and provide opportunity for response to personal attack. There is concern that what was originally intended to spur public debate and increase public awareness has now come to have the opposite effect, since the risk of violating the Fairness Doctrine can be reduced by minimizing discussions of public issues. The time has come for an overall reassessment of the doctrine and its effects--including its application to the political field and the threat of governmental content control.

(4) Protection of Private Rights in the Computer Culture:

Computers make it possible to accumulate data banks which contain vast quantities of data with considerable proprietary value and information concerning millions of our citizens. Electronic communications make this information readily accessible to people in remote locations. The way in which it is assembled, used, and distributed may profoundly affect lives, careers, and incomes. On occasion, the assembled information may be inaccurate. Should the individual have some right to learn about this and correct it? What restrictions should be imposed upon the communications of such accumulated information to other persons? What procedural and privacy safeguards should be required?

(5) Cable TV and Over-The-Air Broadcasting:

One of the new technologies, coaxial cable, permits the distribution of television signals by wire--and a much larger number of signals than over-the-air broadcasting. Cable seems to have the technological potential of providing a new diversity, flexibility, and quality in television programming. There may be some danger, however, that it could destroy our present system of over-the-air television without providing a satisfactory substitute. At the present time, some cable systems are permitted to import "distant signals" from broadcast stations many miles away without making any payment for the use of such material, either to the broadcasters or to the copyright owners from whom the broadcasters have purchased performance rights. There is general agreement that this is wrong, but no consensus as to how the payment should be required. The FCC has required cable systems above a certain size to originate programs. Some feel that the desirable policy would be the direct opposite of this--that origination of programming by the cable system owner should be positively forbidden so that an anti-competitive common control of program production and telecast distribution will not develop. Cities, counties, and states in addition to the FCC have all imposed upon the new medium varying, often confusing, degrees of regulation which may conflict now or in the future. These and many other problems pertaining to cable do not fit existing regulatory molds and almost certainly will require new legislation.

(6) Domestic Satellites:

American technology launched the first commercial communications satellite for international use in 1965. Six years have passed, and even though American private industry has been willing and able, the American public still does not have the benefit of even a satellite system for national communications. The problem has not been money or technology, but simply governmental delay and indecision concerning how domestic systems should be authorized. Should there be one company granted monopoly rights from the outset, or should the field be open, at least initially, to all entrants? Should telephone common carriers be permitted to enter the field? Should Comsat? What special requirements should be imposed, or special privileges granted, to assure service to Alaska and Hawaii?

C. International Communications:

International communications traffic has historically grown at an annual rate of about 15%. Americans now spend more than $530 million a year for this purpose and are expected to be spending more than $5 billion by 1980. International communications are not only important for the conduct of overseas business; in the open world which we seek, they heavily affect the way

in which nations view one another. It is now possible to call London from New York City by simply dialing the number. Last week, a world championship boxing match taking place in Monte Carlo was watched by United States sports enthusiasts on network television. In an era when so many new technologies seem only to facilitate war, creative development of the new technologies of communications is a great chance for peace. Such development requires the resolution of many policy issues, on which OTP will be developing proposals and working closely with the Congress and the FCC.

(1) Structure of the Industry:

At present this country's international private communications are handled by several companies--most of the telephone traffic by AT&T, and most of the data traffic by ITT World Communications, RCA Global Communications and Western Union International. By decision of the FCC, AT&T divides its telephone traffic originating in this country between submarine cables and satellite circuits leased from the Communication Satellite Corporation (Comsat). Comsat is a private corporation authorized by Federal statute whose Board includes Presidentially appointed directors and representatives of other U. S. carriers that buy service from Comsat. The complexity and conflicting incentives built into this industry structure may increase the cost to the public of overseas messages; they certainly place the United States at a severe disadvantage in negotiating with other countries, each of which is usually represented by a single entity. There have been questions raised about this structure for many years; with the tenfold increase in traffic projected by 1980, the Congress and others have been calling for a review of existing legislation and the development of new policy.

(2) The Balance between Satellites and Underseas Cables:

No landing of an undersea communications cable may be made within the United States nor may any communications satellite be placed into service without governmental approval, determined by the FCC. Because of our regulatory structure, if insufficient or excessive capacity is authorized, or if an unreliable or technologically outmoded system is authorized, the private and public consequences are serious. There are at times sharp disputes concerning projected capacity, as well as the relative merits of cables and satellites. These disputes are routinely resolved, in one way or another, in the context of a particular cable or satellite application, but they arise from a failure to address fundamental questions of long-range planning on which the views of industry and several governmental agencies must be sought and coordinated.

(3) International Negotiations:

International communication requires international agreement. Two-way systems need governmental approval at both ends--for cable landings or

satellite earth stations, for rate structures, for connection into the national communications networks. Even one-way broadcasting requires international agreement, since interfering spectrum uses must be avoided. The first permanent forum for such international arrangements was the International Telegraph Union, established in 1865. Its successor is the International Telecommunications Union, established by the Madrid Conference of 1932 and recast into its present form by the Atlantic City Conference of 1947. This organization holds Plenipotentiary Conferences at approximately 5-year intervals, and sponsors much more frequent Administrative Conferences to negotiate changes in the International Radio Regulations and the International Telephone and Telegraph Regulations. In addition to ITU proceedings there are frequent special negotiations with one or more foreign nations--such as those now in progress here in Washington among the members of the International Telecommunications Satellite Consortium (INTELSAT). Such negotiations can have significant commercial, social and political consequences for the United States. OTP is responsible for providing communications policy guidance for these negotiations to the Department of State.

In all of the areas I have discussed above--and in particular the private domestic and international fields--it is not my intention to create the impression that OTP is the final policy maker. Communications policy in this country is ultimately made by the Congress. It is interpreted and applied by the FCC in the exercise of its regulatory responsibilities. As in other fields, however, the Executive Branch has an important role to play--by making known to Congress, the FCC, and the public its considered views on communications policy matters and their relationship to the broad scope of national concerns; by proposing legislation to the Congress where necessary; by providing a forum for the opinions of the public and industry; and by stimulating national discussion on issues of national consequence. In the field of management of the Government's own communications systems my Office does exercise considerable authority though even there we feel strongly that our approach, insofar as possible, should be to coordinate rather than to control. In the field of non-Government communications, on the other hand, we are merely a partner in the policy-making process, dealing in behalf of the Executive Branch with the Congress, the public, the industry and the FCC. (Chart #4)

III. ACCOMPLISHMENTS OF THE OFFICE

The most important thing we have done in our first six months is, frankly, to organize the office and form the nucleus of a staff capable of dealing with the kinds of policy problems I have just discussed. I am sure you are aware that the job of building a new agency and establishing its relationship with other Government agencies is enormously time consuming. When OTP was originally

established, it was contemplated that it would have a staff of 65 people. The present budget request would enable us to continue our orderly growth in the coming year until we have reached that original minimal level. I may add parenthetically that we do not anticipate ever growing much beyond that level. The Office was intentionally structured in such a way as to avoid the building of a new bureaucracy. Consequently it was located within the Executive Office of the President; technical support is provided by staff units in various Government departments. In particular, the Department of Commerce has the mission of supplying OTP with broad technical support and with administrative support in the frequency management process. I am pleased to report that we are now beginning to function effectively in the role that the President and the Congress set for us.

While in the process of building our organization, we have felt it important to press forward on a number of substantive issues. Some of these are still underway, but I might mention two completed projects of some importance. First was the establishment of an aeronautical satellite policy for the United States. It had been apparent for several years that the rapid increase in aircraft traffic on international routes and the limited capability of existing communications systems would soon require the use of satellite communications for aeronautical navigation over the Atlantic and Pacific Basins. There had nevertheless been extended delay in making the necessary arrangements, because of disagreement on technical matters among Federal agencies and within the private sector, and because of the absence of any single forum in which the Federal decision could ultimately be made. The National Aeronautics and Space Administration and the Federal Aviation Administration were about to proceed with overlapping and incompatible programs which could have wasted a substantial amount of money. One of the first accomplishments of the Office was the establishment of a Government policy for aeronautical satellite communications, arrived at after consultation with representatives of various Federal agencies, private airlines and foreign governments. It sets a time frame for development of the system and establishes the outlines of Government-industry cooperation and guidelines for international cooperation. This policy was announced last January. Since that time OTP has been following through to see that it is promptly implemented. This is an example of the type of policy which OTP will be developing -- not policy in the abstract but a specific definition of management relationships to hasten the conversion of new technology to benefit the public and to conserve public funds.

The second major project which has been substantially completed is coordination of United States preparation for the World Administrative Radio Conference on Space to be held in Geneva next month. The process of establishing detailed United States positions is a lengthy one, requiring consultation with industry, Federal agencies ranging from HEW to DOD and, of course, the Department of State. The decisions reached in these international negotiations will be submitted to the Senate for ratification as a treaty; they will affect the growth and development of space communications over the next decade. Our major positions have at this point been established. The briefings of

the Chairman to our delegation have been commenced, and we look forward to a successful session in Geneva.

I should also make mention of three policy proposals which will be announced in the near future. One is legislation for the long-term financing of the Corporation for Public Broadcasting and for the support of educational broadcasting in general. The second is an Executive Branch policy statement concerning the planning of satellite and cable facilities for transatlantic communications. And the third is an updating and amplification of the Executive Branch policy on domestic satellites which was originally announced before formation of this Office, a year ago January.

I have thought it most important, at this first formal appearance before this Committee, to give you this overview of what the Office of Telecommunications Policy is and what it does. Needless to say, I have not made mention of everything we are engaged in, nor have I gone into much detail. I hope, nevertheless, it was enough to give you the general sense of what this Office is meant to do. I will now be happy to reply to any questions you may have concerning the Office and its budget proposal.

CHART 1

GROWTH RATES

CONTRIBUTION TO NATIONAL INCOME BY PERCENTAGE INCREASE 1950 - 1969

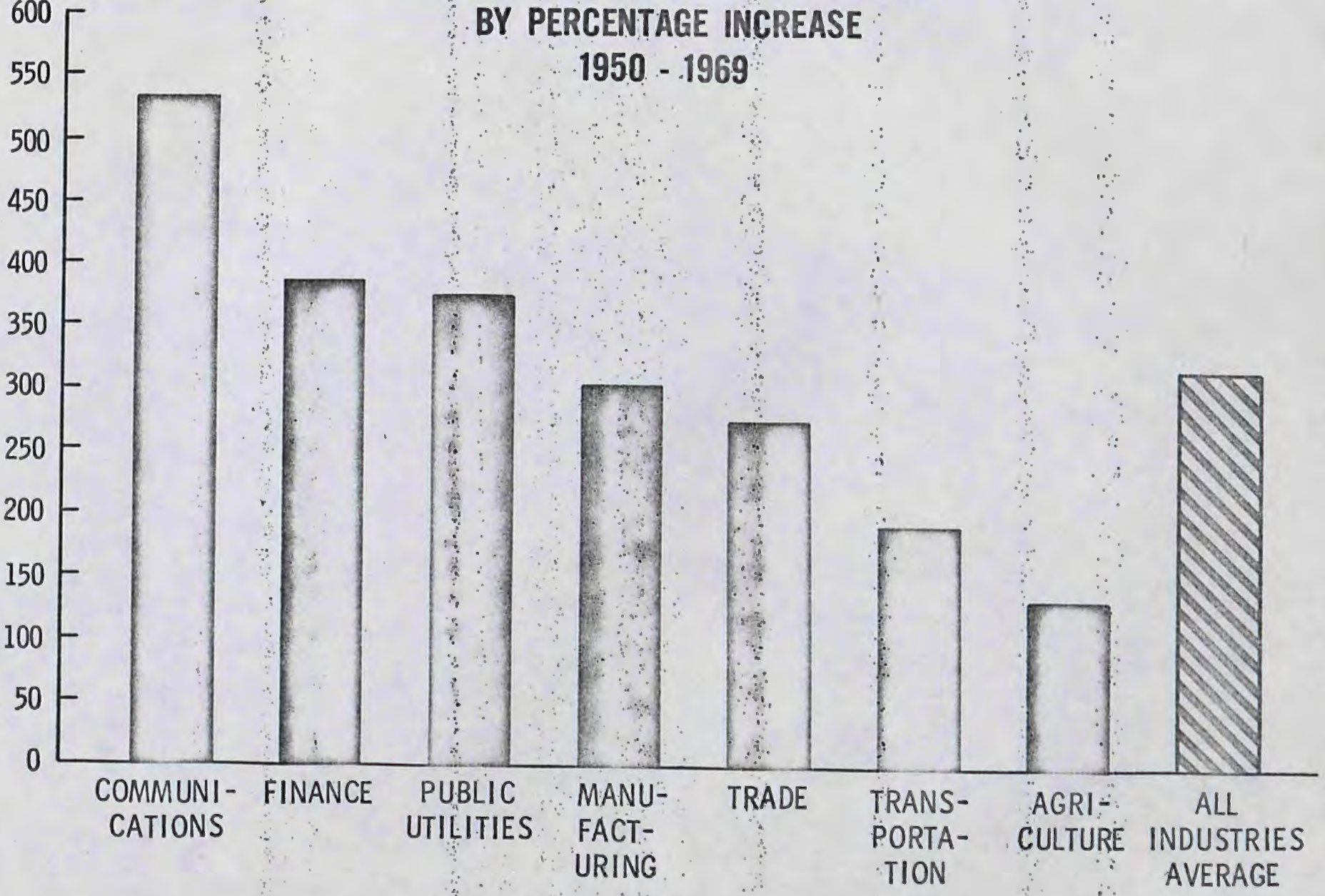
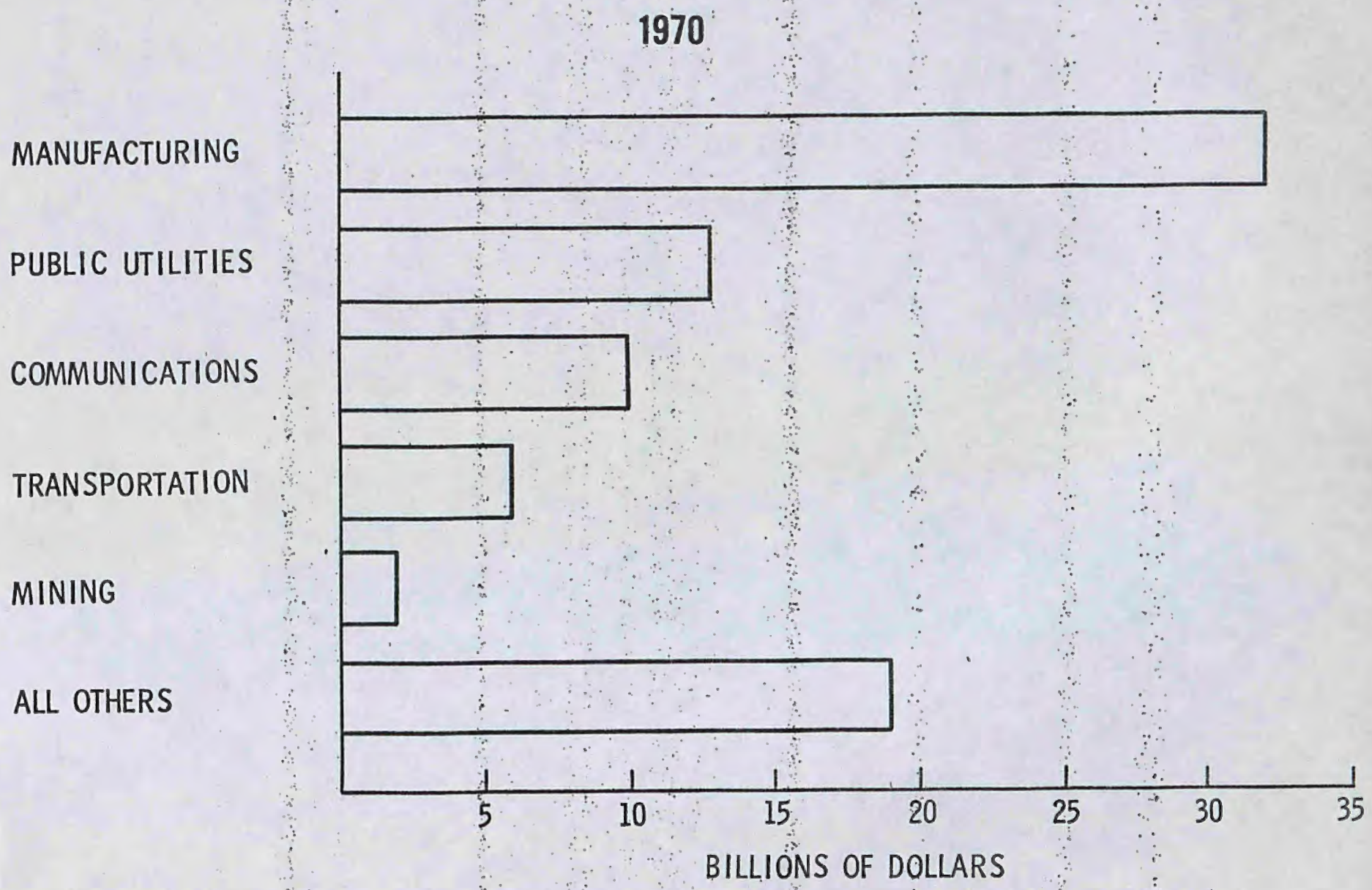


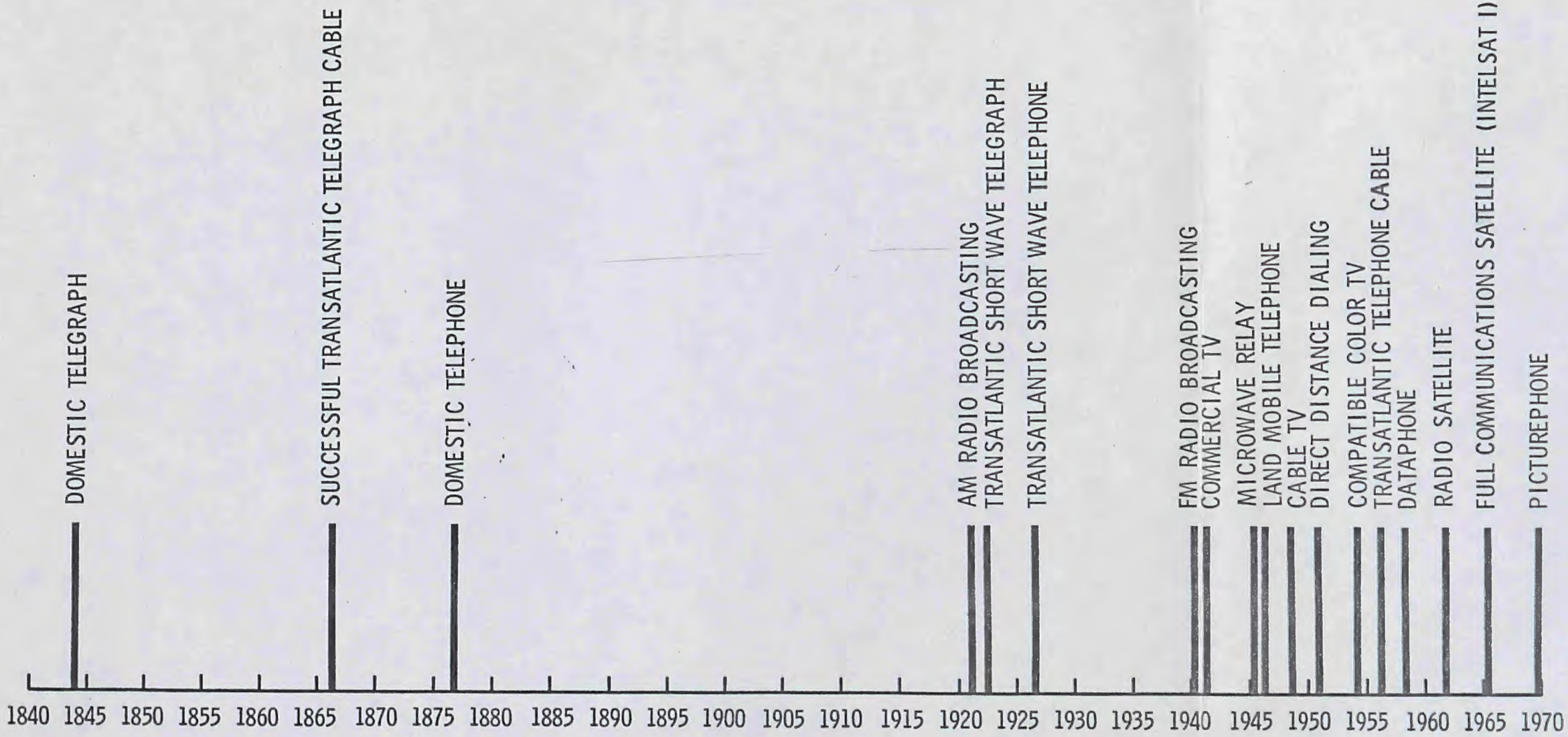
CHART 2

NEW CAPITAL INVESTMENT IN PLANT AND EQUIPMENT



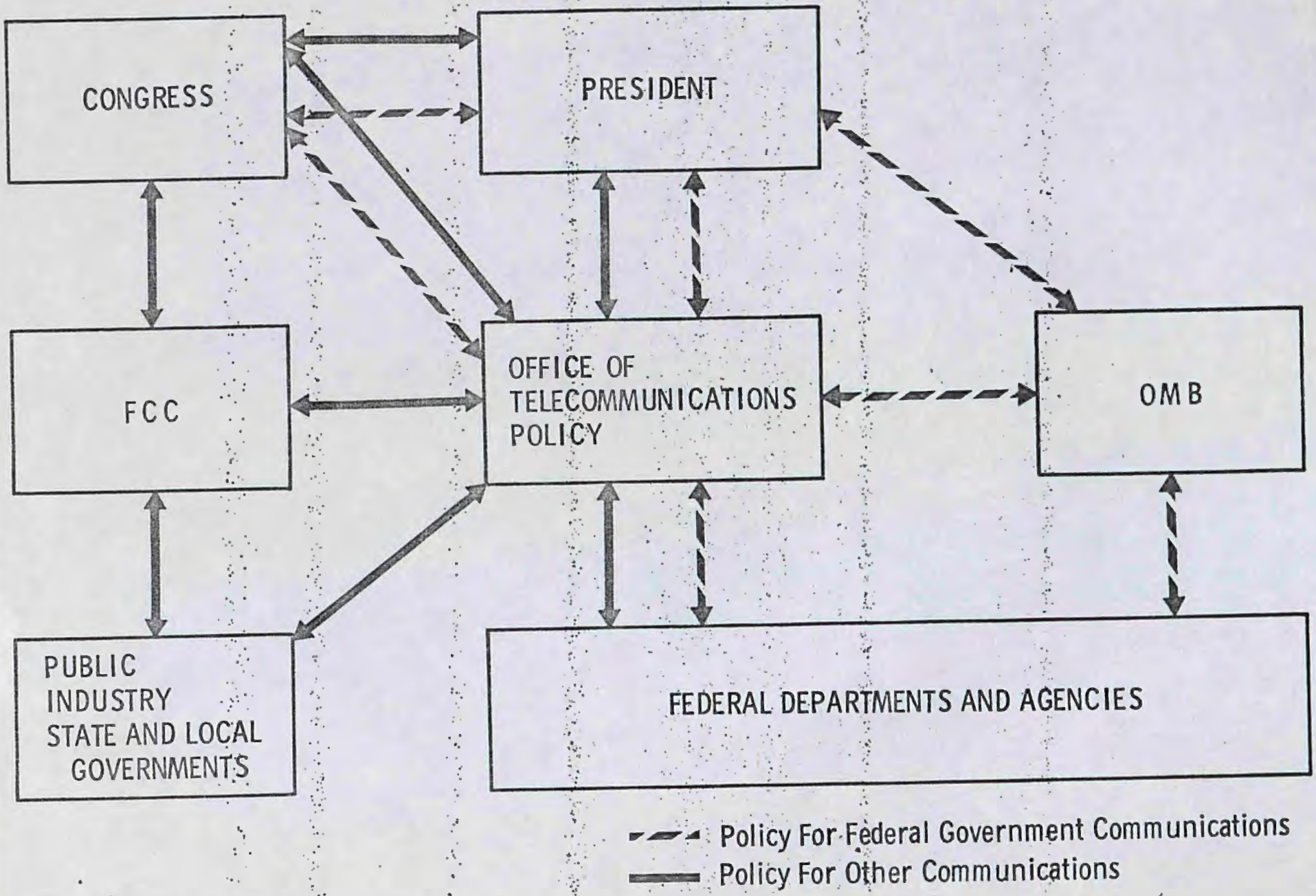
DEVELOPMENTS IN ELECTRONIC COMMUNICATIONS

CHART 3



OFFICE OF TELECOMMUNICATIONS POLICY RELATIONSHIPS

CHART 4



STATEMENT BY

CLAY T. WHITEHEAD, DIRECTOR

OFFICE OF TELECOMMUNICATIONS POLICY

before the

Subcommittee on Constitutional Rights
The Honorable Sam J. Ervin, Chairman
Committee on the Judiciary
United States Senate

February 2, 1972

I am pleased to have this opportunity to appear before you today, to discuss some aspects of the First Amendment which it is an important concern of my Office to protect. I wish to address my remarks specifically to the First Amendment implications of the two most significant innovations in our mass communications system during the past decade.

The first of these is cable television. Coaxial cable and related technologies enable large numbers of electronic signals--television signals included--to be carried directly into the home by wire rather than being broadcast over the air. There is no particular limitation on the number of signals which can be provided; systems now being constructed typically have the capacity to carry about 20 television channels, and can be readily expanded to 40.

The original use for this technology was "CATV," or Community Antenna Television. As its name implies, that involved no more than the use of cable to carry broadcast signals picked up by a high master antenna into homes in areas where reception was difficult. In recent years, however, use of the technology has progressed far beyond that. Many cable systems now use microwave relay systems to import television signals from far distant cities. Some originate programming of their own, and make unused channels available to private individuals, organizations, schools, and municipal agencies. Looking into the future, cable technology has the potential to bring into the home communications services other than television--for example, accounting and library services,

remote medical diagnoses, access to computers, and perhaps even instantaneous facsimile reproduction of news and other printed material. But I wish to focus upon the immediate consequences of cable, and in particular its impact upon mass communications.

I do not have to belabor the point that the provision of 20 to 40 television channels where once there were only four or five drastically alters the character of the medium. It converts a medium of scarcity into a medium of abundance. As this Subcommittee is aware from earlier testimony, one of the most severe problems which must be faced by broadcasters today is the allocation of limited broadcasting time--allocation among various types of programming, and allocation among the many groups and individuals who demand time for their point of view. Cable, if it becomes widespread, may well change that by making the capacity of television, like that of the print media, indefinitely expandable, subject only to the economics of supply and demand.

Of course the new medium also brings its own problems, several of which are immediately related to First Amendment concerns. Economic realities make it very unlikely that any particular community will have more than a single cable system. Unless some structural safeguard or regulatory prohibition is established, we may find a single individual or corporation sitting astride the major means of mass communication in many areas.

The second aspect of this new technology which bears on the First Amendment is, to my mind, the more profound and fundamental, because it forces us to question not only where we are going in the future, but also where we have been in the past. That aspect consists of this: the basic premises which we have used to reconcile broadcasting regulation with the First Amendment do not apply to cable.

In earlier sessions of these hearings, this Subcommittee has heard three principal justifications for Government intrusion into the programming of broadcast communications: The first is the fact of Government licensing, justified by the need to prevent interference between broadcast signals. But with cable, there is nothing broadcast over the air, no possibility of interference, and hence no unavoidable need for Federal licensing. The second is "the public's ownership of the air waves" which the broadcaster uses. But cable does not use the air waves. The third is the physical limitation upon the number of channels which can be broadcast in any area--meaning that there is oligopoly control over the electronic mass media, in effect conferred by Federal license. But the number of feasible cable channels far exceeds the anticipated demand for use, and there are various ways of dispersing any monopoly control over what is programmed on cable channels.

In other words, cable television is now confronting our society with the embarrassing question: Are the reasons we have given in the past forty-odd years for denying to the

broadcast media the same First Amendment freedom enjoyed by the print media really reasons--or only rationalizations. Why is it that we now require (as we in effect do) that each radio and television station present certain types of programming--news, religion, minority interest, agriculture, public affairs? Why is it that our courts repeatedly intervene to decide, or require the FCC to decide, what issues are controversial, how many sides of those controversies exist, and what "balance" should be required in their presentation? Is it really because the detailed governmental imposition of such requirements is made unavoidable by oligopoly control of media content or by the need to decide who is a responsible licensee? Or is it rather that we have, as a society, made the determination that such requirements are good and therefore should be imposed by the Government whenever it has a pretext to do so? And if it is the latter, is this remotely in accord with the principle of the First Amendment, which (within the limitation of laws against obscenity, libel, deception, and criminal incitement) forbids the Government from determining what it is "good" and "not good" to say?

This stark question is inescapably posed by cable technology. The manner in which we choose to regulate cable systems and the content of cable programming will place us squarely on one or the other side of this issue. Perhaps the First Amendment was ill conceived. Or perhaps it was designed for a simpler society in which the power of mass media was not as immense as it is today. Or perhaps the

First Amendment remains sound and means the same thing now as it did then. The answer to how we as a nation feel on these points will be framed as we establish the structure within which cable television will grow.

Because the President realizes that such fundamental issues are involved, he has determined that the desirable regulatory structure for the new technology deserves the closest and most conscientious consideration of the public and the executive and legislative branches of Government. For this reason, he established last June a Cabinet-level committee to examine the entire question and to develop various options for his consideration. Not surprisingly, in view of the magnitude and importance of the subject, the work of the committee is not yet completed. I assure you, however, that First Amendment concerns such as those I have been discussing are prominent in our deliberations--as I hope they will be prominent in yours when the Congress ultimately considers this issue.

I now wish to turn to what I consider the second major innovation in our mass communications system during the past decade--the establishment of a Corporation for Public Broadcasting, supported by Federal funds. The ideals sought by this enterprise are best expressed in the following excerpt from the Report of the Carnegie Commission on Educational Television.

> "If we were to sum up our proposal with all the brevity at our command, we would say that what we recommend is freedom. We seek freedom from the constraints, however necessary in their context, of commercial television. We seek for educational television freedom from the pressures of inadequate funds. We seek for the artist, the technician, the journalist, the scholar, and the public servant freedom to create, freedom to innovate, freedom to be heard in this most far-reaching medium. We seek for the citizen freedom to view, to see programs that the present system, by its incompleteness, denies him."

In addition to this promise, public television also holds some dangers, as was well recognized when it was established. I think most Americans would agree that it would be dangerous for the Government itself to get into the business of running a broadcasting network. One might almost say that the free-speech clause of the First Amendment has an implicit "non-establishment" provision similar to the express "nonestablishment" restriction in the free-exercise-of-religion clause. Just as free exercise of religion is rendered more difficult when there is a state church, so also the full fruits of free speech cannot be harvested when the Government establishes its own mass communications network. Obvious considerations such as these caused Federal support of public broadcasting to be fashioned in such a way as to insulate the system as far as possible from Government interference.

The concern went, however, even further than this. Not only was there an intent to prevent the establishment of a Federal broadcasting system, but there was also a desire to avoid the creation of a large, centralized broadcasting system financed by Federal funds--that is, the Federal "establishment"

of a particular network. The Public Broadcasting Act of 1967, like the Carnegie Commission Report which gave it birth, envisioned a system founded upon the "bedrock of localism," the purpose of the national organization being to serve the needs of the individual local units. Thus it was that the national instrumentality created by the Act--the Corporation for Public Broadcasting--was specifically excluded from producing any programs or owning any interconnection (or network) facilities.

Noncommercial radio has been with us for over 50 years and noncommercial television for 20. They have made an important contribution to the broader use of communications technology for the benefit of all. The new Corporation for Public Broadcasting has, for the most part, made a good start in expanding the quantity and quality of programming available to local noncommercial broadcasting stations. There remain important questions about the most desirable allocation of the Corporation's funds among educational, instructional, artistic, entertainment, and public affairs programming. But most importantly, from the First Amendment standpoint, there remains a question as to how successful the Corporation has been in avoiding the pitfalls of centralization and thereby of Government "establishment." Now that we have a few years' experience under this new system, we see a strong tendency--understandable but nonetheless regrettable--towards a centralization of practical power and authority over all the programming developed and distributed with

Federal funds. Although the Corporation for Public Broadcasting owns no interconnection facilities, which the Act forbids, it funds entirely another organization which does so. Although it produces no programs itself, which the Act forbids, the vast majority of the funds it receives are disbursed in grants to a relatively few "production centers" for such programs as the Corporation itself deems desirable--which are then distributed over the Corporation's wholly funded network. We have in fact witnessed the development of precisely that which the Congress sought to avoid--a "Fourth Network" patterned after the BBC.

There is, moreover, an increasing tendency on the part of the Corporation to concentrate on precisely those areas of programming in which the objection to "establishment" is strongest, and in which the danger of provoking control through the political process is most clear. No citizen who feels strongly about one or another side of a matter of current public controversy enjoys watching the other side presented; but he enjoys it a good deal less when it is presented at his expense. His outrage--quite properly--is expressed to, and then through, his elected representatives who have voted his money for that purpose. And the result is an unfortunate, but nonetheless inevitable, politicization and distortion of an enterprise which should be above faction and controversy.

Many argue that centralization is necessary to achieve efficiency, but I think it is demonstrable that it does not make for efficiency in the attainment of the objectives for

which public broadcasting was established. For those objectives are variety and diversity--almost inherently antithetical to unified control. To choose for public broadcasting the goal of becoming the "Fourth Network" is to choose for it the means which have brought success to the first three--notably, showmanship and appeal to mass tastes. This is not to say that there should be no nationally produced programming for public television. Some types of programming not offered on commercial television require special talent, unique facilities, or extensive funds that can only be provided at the national level; it is the proper role of the Corporation to coordinate and help fund such programming. But both for reasons of efficiency and for the policy reasons I have discussed above, the focus of the system must remain upon the local stations, and its object must be to meet their needs and desires.

The First Amendment is not an isolated phenomenon within our social framework, but rather one facet of a more general concern which runs throughout. For want of a more descriptive term we might describe it as an openness to diversity. Another manifestation of the same fundamental principle within the Constitution itself is the very structure of the Nation which it established--not a monolithic whole, but a federation of separate states, each with the ability to adopt divergent laws governing the vast majority of its citizens' daily activities. This same ideal of variety and diversity has been apparent in some of the most enduring legislation enacted under the Federal

Constitution. Among the most notable was the Communications Act of 1934. Unlike the centralized broadcasting systems of other nations, such as France and England, the heart of the American system was to be the local station, serving the needs and interests of its local community--and managed, not according to the uniform dictates of a central bureaucracy, but according to the diverse judgments of separate individuals and companies.

In 1967, when Congress enacted the Public Broadcasting Act, it did not abandon the ideal and discard the noble experiment of a broadcasting system based upon the local stations and ordinated towards diversity. That would indeed have been a contradictory course, for the whole purpose of public broadcasting was to increase, rather than diminish, variety. It is the hope and objective of this Administration to recall us to the original purposes of the Act. I think it no exaggeration to say that in doing so we are following the spirit of the Constitution itself.

STATEMENT BY

CLAY T. WHITEHEAD, DIRECTOR

OFFICE OF TELECOMMUNICATIONS POLICY

before the

Subcommittee on Communications and Power
The Honorable Torbert H. Macdonald, Chairman
Committee on Interstate and Foreign Commerce
House of Representatives

February 3, 1972

Mr. Chairman, Members of the Subcommittee, I welcome the opportunity to appear before you today to discuss the pending public broadcast funding bills--H.R. 7443, H.R. 11807, H.R. 12808--and the Administration's plan for increased financing of public broadcasting in Fiscal 1973.

Mr. Chairman, I realize that you have been critical of us for not coming forth with a long-range financing plan for public broadcasting. I regret the delay. I have wrestled with this problem for almost a year. Others have tried for years. I need not tell this Subcommittee that it is an exceedingly complex and difficult problem--one that involves basic assumptions about the role and structure of the public broadcasting system in our country and how Government should interact with that system. We expect to solve this problem before the end of Fiscal 1973. With due deference, I do not believe that the Bills under consideration solve it. In order to comment specifically on the Bills, let me discuss briefly the background of our efforts over the past year.

BACKGROUND

Last year, the President's budget message stated that an improved financing plan would be devised for the Corporation for Public Broadcasting (CPB). My Office worked closely with representatives of CPB, the National Association of Educational Broadcasters (NAEB), HEW, the FCC, and other interested groups. But we were not able to develop an acceptable long-range

financing bill. One of the principal issues concerned the method for CPB distribution of operating funds to local educational broadcast stations, and whether the method should be specified in the statute. We feel strongly that a distribution formula should be set out in the statute to assure that the local entities would have the financial strength to counterbalance the growing dominance of CPB and its network arm--the Public Broadcasting Service.

Indeed, the Carnegie Commission felt so strongly about the need to disburse operating funds free of the Corporation's discretion that it recommended an approach that would have had HEW distribute all operating grant funds to the stations. As Dr. Killian stated in his testimony on the 1967 Act, the principal reason for this separation of funding responsibilities was a fear that, if the stations had to look to the Corporation for their "daily operational requirement," it would lead "naturally, inevitably, to unwise, unwarranted and unnecessary centralization of educational broadcasting." However, the Congress provided for operating funds to come from CPB, and operating support was to have been one of CPB's principal responsibilities. Unfortunately, CPB has never devoted enough funds to this purpose.

By October it was clear that we were not making any progress toward an acceptable financing plan, and I wanted

to explain the situation to the educational radio and TV stations, many of whom are in severe financial difficulty. I did so at the annual NAEB Convention. The particular financing controversy was only illustrative of the underlying issues concerning the shape the Congress wanted public broadcasting to take, and I focused on these fundamental issues.

Reduced to their essentials, my concerns are that:

1. The independence of the local stations has suffered because CPB has not devoted sufficient funds to station support grants and grants for purely local program production.
2. Local station autonomy has been undercut by the CPB and PBS use of interconnection facilities to establish a fixed-schedule, real-time network contrary to the intent of the 1967 Act.
3. Program diversity has not been enhanced, since national programs are produced or acquired in effect by CPB's "in-house" production entities, which are also local broadcast stations. Moreover, the national programming seeks a mass audience for news, public affairs, and entertainment programs.
4. Not enough attention is devoted to achieving two important balances: the balance between local and

national programming, and the broad balance among cultural, entertainment, news, public affairs, educational and instructional programs.

H.R. 7443 and H.R. 11807

With this as background, let me turn to the specifics of H.R. 11807 and H.R. 7443. First, as to both, the level of funding is too high. When all of the other demands on the Federal budget are considered, it is unfortunately not possible to devote a total over five years of $500 million (H.R. 7443) or $575 million (H.R. 11807) to public broadcasting. Moreover, H.R. 7443 provides all of these funds to CPB, without specifically requiring any distributions for station support. H.R. 11807 is better, since it requires CPB to earmark at least 30 percent of its funds for this purpose, but here too the amount and nature of the distributions to particular licensees are left to CPB's discretion, albeit a discretion that must be exercised in consultation with public broadcasting representatives. First, we think that a more substantial share of CPB's funds should be passed on to the local stations. When CPB funding gets as high as $65 million, as it would in the first year of funding under this Bill, at least half should go to the stations. Thereafter, an even greater proportion of CPB funds should be distributed to the stations.

Second, H.R. 11807 does not specify the criteria and methods of distributing operating funds to the stations. We prefer to see a matching formula set out in the statute, as it is in the facilities grant portion of the Communications Act. This would give the stations the incentive to generate financial support at the local level. The stations would know that Federal matching funds would come directly to them instead of being disbursed from a Treasury fund to CPB. There's no immediacy to it when CPB then has to set aside a fraction of the match and distribute it to all licensees pursuant to industry-wide criteria. The stations are likely to be more enthusiastic about local fund raising when there is an immediate prospect of a direct match. Finally, it would heighten the local stations' sense of autonomy and independence if they had available a stable source of funds of a known quantity, as a matter of statutory right and not CPB discretion.

Furthermore, H.R. 7443 would not allow CPB to foster the use of new communications technologies, such as video-cassettes, broadband cable, and communications satellites. H.R. 11807 is preferable in that it authorizes CPB to encourage educational and instructional uses of these tech-nologies.

H.R. 12808

Turning now to H.R. 12808, we have not yet assessed the full import of some of the modifications this Bill would make in the present Act. However, the Bill addresses some very real issues, such as the restoration of balance between the local stations and CPB. The Bill would take the interconnection and station support functions away from CPB, and have HEW support the operating costs of the stations. The stations could then make their own interconnection arrangements. Indeed, a number of educational broadcasters are considering the feasibility of just such an arrangement. Some other features such as station representation on the CPB Board of Directors; prohibitions on promotional and lobbying activities, as well as on funding of programs on partisan political controversies, are worthy of consideration. Other features of the Bill, such as the limitation on funding from a single source and the mandatory GAO audit, may be too restrictive. In any event, the cumulative effect of all these features might be to erode the functions that are both necessarily and properly performed at the national level by CPB.

ADMINISTRATION PROPOSAL

In addition to the specifics of the pending long-range financing Bills which I have discussed, as a general matter, we do not believe that a long-range financing plan should be pressed at the present time. This is not to say, however, that the difficulty in devising such a funding approach should stand in the way

of continuing the sound development of public broadcasting at a time when its responsibilities are many but its resources are spread thin. Therefore, the Administration's Bill provides for a oneyear extension of CPB's authorization at an increased funding level and directs operating support grants to the local stations. The reasons we have not submitted a long-range financing plan are neither complex nor devious. One reason the Congress chose to defer long-range financing in 1967 was that CPB was an unknown quantity. It would have to go through a development phase before its structure would be sufficiently set to warrant such a financing plan. Today that development process is continuing. The relationships between the central organizations and the local stations are still relatively unclear. Indeed, the CPB Board has just authorized a study to define these relationships. Until these matters are clarified and the directions are better defined, we believe that it would be more sound for the Congress not to rush forward with a long-range plan during this Session.

The 1967 Act needs substantial refinement to provide a stable source of financing, to define clearly and carefully the respective roles of CPB and the local stations, and to take account of technological changes that have occurred since 1967. While these revisions are under consideration, our one-year extension Bill would allow the growth of the public broadcast system to proceed soundly, during the critical development stages it is now in. Continuing the Administration's

record of increasing funds for public broadcasting--the appropriations will have increased by $40 million from Fiscal 1969 to Fiscal 1973--the present Bill adds $10 million to CPB's current level of funding, for a total of $45 million, of which $5 million must be matched by funds derived elsewhere.

In addition to the extension and increase in authorization for CPB, our Bill would provide a significant portion of Federal funds to local educational broadcast stations. CPB currently distributes over $5 million in general support grants to the stations. Our Bill would add $10 million for Fiscal 1973 and establish a mechanism for distributing a total of $15 million to the local stations, so that they will be effective partners with the Corporation in the development of educational broadcasting services for their communities.

The Bill provides for $2 million to be distributed to public radio stations--almost doubling the general support funds which the Corporation now provides them. Because of the large number and enormously diverse nature of public radio operations, the manner of distribution of these radio funds is left to the discretion of the Corporation, to be exercised in consultation with station representatives. The proportion of the $15 million devoted to radio represents the approximate share of total non-Federal public broadcasting support which goes to radio.

The statutory mechanism would also make available $13 million to approximately 140 licensees of public television stations. Two types of grants would be used for this purpose. First, there would be a minimum support grant of $50,000 or one-quarter the licensee's total non-Federal, non-CPB supported Fiscal 1971 budget, whichever is less. Second, the licensee would be entitled to a supplemental grant based on the proportionate amount which his Fiscal 1971 operating budget, exclusive of Federal and Corporation grants, bore to all licensees' operating budgets during Fiscal 1971. There would, however, be an upper limit on the amount of the supplemental grant, since no licensee's operating budget would be considered to exceed $2 million for grant purposes.

We anticipate that, taking both types of grants into account, and with a total non-Federal Fiscal 1971 budget of over $117 million for all licensees, the minimum distribution in the typical situation would be around $50,000 and the maximum would be approximately $180,000. Station support at this level of funding would give the licensee some breathing time to work with all of us in devising a more long-range financing plan.

CONCLUSION

Mr. Chairman, I have endeavored to summarize the Administration's position on public broadcast funding. I hope that I have given you some idea of the problems that concern us,

and why we believe it is better for now to seek increased funding for another year. We will continue to work constructively and earnestly next year with educational broadcasters to resolve some of the issues that your hearings have aired.

The Congress in the 1967 Act attempted to give practical effect to the Carnegie Commission's eloquent plea for freedom in the public broadcasting system, excellence in its programming, and diversity within that excellence. Despite the arguments of some that diversity and decentralization are impractical and unworkable, or at least not the best way to enhance the national impact of public broadcasting, the Administration is not yet ready to abandon the Congress' grand design. CPB has made major strides in the relatively short time since it was created. The programs it has supported show that it has a great potential in helping the educational broadcast licensees meet their public interest obligations. There should be no doubt on this point. I have focused attention on problems with the public broadcast system because there are problems. But there are also accomplishments and successes that would have been beyond the capacity of educational broadcasting if there had been no CPB.

CPB is still going through that extraordinarily difficult process of self-examination and self-definition. Whether this maturation process evolves an entity that can live up to the

potential envisioned for it depends to some extent on determinations reached by Government. We are continuing to play our role in a way that we feel best serves CPB, the local stations, and the public. We agree with the view, expressed strongly during these hearings, that there must be a workable long-range financing plan, as contemplated by the Public Broadcasting Act of 1967, and the Administration intends to submit one before the proposed extension of authorization expires.

STATEMENT BY

CLAY T. WHITEHEAD, DIRECTOR

OFFICE OF TELECOMMUNICATIONS POLICY

before the

Subcommittee on Treasury, Post Office
and General Government
The Honorable Tom Steed, Chairman
Appropriations Committee
U.S. House of Representatives

April 14, 1972

STATEMENT BY

CLAY T. WHITEHEAD

DIRECTOR, OFFICE OF TELECOMMUNICATIONS POLICY

Mr. Chairman and Members of the Subcommittee, I appreciate the opportunity to discuss with you the budget requests of the Office of Telecommunications Policy (OTP). You have before you our Budget Estimates in some detail; I would like to use this occasion principally to discuss the various activities on which those funds are to be expended.

Initially, however, I want to volunteer a few observations concerning the numbers you have before you. Our total request of $3,084,000, represents a net increase of $484,000 above last year. The vast majority of that is attributable to the increases in Civil Service compensation enacted by Congress this past session, and to the fact that this is the first budget which contemplates operations at a fully staffed level for the entire fiscal year. We are seeking no increase in the level of our presently authorized staff, and only a modest increase ($25,000) in the funds which we may use for research that can be done better or more economically on a contractual basis than inhouse. I stated to you in our hearings last year that it was not our intention to create a huge bureaucracy out of this new office; I stand by that statement, and our activities to date and the current budget request bear it out.

I appreciate the problem which you gentlemen face in evaluating the efficiency and utility of an agency that cannot measure its output in terms of applications processed, miles of highway paved, or even radio and television licenses issued and renewed. As our name indicates, our contribution to Government is less quantifiable, but nonetheless valuable. The fruits of our endeavors are to be found in governmental decisions--usually decisions rendered by other governmental entities, including the FCC and the Congress itself--which can affect the shape of United States communications for years to come.

I would like, therefore, to discuss with you in some detail the major projects to which my Office has devoted its energies during the last fiscal year, and those which it intends to pursue under the proposed budget. They fall into four major areas, namely domestic communications, Government communications, international communications, and spectrum management and use, with a number of subcategories under each.

I. DOMESTIC COMMUNICATIONS

A. Common Carrier Communications

Common carrier communications is for the most part a monopoly public utility service provided by the Bell system and independent telephone companies. The performance of the industry has come under increasing criticism in recent years, and it has been proposed that various segments of common carrier operations be opened to competition. In response to such proposals, the carriers have asserted that the benefits of economy of scale and operational integrity derived from integrated ownership and operation far outweigh any potential customer benefits from competition.

OTP has initiated several investigations into these questions. The ultimate aims of these studies are, first, to develop recommendations as to which aspects of common carrier operation can safely be opened to increased competition, and which should remain under integrated control; and, second, to determine the regulatory principles and practices best designed to ensure that noncompetitive operations remain efficient and innovative.

Principal studies and findings to date include the following:

1. Domestic Satellite Communications

OTP has found that there are insufficient economies of scale in domestic satellite communications to warrant government restriction of competition. Its studies showed that all of the satellite applications on file with the FCC are economically viable, technically compatible, and could be accommodated within existing spectrum and orbital space. OTP therefore recommended to the FCC that any technically and financially qualified applicant be allowed to establish and operate satellite systems on a competitive basis.

2. Specialized Communications Carriers

The entry of new communications carriers offering "specialized" services (e.g., data, private line, video interconnection, etc.) in competition with the existing telephone carriers was approved in principle by the FCC, but a number of issues which could determine the practical feasibility of competitive entry were left unresolved--such as the allowable pricing response and interconnection constraints.

OTP has commenced investigation of the more important unresolved issues, including the technical and economic implications of alternative interconnection policies which will, among other factors, affect competition in the supply of terminal equipment (e.g., telephone and data sets) to be used with the existing telephone "network." These will be long-term studies and could result in new FCC regulations or legislation.

3. Common Carrier Regulation

Even if it is feasible to introduce competition into selective aspects of common carrier operations, it will affect only about 10-20% of total operations. Most common carrier operations, notably the public message telephone service, will continue to be a natural monopoly.

Effective regulation of natural monopolies is necessary to prevent investments in inefficient facilities, excessive rates and profits, technological obsolescence, service degradation, and other problems, but it is difficult for government to second-guess a large public utility on detailed investment and operating decisions. For this reason, in Fiscal Year 1973 OTP will continue to explore the desirability of encouraging better public performance of regulated utilities through improved policies rather than increasingly detailed regulation. Some of these policies include:

a. Alternatives to Rate of Return Regulation: Traditional common carrier regulation is based on an agency-determined "fair" rate of return which requires establishment of a "rate base" (i.e., the amount of investment) and detailed information on profit flow. But this method of regulation can create incentives for excessive investment in capital equipment and can distort normal business decisions in other ways which affect technological progress. OTP will attempt to determine (a) the magnitude of the distortions, if any, caused by rate-base regulation and (b) whether there are alternatives to rate-base regulation. It is very difficult to perform quantitative comparisons to test the hypothesis of rate-base distortions when dealing with a natural monopoly. OTP has studies underway in this area.

b. Depreciation Programs: Common carrier equipment is typically depreciated over very long periods corresponding to the expected physical life of the equipment, although the useful life is often much shorter due to rapid technological

advances. This is only one aspect of depreciation policies that affect common carrier financial decisions and customer rates; other aspects are disposition of fixed asset salvage, and separation of depreciable and nondepreciable investments. In Fiscal Year 1973, OTP will undertake a comprehensive investigation of depreciation practices, objectives, effects, and alternatives in the common carrier industry.

B. Cable Television and Broadband Communications

Broadband cable systems represent a new communications medium which can increase consumer choice in television programming and provide many new communication services hitherto unavailable. The immediate effect of cable expansion, however, is to disrupt some of the distribution practices of the existing television industry and to threaten the economic position of some broadcast stations and copyright owners. There is urgent need for policies to guide the development and regulation of cable in such a fashion that its enormous benefits can be rapidly achieved without depriving the society of its healthy programming industry and its essential broadcasting services.

OTP has undertaken a series of studies and investigations to identify and illuminate particular aspects of broadband cable development which require policy consideration, and to develop policy recommendations. These include:

a. A study of the present and projected costs of broadband cable systems, to serve as a basis for estimating future growth patterns and rates of development of cable distribution systems.

b. A study of the television program production industry and its economics, to serve as a basis for estimating the growth in new television programming likely to occur as a result of cable system development.

c. A study directed to the development of an industry simulation model to be used in conjunction with the results of (a) and (b) to predict future industry development.

d. Definition of a study project on projected consumer demand for cable television under alternative policies.

In addition to these studies, OTP has provided supporting analysis and developed alternative policy recommendations for the

President's Cabinet committee on cable television. In this work it has examined, among other matters, the economic and social effects of vertical integration in the production and distribution of cable television programming; the probable impact of expected cable growth on the broadcast and copyright industries; the problems of access to the cable media by all segments of the public and industry; and considerations pertaining to joint ownership of broadcast, cable, and telephone facilities. Policy alternatives pertaining to these various matters were developed for consideration by the Cabinet committee. The results of this activity have been presented to the committee, which is expected to complete its report in the near future.

A significant achievement in the cable television field was resolution of the long-standing controversy concerning distant signal importation, that is, cable use of signals broadcast by out-of-market television stations. The distant signal question involved complex, interrelated issues such as CATV's need to offer this service in order to attract capital and begin its growth, the effect of distant signal competition upon the economic stability of local radio and TV stations, program suppliers' need for copyright protection, and the public need for a wide diversity of quality program services. In August, the FCC announced its intention to end the six-year "freeze" on distant signal importation without provisions for copyright payment and copyright exclusivity protection. This aroused great concern within the broadcasting and copyright industries, which threatened to seek Congressional action to stop implementation of the new rules. While the outcome of such an effort was unclear, it would surely have created uncertainty and delay in the regularization of cable television growth. Since OTP believed further delay and uncertainty would be harmful to the public interest, it took the initiative in seeking to act as mediator in the dispute. The principal parties ultimately agreed upon a compromise plan, the main feature of which is to supplement the FCC's rules with regulatory and legislative copyright and exclusivity provisions. The desirability of this plan is now being considered by the FCC, which is completing action on its new cable television rules, and by the Congress, which is considering new copyright legislation.

In Fiscal 1973, OTP will continue its attempts to assist the FCC and the Congress in resolving the complex, but fundamental, policy questions that attend the full development of this new technology. In this regard, OTP recently received the results of a study on the feasibility of designing a broadband cable pilot program for a few selected urban and rural communities to demonstrate the utility of the technology to meet various needs

in the fields of education, health information, vocational training and assistance, and business. OTP is considering how best to proceed in this area. OTP will also prepare and document whatever legislation the President may deem necessary to implement the recommendations of the Cabinet committee.

C. Broadcasting

1. Public Broadcasting

The Public Broadcasting Act of 1967 created a framework for educational and instructional broadcasting, largely as envisioned by the Carnegie Commission on Educational Television. However, the means of establishing a stable source of Federal support funds which would avoid detailed government oversight of program content, was left unresolved and has remained so. In addition, the years since 1967 have witnessed the development of important new technologies for which no provision is made in the Public Broadcasting Act.

During the past year OTP sought to achieve amendments to the Act which would eliminate both these deficiencies. It consulted with interested organizations in public broadcasting and with the relevant agencies of government, and reviewed a range of approaches to new legislation. In the summer of 1971, it drafted and submitted for coordination to the Office of Management and Budget a bill which made provision for new technologies and established a financing plan consistent with the congressional intent for public broadcasting in general, and for the Corporation for Public Broadcasting (CPB) in particular. The bill was withdrawn for modification when it appeared that CPB could not support a financing approach that provided assured Federal funding of individual public broadcast stations.

In order to provide for the immediate financial needs of public broadcasting pending resolution of the difficult question of long-term funding, OTP prepared and submitted to the Congress this year an Administration Bill which increases the level of Federal support by 30%, almost all of the increase to be directed to local public broadcasting stations. Before this one-year Bill expires, OTP hopes to achieve consensus on long-term legislative proposals to meet the needs of public broadcasting in a manner consistent with the intent of the 1967 Act.

2. License Renewal Policy

One of the major broadcasting controversies of recent years has involved the triennial license renewal process. Although all can agree that a broadcaster who has performed well in the public interest should have his license renewed, the Congress, the FCC, and the courts have struggled with the questions of what is good performance and what standard should be used to judge the incumbent licensee's performance in the face of a challenge to his renewal application.

In Fiscal 1972, OTP developed and proposed for public discussion a wide-ranging series of suggestions for modifying the Communications Act of 1934, one of which dealt with license renewal policy. OTP pointed out the dangers of adopting renewal standards that lead inevitably to government supervision of program content. It proposed for discussion a more "neutral" renewal standard that would place the primary emphasis on the licensee's being attuned to the programming needs and interests of his local audience. Using this standard, a premium would be placed on the obligation to be directly responsive to community problems and issues; licensees who had met this obligation would be assured license renewal. This would lead to needed stability in an industry that must make relatively long-term commitments to public service.

In the coming year OTP hopes to work with interested citizen and industry groups, the Congress, and the FCC to create a workable license renewal policy which assures industry stability and service to the public.

3. Fairness Doctrine and Access to the Broadcast Media

Another critical issue--one that is central to the role of the mass media in an open society--is that of public access to the broadcast media for discussion of and information about controversial public issues. The FCC's Fairness Doctrine requires the broadcaster to make time available for the presentation of contrasting viewpoints once a particular side of a controversial issue of public importance has been expressed. Although not originally contemplated, this "fairness" obligation is now being enforced on an issue-by-issue, case-by-case basis, instead of through an overall evaluation of whether the broadcaster has kept the public well informed, with reasonable time for contrasting views. When enforced in this manner, the broadcaster's journalistic determinations are repeatedly second-guessed by agency and courts, and the government decides who shall speak on what issues.

This diminishes the "free press" discretion of the licensee and tends to convert broadcasting from a private enterprise activity to a government instrumentality.

A major incentive for case-by-case application of the Fairness Doctrine is the fact that individuals' access to the media for discussion of controversial issues can only effectively be achieved through that device. Broadcasters do not ordinarily sell their advertising time for such purposes--partly because they may be compelled to "balance" such presentations in their program time.

One of OTP's projects in FY 1972 was a study of Fairness Doctrine enforcement and the closely related problem of access to the media. In October 1971 it proposed for consideration several specific modifications of broadcast regulation in these fields. It participated in the FCC panel discussions on the Fairness Doctrine. It has published specific criticisms of recent proposals for compulsory free "counter-advertising."

OTP will continue during the coming year to explore various alternatives for solving the fairness and access dilemmas. It will seek to assist the Congress and the FCC in devising mechanisms to enhance free expression and to minimize government intervention in the marketplace of ideas.

4. Radio Regulation

For many years radio broadcasting has been regulated as an afterthought to television. Some of the rationales and assumptions, such as scarcity of outlets and restricted entry, which shaped early radio regulation and still justify regulation of television stations, have been rendered meaningless by the phenomenal growth in the number of AM and FM radio stations, offering widely diversified special program services to the public.

After studying the issue during FY 1972, OTP proposed to the FCC that it undertake an experiment in radio deregulation, with a view toward lessening the regulatory controls on commercial radio programming, commercial practices and other nontechnical operations. The proposal was supported by an OTP Staff Paper setting forth the reasons such an experiment seemed appropriate and promising. The FCC is now considering this proposal and OTP intends to work with the Commission, to the extent deemed desirable, in order to implement a pilot plan.

D. Federal-State Communications

Communication issues affecting State and local governments arise in every substantive area and in varying contexts. For example, the planning of a national emergency communication system requires State and local participation; regulation of the communications common carrier industry has traditionally been divided between the FCC and State public utility commissions; regulation of CATV systems has been divided between the FCC and local (municipal) authorities; public broadcasting and educational communications involve State and local governments to a significant degree; the operation of public safety communications systems (police, fire, ambulance, etc.) are usually under the direct operational control of local officials; and in many cases, local governmental communication facilities and services are funded in whole or in part through Federal grant-in-aid programs.

To provide guidance and assistance to State and local governments, OTP has undertaken one general and several specific tasks. The general task is to identify the various Federal assistance programs involving telecommunications, in order to advise State and local governments on the effective utilization of these programs, and in order to inform the Congress of duplications or deficiencies. This review is now in progress under OTP supervision, and should be completed by the end of Fiscal Year 1972.

Among the specific tasks which OTP has undertaken in this area are (a) assistance to the States of Hawaii and Alaska in identifying communications needs which might be met through modern technology (e.g., communication satellites), and in developing plans and programs for using such technology; (b) advice to local and State government officials concerning the potential and the problems of broadband cable communications and CATV, and the desirable manner of State and local regulation; and (c) consultation with State public utility commissioners concerning the impact of new specialized communications carriers, broadband cable systems, and data communications services on traditional regulatory policies and practices. Since these tasks are largely consultative and ad hoc in nature, it is difficult to specify a future timetable. OTP does expect, however, that major requirements for information and consultation will emerge from long-range cable policy development; this expectation is based upon the very large flow of such requests which were stimulated by the announcement and preliminary work of the Cabinet committee. OTP also anticipates a substantial continuing requirement for assistance to Hawaii, Alaska, and the U.S. Trust Territories as their internal communication planning activities progress.

E. Mobile Communications

The frequency spectrum available for mobile radio services has recently been tripled by the FCC. The mobile communications industry will no longer be limited by a frequency shortage but will face classical supply and demand limitations. This will raise a number of issues as to appropriate types of new systems, new services, and the institutional structure to support them. The transition from spectrum scarcity to spectrum abundance must be regulated to create an industry structure that is sensitive to future demands for communications services of all types, including improved mobile telephone services for urban areas, integrated dispatch services, and public telephone services for domestic aircraft.

OTP has begun a program, with assistance from the Policy Support Division of The Office of Telecommunication of the Department of Commerce, to assess the technical, economic, and institutional effects of proposed new mobile systems and services and to formulate policy guidelines for the development and regulation of the expanded industry. In cooperation with the FCC, DOT, LEAA, HEW, and HUD, OTP will assess the feasibility of a pilot program to demonstrate innovative uses of mobile communications services in support of public safety, emergency health services, highway safety, and transportation in general.

F. New Technology

During the past decade there have been radical improvements in communications technology resulting from independent research and development of U.S. industry, research in the academic community, the U.S. space program, and other Government sponsored R&D. These technologies provide opportunities for vastly improved and expanded communications services, which could have significant social and economic effects if exploited properly.

OTP plans a study effort designed primarily to identify areas in which new technological advances are occurring and to evaluate the effect of these technologies upon the existing structure of the domestic communications industries. In the coming year, OTP hopes to identify in broad terms the current state-of-the-art in major fields of communications technology, and to isolate any natural limiting factors. If necessary, OTP will develop policy guidelines regarding the application of a new technology to a particular use.

II. GOVERNMENT COMMUNICATIONS

A. Federal Communications Policy and Planning

The Federal Government's own communications consume from 5 to 10 billion dollars per year. The major concerns in this field are avoidance of duplication, effective management of the acquisition of new systems, achievement of compatibility among systems, and satisfactory operating performance. The creation of the National Communications System in 1963, which sought to integrate long-haul, point-to-point communications of the Federal Government into a united system, has not significantly affected the planning, design and cost of government communications systems, although it has contributed to better coordination of day-to-day operations. The majority of Federal communications expenditures are beyond the scope of the NCS and have not been addressed at all from an overall Federal point of view.

The major objectives of the OTP program in the area of Federal communications are: First, identifying all the communications activities and resources of the Federal Government; second, determining the needs for effective information exchange among the various departments and agencies; and finally, taking action in those areas in which integration will best achieve the ends of efficiency and economy.

OTP has completed a review of all existing studies and analyses pertaining to the integration of the two largest communications networks in the Federal Government, the AUTOVON network and the FTS. OTP has determined that integration should not be attempted at this time.

OTP has undertaken a review of existing and planned radio navigation aids operated or used by various elements of the Federal Government, accounting for the expenditure of between one and three billion dollars annually (not including expenditures by private users). It is now discussing with the affected Federal departments the designation of a single system as the standard long-range radio navigation system and the formulation of a schedule on which other long-range systems can be phased out. It is planning an evaluation of the many different position-fixing systems used by the Government, to determine how many are needed to meet all requirements, and how many might be replaced if a global, high-accuracy navigation satellite system is deployed.

OTP has begun a review of all the Government's communications satellite programs, with an eye toward identifying avoidable duplication and assuring that available economies of scale are exploited. It will initiate a similar review of

computer-communications networks. The assistance of major Federal departments and agencies will be solicited in both these reviews, and they are expected to be completed in time to influence the preparation of the Fiscal Year 1974 Budget.

OTP has begun work with other elements of the Executive Office of the President to determine the probable future communications needs of the Executive Office, particularly the needs for integration with the communications and information handling systems of the departments and agencies. It is anticipated that most of these requirements will be established during Fiscal Year 1973. Based on the results of the requirements survey, OTP plans to determine the technical arrangements necessary to meet these requirements, including the degree of compatibility among Federal systems needed to permit the required exchange of information.

B. Emergency Preparedness

The purpose of the Emergency Preparedness Program is to insure that national and Federal communications systems are fully capable of meeting priority needs under emergency conditions, including nuclear attack. This is a demanding task, because of the numerous contingencies that must be provided for--both with respect to the nature and location of the disruption and with respect to the nature and location of the services which, in one or another circumstance, it must be considered vital to restore. Emergency communications plans and capabilities must comply with three basic principles. First, maximum dual use of facilities for both emergency and routine operations. Second, balanced survivability among communications and the facilities which are supported by communications. Third, focusing of responsibility to assure accomplishment.

OTP has completed reviews of those existing and proposed emergency communications systems which would provide warning and emergency information to the people of the United States under conditions of nuclear attack or natural disaster. These include the Emergency Broadcast System, the proposed radio warning system of the Office of Civil Defense, the radio warning systems of the National Oceanic and Atmospheric Administration, and the proposed warning capability through the facilities of private broadcasting. These reviews have resulted in the following: (1) Changes in the Emergency Broadcast System, to improve its reliability. (2) Separation of the warning

function from the Emergency Broadcast System. (3) The selection from among various alternatives of the most promising approach to a nationwide public warning system. (4) Identification of a need for design of an inexpensive home warning receiver, a project which the Office of Civil Defense is now working on. (5) Establishment of an Administration policy that legislation will not be sought requiring the inclusion of a warning receiver in every new radio or television set.

OTP is reviewing the policies and procedures under which critical private line services would be restored by the United States communications common carriers. Since no system of pre-set restoration priorities can be satisfactory for all emergency conditions, some mechanism must be developed to provide for flexible management of national resources when central control is possible. To this end, OTP has directed the preparation of a new plan for providing on-the-scene communications facilities and resource management capabilities to Federal field teams deployed in areas where a natural disaster has struck. This Office is also completing a study of the basic organizational framework for emergency communications management, and has prepared a communications annex to Federal emergency plans. During Fiscal Year 1973 OTP expects to complete a plan for effective Federal field organization for communications management under war emergency conditions.

OTP is concerned with the design features that should be incorporated in national communications facilities to increase their resistance to nuclear weapons effects. The principal nuclear effect now under study is the electromagnetic pulse from high altitude nuclear detonations. The Office is also working with the Department of Defense to assure that measures taken to enhance the survivability of communications links are consistent with the survivability of the terminal points of the system.

III. INTERNATIONAL COMMUNICATIONS

A. Communications Satellites

1. INTELSAT

Negotiation of Definitive Arrangements for INTELSAT was completed in 1971, and they are expected to take effect during 1972. They will change the U.S. role in INTELSAT, in that we will no longer have a controlling voice in its governing body, although we will have substantial continuing influence in decision-making; Comsat's assured tenure as the contract manager of INTELSAT will be limited to six years; and several new organs are created which involve direct government participation in the organization. These changes give added importance to OTP's obligation, in conjunction with the Department of State and the FCC, to advise Comsat as our Government's representative to INTELSAT.

2. Domestic and Regional Systems

The FCC is considering several applications for domestic satellite systems. Most propose service between the mainland and Hawaii, which is now provided by INTELSAT. The transition from INTELSAT services to domestic satellite services may have a significant impact on the Pacific INTELSAT region. Similarly, the Europeans are planning domestic and regional systems which could affect present INTELSAT services. OTP advice will be required as to these and other interfaces between INTELSAT and domestic and regional systems.

3. Specialized Satellite Communications Services

In this area, the issue is the institutional structure within which specialized services will evolve. OTP announced a policy in January, 1971, providing guidelines for the establishment of a new structure for international aeronautical satellite communication services. Subsequently, FAA, DOT, and the Department of State discussed this matter with the European countries (ESRO) and drafted a Memorandum of Understanding defining a joint international program. OTP reviewed the Memorandum, along with other Executive agencies, and prepared a recommendation which was accepted by the White House. OTP is currently engaged in coordinating the renegotiation of a joint international program.

With respect to maritime satellite services, the Coast Guard, the American Institute for Merchant Shipping, and the Maritime Commission consider that such services will be required well before the end of this decade. OTP will work with those organizations during Fiscal Year 1973 to insure that maritime requirements will be satisfied in the most efficient manner.

OTP has already recommended that the aeronautical satellite program be designed to accommodate future maritime requirements.

4. Broadcast Satellites

Satellite technology is available to initiate direct broadcasts to the home, but the political problems involved in the use of broadcast media to cross national boundaries remain an obstacle to institution of this service. The UN is the principal forum in which this matter will be resolved, and the issue has already been joined. Obviously, proposals which would prohibit international satellite broadcasts whose content is not approved by the receiving state raise questions fundamental to our national principles. In conjunction with the Department of State, OTP will participate in the inter-governmental groups working in the broadcast satellite area.

B. International Industry Structure and Facilities

The U.S. international communications industry provides vital communications services for American business, the public, and national security organizations. The structure and performance of this industry have been under criticism from Congressional and other sources for many years, and this criticism has increased with the advent of the new technology of communication satellites and the creation of a quasi-governmental corporation (Comsat) to represent United States interests in the international use of this technology. As a result of a highly complex and artificial industry structure (largely the creation of the Government itself), the traditional problems of rate and investment regulation are particularly acute in the international field; and because of divergent incentives there are widely divergent views in the industry with respect to the best "mix" of international transmission facilities (i.e., cables and satellites). It thus becomes necessary for the FCC to rule on competing or alternative proposals for new facility construction, and to allocate the traffic among various facilities and carriers.

OTP has examined the present structure of the international communications industry to identify sources of inefficiency and duplication, as well as impediments to competition and rate reduction. Its recommendations will soon be forwarded to Senator Pastore in response to his request for Administration views in this area.

In May of 1971, OTP completed a comprehensive study of international transmission requirements and alternative facilities

for the Atlantic Basin, including comparative cost and performance estimates. This was forwarded to the FCC, with policy recommendations concerning authorization criteria needed to avoid inefficient future investment in international transmission facilities. OTP is presently conducting a similar case study for the Pacific Basin. It has the same objective of establishing firm analytic procedures and investment criteria for use in the authorization process, so that the international carriers and their foreign counterparts can plan future investments with reasonable assurance. Implementation of policies concerning international communications will require continued effort in future years.

C. International Organization Activities

1. UNESCO

During 1972, UNESCO will convene several meetings to develop guidelines for use of communication satellites in the international distribution, and possible international broadcasting, of radio and television programming. OTP has worked closely with the United States Patent Office, the Department of State, and the FCC, as well as various interested groups in the broadcasting industry, to establish and maintain a sound and consistent U.S. position on standards, codes of conduct, and intellectual property rights protection. Because of the expected developments within UNESCO and, possibly, within the World Intellectual Properties Organization, these activities are expected to continue throughout Fiscal 1973.

2. International Telecommunication Union

The International Telecommunication Union, a specialized agency of the United Nations with 141 member administrations, maintains and extends international cooperation for the improvement and rational use of telecommunications of all kinds. The Union uses world conferences of its members to review and update the international regulations needed to assure the smooth flow of global radio and telegraph communications. A principal function is the allocation of radio frequencies among the respective radio services (amateur, broadcasting, fixed, aeronautical mobile, communication satellites, etc.). During the past year, OTP provided guidance for U.S. participation in ITU activities. As a result of the combined effort of the Executive Branch, the FCC, and industry interests, U.S. objectives in accommodating space communication requirements were achieved at the World Administrative Radio Conference on Space Telecommunications.

OTP has developed in conjunction with the FCC the means of implementing the decisions of this Conference, as soon as Senate ratification of the Conference results is obtained.

In 1973, an ITU Plenipotentiary Conference will be convened to review and update the International Telecommunications Convention. Principal issues involved in U.S. participation include whether the United States should advocate changes in the organization or the purposes of the ITU, and whether a new international communications organization should be formed to cope with policy issues unrelated to technological cooperation. As part of its preparatory work, the United States must study these and other questions in depth and prepare position papers aimed at assuring responsiveness of the ITU to the international telecommunications requirements of the 1970's and 1980's. OTP is working with the Department of State on the recommended scope of the Conference and the general objectives the United States should seek to attain; it will remain active during Fiscal Year 1973 in developing and coordinating the U.S. position, and commenting upon the positions of other countries. Similar efforts have been begun in preparation for the World Administrative Radio Conference on Maritime Matters scheduled for 1974.

The ITU maintains two major international coordinating bodies known as the International Consultative Committee on Telegraph and Telephone and the International Consultative Committee on Radio. These organizations have numerous technical study groups which examine problems regarding international standards, practices, system planning, and rates applicable to the international communications services. OTP is responsible for coordinating the preparation of U.S. positions for such activities, particularly those dealing with technical and operational aspects of radio frequency spectrum planning, allocation, and use. During Fiscal Year 1973, activities dealing with the problems of space technology will be particularly important.

IV. SPECTRUM PLANS AND POLICIES

There is intense national and international competition for the use of the radio spectrum for all forms of radio transmissions (radio communications, navigation, broadcasting, radar, air traffic control, etc.). The Federal Government is the largest single user of the spectrum, and OTP directs Government activities related to spectrum management and planning. This includes cooperating with the FCC to develop plans for the more effective use of the entire spectrum, for both Government and non-Government purposes.

Specific tasks involved fall basically within the categories of allocation and assignment for particular uses, evaluation of possible biomedical side effects of electromagnetic radiations, and planning to meet Government and non-Government national needs.

In the allocation and assignment area, much progress has been made in Fiscal 1972. The results of improved ADP and engineering capabilities were applied to direct more effectively the assignment of frequencies to Government stations (about 120,000 actual assignments on file). Specific analyses were conducted of the interference potential among competing interests for the same spectrum resources (e.g., interference betwen Collision Avoidance Systems and Altimeters; malfunctioning CATV systems and Air Traffic Control services; tropospheric scatter systems and space systems) and an interference prediction model for Air Traffic Control air-ground communications was developed. New procedures were developed to assess the potential electromagnetic compatibility among communications and electronics systems before budgetary support is committed; these procedures will greatly improve Federal planning and budgeting for communications systems, and will save both dollar and spectrum resources. Some 8000 MHz of spectrum, previously reserved for exclusive Government use, was made available to the FCC for sharing by non-Government interests. In the allocation and assignment area during the coming Fiscal Year, OTP plans to continue the development of an electromagnetic compatibility analysis capability to realize better efficiency in Federal use of the spectrum. More engineering analyses are projected in such areas as interference between the Decision Information Distribution System and power line systems, interference prediction with respect to air-ground communications, the compatibility of Government systems at 7/8 GHz, and the compatibility of proposed aeronautical and maritime satellite operations between 1535 and 1660 MHz. The Office will update the national emergency readiness plan for use of the radio spectrum, and will monitor

Government agency compliance with the allocations resulting from ITU Conferences (1967 Maritime WARC and 1971 Space WARC). A stronger technical base will also be developed for Government use of the spectrum--standards, monitoring, technical characteristics, receiver improvement, research in the field of radio wave propagation, and radio noise abatement.

There is some evidence and much apprehension about the hazards of electromagnetic radiations. With respect to biomedical effects, OTP established during the past year a coordinated "Program for Assessment of Biological Hazards of Nonionizing Electromagnetic Radiations." Under this program, the Office provided guidance to Federal Government agencies concerning needed research. The program is being pressed to fruition at the earliest practicable date (a coordinated five-year effort of some $63 million allocated among the cognizant agencies of the Government, much of which is already budgeted).

In the category of spectrum planning, a study was initiated during Fiscal Year 1972 to develop alternative methods for allocation of spectrum resources which would give more accurate weight to all relevant technical, economic, and social criteria. In cooperation with the FCC, a review of present frequency allocations and uses was initiated with a view to reallocation and improved sharing arrangements between Government and non-Government uses. Both these activities will continue in the coming Fiscal Year.

CONCLUSION

This concludes my explanation of the projects and activities undertaken by OTP during Fiscal Year 1972 and contemplated under the budget estimates you have before you. We believe that our plans and projections serve fully the mission we have been assigned by the President and the Congress.

Despite the length of this presentation, I am confident that some matters have not been covered in as complete detail as the Subcommittee would find helpful. I shall be happy to answer any questions you may have.

STATEMENT BY

CLAY T. WHITEHEAD, DIRECTOR

OFFICE OF TELECOMMUNICATIONS POLICY

before the

Subcommittee on Treasury, Post Office, and General Government
The Honorable Joseph M. Montoya, Chairman
Appropriations Committee
United States Senate

May 2, 1972

STATEMENT BY

CLAY T. WHITEHEAD

DIRECTOR, OFFICE OF TELECOMMUNICATIONS POLICY

Mr. Chairman and Members of the Subcommittee, I appreciate the opportunity to discuss with you the budget requests of the Office of Telecommunications Policy (OTP). You have before you our Budget Estimates in some detail; I would like to use this occasion principally to discuss the various activities on which those funds are to be expended.

Initially, however, I want to volunteer a few observations concerning the numbers you have before you. Our total request of $3,084,000, represents a net increase of $484,000 above last year. The vast majority of that is attributable to the increases in Civil Service compensation enacted by Congress this past session, and to the fact that this is the first budget which contemplates operations at a fully staffed level for the entire fiscal year. We are seeking no increase in the level of our presently authorized staff, and only a modest increase ($25,000) in the funds which we may use for research that can be done better or more economically on a contractual basis than inhouse. I stated to you in our hearings last year that it was not our intention to create a huge bureaucracy out of this new office; I stand by that statement, and our activities to date and the current budget request bear it out.

I appreciate the problem which you gentlemen face in evaluating the efficiency and utility of an agency that cannot measure its output in terms of applications processed, miles of highway paved, or even radio and television licenses issued and renewed. As our name indicates, our contribution to Government is less quantifiable, but nonetheless valuable. The fruits of our endeavors are to be found in governmental decisions--usually decisions rendered by other governmental entities, including the FCC and the Congress itself--which can affect the shape of United States communications for years to come.

I would like, therefore, to discuss with you in some detail the major projects to which my Office has devoted its energies during the last fiscal year, and those which it intends to pursue under the proposed budget. They fall into four major areas, namely domestic communications, Government communications, international communications, and spectrum management and use, with a number of subcategories under each.

I. DOMESTIC COMMUNICATIONS

A. Common Carrier Communications

Common carrier communications is for the most part a monopoly public utility service provided by the Bell system and independent telephone companies. The performance of the industry has come under increasing criticism in recent years, and it has been proposed that various segments of common carrier operations be opened to competition. In response to such proposals, the carriers have asserted that the benefits of economy of scale and operational integrity derived from integrated ownership and operation far outweigh any potential customer benefits from competition.

OTP has initiated several investigations into these questions. The ultimate aims of these studies are, first, to develop recommendations as to which aspects of common carrier operation can safely be opened to increased competition, and which should remain under integrated control; and, second, to determine the regulatory principles and practices best designed to ensure that noncompetitive operations remain efficient and innovative.

Principal studies and findings to date include the following:

1. Domestic Satellite Communications

OTP has found that there are insufficient economies of scale in domestic satellite communications to warrant government restriction of competition. Its studies showed that all of the satellite applications on file with the FCC are economically viable, technically compatible, and could be accommodated within existing spectrum and orbital space. OTP therefore recommended to the FCC that any technically and financially qualified applicant be allowed to establish and operate satellite systems on a competitive basis.

2. Specialized Communications Carriers

The entry of new communications carriers offering "specialized" services (e.g., data, private line, video interconnection, etc.) in competition with the existing telephone carriers was approved in principle by the FCC, but a number of issues which could determine the practical feasibility of competitive entry were left unresolved--such as the allowable pricing response and interconnection constraints.

OTP has commenced investigation of the more important unresolved issues, including the technical and economic implications of alternative interconnection policies which will, among other factors, affect competition in the supply of terminal equipment (e.g., telephone and data sets) to be used with the existing telephone "network." These will be long-term studies and could result in new FCC regulations or legislation.

3. Common Carrier Regulation

Even if it is feasible to introduce competition into selective aspects of common carrier operations, it will affect only about 10-20% of total operations. Most common carrier operations, notably the public message telephone service, will continue to be a natural monopoly.

Effective regulation of natural monopolies is necessary to prevent investments in inefficient facilities, excessive rates and profits, technological obsolescence, service degradation, and other problems, but it is difficult for government to second-guess a large public utility on detailed investment and operating decisions. For this reason, in Fiscal Year 1973 OTP will continue to explore the desirability of encouraging better public performance of regulated utilities through improved policies rather than increasingly detailed regulation. Some of these policies include:

a. Alternatives to Rate of Return Regulation: Traditional common carrier regulation is based on an agency-determined "fair" rate of return which requires establishment of a "rate base" (i.e., the amount of investment) and detailed information on profit flow. But this method of regulation can create incentives for excessive investment in capital equipment and can distort normal business decisions in other ways which affect technological progress. OTP will attempt to determine (a) the magnitude of the distortions, if any, caused by rate-base regulation and (b) whether there are alternatives to rate-base regulation. It is very difficult to perform quantitative comparisons to test the hypothesis of rate-base distortions when dealing with a natural monopoly. OTP has studies underway in this area.

b. Depreciation Programs: Common carrier equipment is typically depreciated over very long periods corresponding to the expected physical life of the equipment, although the useful life is often much shorter due to rapid technological

advances. This is only one aspect of depreciation policies that affect common carrier financial decisions and customer rates; other aspects are disposition of fixed asset salvage, and separation of depreciable and nondepreciable investments. In Fiscal Year 1973, OTP will undertake a comprehensive investigation of depreciation practices, objectives, effects, and alternatives in the common carrier industry.

B. Cable Television and Broadband Communications

Broadband cable systems represent a new communications medium which can increase consumer choice in television programming and provide many new communication services hitherto unavailable. The immediate effect of cable expansion, however, is to disrupt some of the distribution practices of the existing television industry and to threaten the economic position of some broadcast stations and copyright owners. There is urgent need for policies to guide the development and regulation of cable in such a fashion that its enormous benefits can be rapidly achieved without depriving the society of its healthy programming industry and its essential broadcasting services.

OTP has undertaken a series of studies and investigations to identify and illuminate particular aspects of broadband cable development which require policy consideration, and to develop policy recommendations. These include:

a. A study of the present and projected costs of broadband cable systems, to serve as a basis for estimating future growth patterns and rates of development of cable distribution systems.

b. A study of the television program production industry and its economics, to serve as a basis for estimating the growth in new television programming likely to occur as a result of cable system development.

c. A study directed to the development of an industry simulation model to be used in conjunction with the results of (a) and (b) to predict future industry development.

d. Definition of a study project on projected consumer demand for cable television under alternative policies.

In addition to these studies, OTP has provided supporting analysis and developed alternative policy recommendations for the

President's Cabinet committee on cable television. In this work it has examined, among other matters, the economic and social effects of vertical integration in the production and distribution of cable television programming; the probable impact of expected cable growth on the broadcast and copyright industries; the problems of access to the cable media by all segments of the public and industry; and considerations pertaining to joint ownership of broadcast, cable, and telephone facilities. Policy alternatives pertaining to these various matters were developed for consideration by the Cabinet committee. The results of this activity have been presented to the committee, which is expected to complete its report in the near future.

A significant achievement in the cable television field was resolution of the long-standing controversy concerning distant signal importation, that is, cable use of signals broadcast by out-of-market television stations. The distant signal question involved complex, interrelated issues such as CATV's need to offer this service in order to attract capital and begin its growth, the effect of distant signal competition upon the economic stability of local radio and TV stations, program suppliers' need for copyright protection, and the public need for a wide diversity of quality program services. In August, the FCC announced its intention to end the six-year "freeze" on distant signal importation without provisions for copyright payment and copyright exclusivity protection. This aroused great concern within the broadcasting and copyright industries, which threatened to seek Congressional action to stop implementation of the new rules. While the outcome of such an effort was unclear, it would surely have created uncertainty and delay in the regularization of cable television growth. Since OTP believed further delay and uncertainty would be harmful to the public interest, it took the initiative in seeking to act as mediator in the dispute. The principal parties ultimately agreed upon a compromise plan, the main feature of which is to supplement the FCC's rules with regulatory and legislative copyright and exclusivity provisions. The desirability of this plan is now being considered by the FCC, which is completing action on its new cable television rules, and by the Congress, which is considering new copyright legislation.

In Fiscal 1973, OTP will continue its attempts to assist the FCC and the Congress in resolving the complex, but fundamental, policy questions that attend the full development of this new technology. In this regard, OTP recently received the results of a study on the feasibility of designing a broadband cable pilot program for a few selected urban and rural communities to demonstrate the utility of the technology to meet various needs

in the fields of education, health information, vocational training and assistance, and business. OTP is considering how best to proceed in this area. OTP will also prepare and document whatever legislation the President may deem necessary to implement the recommendations of the Cabinet committee.

C. Broadcasting

1. Public Broadcasting

The Public Broadcasting Act of 1967 created a framework for educational and instructional broadcasting, largely as envisioned by the Carnegie Commission on Educational Television. However, the means of establishing a stable source of Federal support funds which would avoid detailed government oversight of program content, was left unresolved and has remained so. In addition, the years since 1967 have witnessed the development of important new technologies for which no provision is made in the Public Broadcasting Act.

During the past year OTP sought to achieve amendments to the Act which would eliminate both these deficiencies. It consulted with interested organizations in public broadcasting and with the relevant agencies of government, and reviewed a range of approaches to new legislation. In the summer of 1971, it drafted and submitted for coordination to the Office of Management and Budget a bill which made provision for new technologies and established a financing plan consistent with the congressional intent for public broadcasting in general, and for the Corporation for Public Broadcasting (CPB) in particular. The bill was withdrawn for modification when it appeared that CPB could not support a financing approach that provided assured Federal funding of individual public broadcast stations.

In order to provide for the immediate financial needs of public broadcasting pending resolution of the difficult question of long-term funding, OTP prepared and submitted to the Congress this year an Administration Bill which increases the level of Federal support by 30%, almost all of the increase to be directed to local public broadcasting stations. Before this one-year Bill expires, OTP hopes to achieve consensus on long-term legislative proposals to meet the needs of public broadcasting in a manner consistent with the intent of the 1967 Act.

2. License Renewal Policy

One of the major broadcasting controversies of recent years has involved the triennial license renewal process. Although all can agree that a broadcaster who has performed well in the public interest should have his license renewed, the Congress, the FCC, and the courts have struggled with the questions of what is good performance and what standard should be used to judge the incumbent licensee's performance in the face of a challenge to his renewal application.

In Fiscal 1972, OTP developed and proposed for public discussion a wide-ranging series of suggestions for modifying the Communications Act of 1934, one of which dealt with license renewal policy. OTP pointed out the dangers of adopting renewal standards that lead inevitably to government supervision of program content. It proposed for discussion a more "neutral" renewal standard that would place the primary emphasis on the licensee's being attuned to the programming needs and interests of his local audience. Using this standard, a premium would be placed on the obligation to be directly responsive to community problems and issues; licensees who had met this obligation would be assured license renewal. This would lead to needed stability in an industry that must make relatively long-term commitments to public service.

In the coming year OTP hopes to work with interested citizen and industry groups, the Congress, and the FCC to create a workable license renewal policy which assures industry stability and service to the public.

3. Fairness Doctrine and Access to the Broadcast Media

Another critical issue--one that is central to the role of the mass media in an open society--is that of public access to the broadcast media for discussion of and information about controversial public issues. The FCC's Fairness Doctrine requires the broadcaster to make time available for the presentation of contrasting viewpoints once a particular side of a controversial issue of public importance has been expressed. Although not originally contemplated, this "fairness" obligation is now being enforced on an issue-by-issue, case-by-case basis, instead of through an overall evaluation of whether the broadcaster has kept the public well informed, with reasonable time for contrasting views. When enforced in this manner, the broadcaster's journalistic determinations are repeatedly second-guessed by agency and courts, and the government decides who shall speak on what issues.

This diminishes the "free press" discretion of the licensee and tends to convert broadcasting from a private enterprise activity to a government instrumentality.

A major incentive for case-by-case application of the Fairness Doctrine is the fact that individuals' access to the media for discussion of controversial issues can only effectively be achieved through that device. Broadcasters do not ordinarily sell their advertising time for such purposes--partly because they may be compelled to "balance" such presentations in their program time.

One of OTP's projects in FY 1972 was a study of Fairness Doctrine enforcement and the closely related problem of access to the media. In October 1971 it proposed for consideration several specific modifications of broadcast regulation in these fields. It participated in the FCC panel discussions on the Fairness Doctrine. It has published specific criticisms of recent proposals for compulsory free "counter-advertising."

OTP will continue during the coming year to explore various alternatives for solving the fairness and access dilemmas. It will seek to assist the Congress and the FCC in devising mechanisms to enhance free expression and to minimize government intervention in the marketplace of ideas.

4. Radio Regulation

For many years radio broadcasting has been regulated as an afterthought to television. Some of the rationales and assumptions, such as scarcity of outlets and restricted entry, which shaped early radio regulation and still justify regulation of television stations, have been rendered meaningless by the phenomenal growth in the number of AM and FM radio stations, offering widely diversified special program services to the public.

After studying the issue during FY 1972, OTP proposed to the FCC that it undertake an experiment in radio deregulation, with a view toward lessening the regulatory controls on commercial radio programming, commercial practices and other nontechnical operations. The proposal was supported by an OTP Staff Paper setting forth the reasons such an experiment seemed appropriate and promising. The FCC is now considering this proposal and OTP intends to work with the Commission, to the extent deemed desirable, in order to implement a pilot plan.

D. Federal-State Communications

Communication issues affecting State and local governments arise in every substantive area and in varying contexts. For example, the planning of a national emergency communication system requires State and local participation; regulation of the communications common carrier industry has traditionally been divided between the FCC and State public utility commissions; regulation of CATV systems has been divided between the FCC and local (municipal) authorities; public broadcasting and educational communications involve State and local governments to a significant degree; the operation of public safety communications systems (police, fire, ambulance, etc.) are usually under the direct operational control of local officials; and in many cases, local governmental communication facilities and services are funded in whole or in part through Federal grant-in-aid programs.

To provide guidance and assistance to State and local governments, OTP has undertaken one general and several specific tasks. The general task is to identify the various Federal assistance programs involving telecommunications, in order to advise State and local governments on the effective utilization of these programs, and in order to inform the Congress of duplications or deficiencies. This review is now in progress under OTP supervision, and should be completed by the end of Fiscal Year 1972.

Among the specific tasks which OTP has undertaken in this area are (a) assistance to the States of Hawaii and Alaska in identifying communications needs which might be met through modern technology (e.g., communication satellites), and in developing plans and programs for using such technology; (b) advice to local and State government officials concerning the potential and the problems of broadband cable communications and CATV, and the desirable manner of State and local regulation; and (c) consultation with State public utility commissioners concerning the impact of new specialized communications carriers, broadband cable systems, and data communications services on traditional regulatory policies and practices. Since these tasks are largely consultative and ad hoc in nature, it is difficult to specify a future timetable. OTP does expect, however, that major requirements for information and consultation will emerge from long-range cable policy development; this expectation is based upon the very large flow of such requests which were stimulated by the announcement and preliminary work of the Cabinet committee. OTP also anticipates a substantial continuing requirement for assistance to Hawaii, Alaska, and the U.S. Trust Territories as their internal communication planning activities progress.

E. Mobile Communications

The frequency spectrum available for mobile radio services has recently been tripled by the FCC. The mobile communications industry will no longer be limited by a frequency shortage but will face classical supply and demand limitations. This will raise a number of issues as to appropriate types of new systems, new services, and the institutional structure to support them. The transition from spectrum scarcity to spectrum abundance must be regulated to create an industry structure that is sensitive to future demands for communications services of all types, including improved mobile telephone services for urban areas, integrated dispatch services, and public telephone services for domestic aircraft.

OTP has begun a program, with assistance from the Policy Support Division of The Office of Telecommunication of the Department of Commerce, to assess the technical, economic, and institutional effects of proposed new mobile systems and services and to formulate policy guidelines for the development and regulation of the expanded industry. In cooperation with the FCC, DOT, LEAA, HEW, and HUD, OTP will assess the feasibility of a pilot program to demonstrate innovative uses of mobile communications services in support of public safety, emergency health services, highway safety, and transportation in general.

F. New Technology

During the past decade there have been radical improvements in communications technology resulting from independent research and development of U.S. industry, research in the academic community, the U.S. space program, and other Government sponsored R&D. These technologies provide opportunities for vastly improved and expanded communications services, which could have significant social and economic effects if exploited properly.

OTP plans a study effort designed primarily to identify areas in which new technological advances are occurring and to evaluate the effect of these technologies upon the existing structure of the domestic communications industries. In the coming year, OTP hopes to identify in broad terms the current state-of-the-art in major fields of communications technology, and to isolate any natural limiting factors. If necessary, OTP will develop policy guidelines regarding the application of a new technology to a particular use.

II. GOVERNMENT COMMUNICATIONS

A. Federal Communications Policy and Planning

The Federal Government's own communications consume from 5 to 10 billion dollars per year. The major concerns in this field are avoidance of duplication, effective management of the acquisition of new systems, achievement of compatibility among systems, and satisfactory operating performance. The creation of the National Communications System in 1963, which sought to integrate long-haul, point-to-point communications of the Federal Government into a united system, has not significantly affected the planning, design and cost of government communications systems, although it has contributed to better coordination of day-to-day operations. The majority of Federal communications expenditures are beyond the scope of the NCS and have not been addressed at all from an overall Federal point of view.

The major objectives of the OTP program in the area of Federal communications are: First, identifying all the communications activities and resources of the Federal Government; second, determining the needs for effective information exchange among the various departments and agencies; and finally, taking action in those areas in which integration will best achieve the ends of efficiency and economy.

OTP has completed a review of all existing studies and analyses pertaining to the integration of the two largest communications networks in the Federal Government, the AUTOVON network and the FTS. OTP has determined that integration should not be attempted at this time.

OTP has undertaken a review of existing and planned radio navigation aids operated or used by various elements of the Federal Government, accounting for the expenditure of between one and three billion dollars annually (not including expenditures by private users). It is now discussing with the affected Federal departments the designation of a single system as the standard long-range radio navigation system and the formulation of a schedule on which other long-range systems can be phased out. It is planning an evaluation of the many different position-fixing systems used by the Government, to determine how many are needed to meet all requirements, and how many might be replaced if a global, high-accuracy navigation satellite system is deployed.

OTP has begun a review of all the Government's communications satellite programs, with an eye toward identifying avoidable duplication and assuring that available economies of scale are exploited. It will initiate a similar review of

computer-communications networks. The assistance of major Federal departments and agencies will be solicited in both these reviews, and they are expected to be completed in time to influence the preparation of the Fiscal Year 1974 Budget.

OTP has begun work with other elements of the Executive Office of the President to determine the probable future communications needs of the Executive Office, particularly the needs for integration with the communications and information handling systems of the departments and agencies. It is anticipated that most of these requirements will be established during Fiscal Year 1973. Based on the results of the requirements survey, OTP plans to determine the technical arrangements necessary to meet these requirements, including the degree of compatibility among Federal systems needed to permit the required exchange of information.

B. Emergency Preparedness

The purpose of the Emergency Preparedness Program is to insure that national and Federal communications systems are fully capable of meeting priority needs under emergency conditions, including nuclear attack. This is a demanding task, because of the numerous contingencies that must be provided for--both with respect to the nature and location of the disruption and with respect to the nature and location of the services which, in one or another circumstance, it must be considered vital to restore. Emergency communications plans and capabilities must comply with three basic principles. First, maximum dual use of facilities for both emergency and routine operations. Second, balanced survivability among communications and the facilities which are supported by communications. Third, focusing of responsibility to assure accomplishment.

OTP has completed reviews of those existing and proposed emergency communications systems which would provide warning and emergency information to the people of the United States under conditions of nuclear attack or natural disaster. These include the Emergency Broadcast System, the proposed radio warning system of the Office of Civil Defense, the radio warning systems of the National Oceanic and Atmospheric Administration, and the proposed warning capability through the facilities of private broadcasting. These reviews have resulted in the following: (1) Changes in the Emergency Broadcast System, to improve its reliability. (2) Separation of the warning

function from the Emergency Broadcast System. (3) The selection from among various alternatives of the most promising approach to a nationwide public warning system. (4) Identification of a need for design of an inexpensive home warning receiver, a project which the Office of Civil Defense is now working on. (5) Establishment of an Administration policy that legislation will not be sought requiring the inclusion of a warning receiver in every new radio or television set.

OTP is reviewing the policies and procedures under which critical private line services would be restored by the United States communications common carriers. Since no system of pre-set restoration priorities can be satisfactory for all emergency conditions, some mechanism must be developed to provide for flexible management of national resources when central control is possible. To this end, OTP has directed the preparation of a new plan for providing on-the-scene communications facilities and resource management capabilities to Federal field teams deployed in areas where a natural disaster has struck. This Office is also completing a study of the basic organizational framework for emergency communications management, and has prepared a communications annex to Federal emergency plans. During Fiscal Year 1973 OTP expects to complete a plan for effective Federal field organization for communications management under war emergency conditions.

OTP is concerned with the design features that should be incorporated in national communications facilities to increase their resistance to nuclear weapons effects. The principal nuclear effect now under study is the electromagnetic pulse from high altitude nuclear detonations. The Office is also working with the Department of Defense to assure that measures taken to enhance the survivability of communications links are consistent with the survivability of the terminal points of the system.

III. INTERNATIONAL COMMUNICATIONS

A. Communications Satellites

1. INTELSAT

Negotiation of Definitive Arrangements for INTELSAT was completed in 1971, and they are expected to take effect during 1972. They will change the U.S. role in INTELSAT, in that we will no longer have a controlling voice in its governing body, although we will have substantial continuing influence in decision-making; Comsat's assured tenure as the contract manager of INTELSAT will be limited to six years; and several new organs are created which involve direct government participation in the organization. These changes give added importance to OTP's obligation, in conjunction with the Department of State and the FCC, to advise Comsat as our Government's representative to INTELSAT.

2. Domestic and Regional Systems

The FCC is considering several applications for domestic satellite systems. Most propose service between the mainland and Hawaii, which is now provided by INTELSAT. The transition from INTELSAT services to domestic satellite services may have a significant impact on the Pacific INTELSAT region. Similarly, the Europeans are planning domestic and regional systems which could affect present INTELSAT services. OTP advice will be required as to these and other interfaces between INTELSAT and domestic and regional systems.

3. Specialized Satellite Communications Services

In this area, the issue is the institutional structure within which specialized services will evolve. OTP announced a policy in January, 1971, providing guidelines for the establishment of a new structure for international aeronautical satellite communication services. Subsequently, FAA, DOT, and the Department of State discussed this matter with the European countries (ESRO) and drafted a Memorandum of Understanding defining a joint international program. OTP reviewed the Memorandum, along with other Executive agencies, and prepared a recommendation which was accepted by the White House. OTP is currently engaged in coordinating the renegotiation of a joint international program.

With respect to maritime satellite services, the Coast Guard, the American Institute for Merchant Shipping, and the Maritime Commission consider that such services will be required well before the end of this decade. OTP will work with those organizations during Fiscal Year 1973 to insure that maritime requirements will be satisfied in the most efficient manner.

OTP has already recommended that the aeronautical satellite program be designed to accommodate future maritime requirements.

4. Broadcast Satellites

Satellite technology is available to initiate direct broadcasts to the home, but the political problems involved in the use of broadcast media to cross national boundaries remain an obstacle to institution of this service. The UN is the principal forum in which this matter will be resolved, and the issue has already been joined. Obviously, proposals which would prohibit international satellite broadcasts whose content is not approved by the receiving state raise questions fundamental to our national principles. In conjunction with the Department of State, OTP will participate in the inter-governmental groups working in the broadcast satellite area.

B. International Industry Structure and Facilities

The U.S. international communications industry provides vital communications services for American business, the public, and national security organizations. The structure and performance of this industry have been under criticism from Congressional and other sources for many years, and this criticism has increased with the advent of the new technology of communication satellites and the creation of a quasi-governmental corporation (Comsat) to represent United States interests in the international use of this technology. As a result of a highly complex and artificial industry structure (largely the creation of the Government itself), the traditional problems of rate and investment regulation are particularly acute in the international field; and because of divergent incentives there are widely divergent views in the industry with respect to the best "mix" of international transmission facilities (i.e., cables and satellites). It thus becomes necessary for the FCC to rule on competing or alternative proposals for new facility construction, and to allocate the traffic among various facilities and carriers.

OTP has examined the present structure of the international communications industry to identify sources of inefficiency and duplication, as well as impediments to competition and rate reduction. Its recommendations will soon be forwarded to Senator Pastore in response to his request for Administration views in this area.

In May of 1971, OTP completed a comprehensive study of international transmission requirements and alternative facilities

for the Atlantic Basin, including comparative cost and performance estimates. This was forwarded to the FCC, with policy recommendations concerning authorization criteria needed to avoid inefficient future investment in international transmission facilities. OTP is presently conducting a similar case study for the Pacific Basin. It has the same objective of establishing firm analytic procedures and investment criteria for use in the authorization process, so that the international carriers and their foreign counterparts can plan future investments with reasonable assurance. Implementation of policies concerning international communications will require continued effort in future years.

C. International Organization Activities

1. UNESCO

During 1972, UNESCO will convene several meetings to develop guidelines for use of communication satellites in the international distribution, and possible international broadcasting, of radio and television programming. OTP has worked closely with the United States Patent Office, the Department of State, and the FCC, as well as various interested groups in the broadcasting industry, to establish and maintain a sound and consistent U.S. position on standards, codes of conduct, and intellectual property rights protection. Because of the expected developments within UNESCO and, possibly, within the World Intellectual Properties Organization, these activities are expected to continue throughout Fiscal 1973.

2. International Telecommunication Union

The International Telecommunication Union, a specialized agency of the United Nations with 141 member administrations, maintains and extends international cooperation for the improvement and rational use of telecommunications of all kinds. The Union uses world conferences of its members to review and update the international regulations needed to assure the smooth flow of global radio and telegraph communications. A principal function is the allocation of radio frequencies among the respective radio services (amateur, broadcasting, fixed, aeronautical mobile, communication satellites, etc.). During the past year, OTP provided guidance for U.S. participation in ITU activities. As a result of the combined effort of the Executive Branch, the FCC, and industry interests, U.S. objectives in accommodating space communication requirements were achieved at the World Administrative Radio Conference on Space Telecommunications.

OTP has developed in conjunction with the FCC the means of implementing the decisions of this Conference, as soon as Senate ratification of the Conference results is obtained.

In 1973, an ITU Plenipotentiary Conference will be convened to review and update the International Telecommunications Convention. Principal issues involved in U.S. participation include whether the United States should advocate changes in the organization or the purposes of the ITU, and whether a new international communications organization should be formed to cope with policy issues unrelated to technological cooperation. As part of its preparatory work, the United States must study these and other questions in depth and prepare position papers aimed at assuring responsiveness of the ITU to the international telecommunications requirements of the 1970's and 1980's. OTP is working with the Department of State on the recommended scope of the Conference and the general objectives the United States should seek to attain; it will remain active during Fiscal Year 1973 in developing and coordinating the U.S. position, and commenting upon the positions of other countries. Similar efforts have been begun in preparation for the World Administrative Radio Conference on Maritime Matters scheduled for 1974.

The ITU maintains two major international coordinating bodies known as the International Consultative Committee on Telegraph and Telephone and the International Consultative Committee on Radio. These organizations have numerous technical study groups which examine problems regarding international standards, practices, system planning, and rates applicable to the international communications services. OTP is responsible for coordinating the preparation of U.S. positions for such activities, particularly those dealing with technical and operational aspects of radio frequency spectrum planning, allocation, and use. During Fiscal Year 1973, activities dealing with the problems of space technology will be particularly important.

IV. SPECTRUM PLANS AND POLICIES

There is intense national and international competition for the use of the radio spectrum for all forms of radio transmissions (radio communications, navigation, broadcasting, radar, air traffic control, etc.). The Federal Government is the largest single user of the spectrum, and OTP directs Government activities related to spectrum management and planning. This includes cooperating with the FCC to develop plans for the more effective use of the entire spectrum, for both Government and non-Government purposes.

Specific tasks involved fall basically within the categories of allocation and assignment for particular uses, evaluation of possible biomedical side effects of electromagnetic radiations, and planning to meet Government and non-Government national needs.

In the allocation and assignment area, much progress has been made in Fiscal 1972. The results of improved ADP and engineering capabilities were applied to direct more effectively the assignment of frequencies to Government stations (about 120,000 actual assignments on file). Specific analyses were conducted of the interference potential among competing interests for the same spectrum resources (e.g., interference betwen Collision Avoidance Systems and Altimeters; malfunctioning CATV systems and Air Traffic Control services; tropospheric scatter systems and space systems) and an interference prediction model for Air Traffic Control air-ground communications was developed. New procedures were developed to assess the potential electromagnetic compatibility among communications and electronics systems before budgetary support is committed; these procedures will greatly improve Federal planning and budgeting for communications systems, and will save both dollar and spectrum resources. Some 8000 MHz of spectrum, previously reserved for exclusive Government use, was made available to the FCC for sharing by non-Government interests. In the allocation and assignment area during the coming Fiscal Year, OTP plans to continue the development of an electromagnetic compatibility analysis capability to realize better efficiency in Federal use of the spectrum. More engineering analyses are projected in such areas as interference between the Decision Information Distribution System and power line systems, interference prediction with respect to air-ground communications, the compatibility of Government systems at 7/8 GHz, and the compatibility of proposed aeronautical and maritime satellite operations between 1535 and 1660 MHz. The Office will update the national emergency readiness plan for use of the radio spectrum, and will monitor

Government agency compliance with the allocations resulting from ITU Conferences (1967 Maritime WARC and 1971 Space WARC). A stronger technical base will also be developed for Government use of the spectrum--standards, monitoring, technical characteristics, receiver improvement, research in the field of radio wave propagation, and radio noise abatement.

There is some evidence and much apprehension about the hazards of electromagnetic radiations. With respect to biomedical effects, OTP established during the past year a coordinated "Program for Assessment of Biological Hazards of Nonionizing Electromagnetic Radiations." Under this program, the Office provided guidance to Federal Government agencies concerning needed research. The program is being pressed to fruition at the earliest practicable date (a coordinated five-year effort of some $63 million allocated among the cognizant agencies of the Government, much of which is already budgeted).

In the category of spectrum planning, a study was initiated during Fiscal Year 1972 to develop alternative methods for allocation of spectrum resources which would give more accurate weight to all relevant technical, economic, and social criteria. In cooperation with the FCC, a review of present frequency allocations and uses was initiated with a view to reallocation and improved sharing arrangements between Government and non-Government uses. Both these activities will continue in the coming Fiscal Year.

CONCLUSION

This concludes my explanation of the projects and activities undertaken by OTP during Fiscal Year 1972 and contemplated under the budget estimates you have before you. We believe that our plans and projections serve fully the mission we have been assigned by the President and the Congress.

Despite the length of this presentation, I am confident that some matters have not been covered in as complete detail as the Subcommittee would find helpful. I shall be happy to answer any questions you may have.

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF EMERGENCY PREPAREDNESS
OFFICE OF TELECOMMUNICATIONS MANAGEMENT

Date: June 29, 1970

Subject:

To: Dr. Clay T. Whitehead

Congratulations on your nomination as Director of the Office of Telecommunications Policy and best wishes for a speedy confirmation.

Now that we know the nominee, we have rewritten (attached) the possible questions and answers for the confirmation hearing. As I mentioned last Monday, it should be helpful to you if we could spend a couple of hours to discuss some of the problems.

Bill

From: W. E. Plummer
Acting

QUESTIONS AND ANSWERS FOR CONFIRMATION HEARING

Q: During the five years of General O'Connell's tenure as Director of Telecommunications Policy, he did not see the President once. Now you are by definition the President's principal advisor on telecommunications matters. Do you foresee that you will have access to the President?

A: In his covering letter to Congress which accompanied Reorganization Plan No. 1 of 1970, the President indicated his feeling concerning the great importance of telecommunications technology -- its growing influence upon the people of this Nation as well as people throughout the world. I am convinced that the President has very deep concerns with the complex issues and problems which face us as a consequence of the rapid growth of this technology. I am of the opinion that the President will not hesitate to call upon his principal advisor on telecommunications whenever he wishes to discuss a matter of national importance which is within the competence, the responsibility and the authority vested in my office.

Q: To what extent do you expect to draw upon the private sectors for assistance in the development of national telecommunications policy?

A: Again I refer, Mr. Chairman, to the President's Letter of Transmittal, in which he stated that "the speed of economic and technological

advance in our time means that new questions concerning communications are constantly arising" and "the Government must be well informed and well advised." The President then went on to say that this "Office will enable the President and all Government officials to share more fully in the experience, the insights, and the forecasts of Government and non-government experts."

I would hope that I can draw upon the wealth of expertise and counsel within industry and our educational institutions as well as within many departments and agencies of the Government. I consider the Joint Technical Advisory Council as one good example of the high quality of professionalism which has in the past been available to this office and which I hope will be equally available to me. There are many other such organizations, to say nothing of the major telecommunications industries whose officials have many times in the past made themselves available to the Government as and when their assistance was desirable. I see no conflict of interest involved in this kind of liaison. I do see it as a means of accelerating our progress toward national goals in telecommunication.

Q: How shall the U. S. develop policies and plans to foster the soundness and vigor of its telecommunications industry in the face of new technical developments, changing needs and economic developments?

A: I mentioned earlier, Mr. Chairman, that I am sympathetic to the idea of establishing and maintaining effective lines of communication between this office and the national telecommunications industry. I believe that this is a first step toward assuring continues at a high level. I am persuaded that this industry ourselves that the soundness and vigor of the industry has for a number of years been unable to develop the mid-range and long-range plans which would give some assurance of orderly technical and economic growth. I am of the opinion that this lack of capability has stemmed from the lack of a body of enlightened national telecommunications policy -- one upon which industry could depend in making its own long-term evaluations concerning, for example, their rate and direction of growth. I believe that a close relationship with the telecommunications industry will assist us in identifying current or potential problems, in analyzing alternatives, in developing policies and procedures for overcoming the problems, and in obtaining full cooperation of industry in implementing the policies.

The revolution in telecommunications technology is forcing us to re-think through many of the conventional approaches to applying new technologies and technological innovations to society's needs. I believe that we can no longer treat developments in telecommunications merely or even primarily from the question of technical

feasibility. We have learned, sometimes to our disappointment, that many things which are technically feasible and placed at the disposal of our people trigger a number of social, political and economic problems which were neither foreseen nor the potentials adequately studied. I feel that we need to go beyond the engineering phase and look at these things from a greatly broadened perspective, an interdisciplinary one if I may. This is, incidentally, one of the basic ideas behind the NECAF concept.

Q: Do you mean to suggest that the basic national guidelines for telecommunications -- as, for example, the Communications Act of 1934 and the Communications Satellite Act of 1962 -- are obsolete? Inadequate for today's needs?

A: Mr. Chairman, I would not describe either of these Acts as obsolete or inadequate. They certainly bear constant and analytical reviews -- as do other legislation and executive orders. If, in the course of our reviews it appears that changes need to be made in our framework for national telecommunications policy, I will certainly make such recommendations.

Q: One of my greatest concerns for many years has been the problem of the frequency spectrum. There are many who feel that the Federal Government is hogging frequencies -- that once it gets them, they never let go irrespective of whether they need them or not.

A: I have, of course, been briefed on many of the most pressing problems which faced General O'Connell and which will face me in OTP. I am not as familiar as I would like to be on the entire frequency spectrum problem and as I expect to be within a very short time. I will say this, however: On the basis of my briefings and the short discussions I have had with knowledgeable members of the staff, I am of the opinion that very much progress has been made toward assuring that no such hogging of frequencies by the Federal Government can take place -- or, if it ever did take place -- could continue for an indefinite period of time. With the advent of a computerized operation for frequency management, the office now has the capability for reviewing with far greater accuracy and speed the entire assignment and control function. Moreover, the system for an automatic review of frequency use at least once every five years is now in effect. I can assure this Committee that we will be making every possible effort to assure all uses by the Federal Government of frequencies are valid, justified and of a continuing requirement.

Q: I understand that you intend to give the Commerce Department the responsibility for the frequency management activity. Do you feel that Commerce can run it better than your people can?

A: Mr. Chairman, there have been discussions in respect to transferring certain elements of the frequency management activity to the Department of Commerce. In general, the thrust of these conversations has been to determine just what portions of the frequency management which are routine in nature can be transferred. The responsibility for overall national planning and policy formulation and coordination in the frequency management area will remain with the Office of Telecommunications Policy. I cannot tell this Committee at this time how many and what kinds of people will be involved in this split.

Q: There has been much speculation from time to time regarding the advisability of placing the entire frequency management business -- both Government and non-government -- into your office. Do you have any views on this?

A: No, Mr. Chairman. Not at this time. I don't feel that I have sufficient background nor adequately analyzed the advantages and disadvantages of such an arrangement.

Q: How do you visualize your relationship with the FCC?

A: I see no area of contention between our respective offices. The President has defined very clearly the purpose of this office vis-a-vis that of the FCC and in a recent letter to Chairman Holifield, I

iterated my own view that the Office of Telecommunications Policy and the FCC were in no sense competitors in the areas of national and public policy. I consider that, in certain major areas -- for example, in our respective roles in managing the electromagnetic spectrum -- we need to consult with one another, assist one another if and when such assistance was indicated, and advise each other of actual or potential problems which might affect our national telecommunications posture. It is my understanding that the relationship between General O'Connell and Chairman Hyde -- as well as between their respective staffs -- was a very close and productive one in the sense that they cooperated closely and continuously on problems of mutual concern. I would hope that this relationship between our respective offices would not only continue but be progressively strengthened.

Q: Will more Presidential recommendations on FCC policy matters such as the recent domestic satellite policy be sent to the FCC?

A: Yes.

Q: Back in 1963, President Kennedy established the National Communications System. It was to be developed by linking together major government systems and eventually we were going to get a fully-survivable, integrated, economical and dependable system for any kind of national emergency. Seven years later, there is a serious question in my mind as to whether any of these four objectives have been attained. Can you comment on this?

A: As you know, Mr. Chairman, the Director of the Office of Telecommunications Policy has a key policy role in guiding the development of the NCS. In exercising this authority, the Director must work very closely with the Executive Agent and the Manag er of the NCS who are respectively the Secretary of Defense and the Commanding General of the Defense Communications Agency. I am confident that the recent reorganization in DoD which has resulted in the establishment of the position of Assistant to the Secretary of Defense for Telecommunications -- will enhance the capability of both this office and of DoD to move ahead in the development of this communication system, which I consider to be indispensable to the national interest and security. I can assure this Committee that I consider this matter an urgent one.

Q: I am upset by what I see happening in these INTELSAT negotiations. As far as I can see, we are trying to give the store away. It's not right to do this when you consider that these satellites are up only because the U. S. spent the taxpayers' funds on the R&D to get them up. What is going on down there anyway?

A: Mr. Chairman, as the Committee knows, this office has a key role to play in national policy formulation with respect to satellite communications in general and to the global commercial satellite system in particular. I share your view that we should not dissipate at the conference table all of the hard-won and expensive progress which we have made in satellite communication. However, I am confident that you and the members of the committee are sympathetic to the concept of international cooperation in world-wide communication and that you are in accord with the principle that no one country or group of countries should be permitted to dominate completely an activity in which, by definition, the concept of international cooperation is prerequisite to progress. I can assure you, however, that while I firmly hold to the principle of international cooperation, I do not in any sense subscribe to the principle of international domination.

Q: Much has been written and spoken about the increasing dangers to our society of computerization. The question of individual privacy is becoming more urgent as we move into the area of teleprocessing. Do you have any views on this subject?

A: I am aware of the fears which have been voiced. The issues involved here are complex. It is a problem whose ultimate dimensions are not yet clear. In the sense that teleprocessing is a new technology, we are faced with the initial problem of getting the facts. We don't know yet how this technology is going to develop, what kind of markets will be created, what sort of hazards to personal privacy -- if any -- will emerge. This is one of those problems which, again, deserve the benefit of inter-disciplinary research and analysis. There is no question in respect to technical feasibility. The real questions are what effects the large-scale introduction of teleprocessing techniques and equipments will have upon our society. Hopefully, I will have the resources to apply to this kind of problem solving.

DRAFT/June 22, 1970
C. C. Joyce

Director

Question: Why has there been such a delay in nominating a director?

Answer: We spent a lot of time trying to find a man with competance in all of the fields relevant to communications policy formulations, both technical and non-technical, plus experience in government and industry, who would have the respect of all of the interests concerned with communications, and who was willing to take the job. Try as we might, we were unable to combine all these in any one man. It was finally decided that I would bring to the job experience in policy matters coupled with ~~a respectable~~ acceptable technical background, and that I would seek a deputy with strong experience in industry.

Question: I have heard it said that you feel that technical competance is not important in the formulation of communications policy. Is that your view?

Answer: Of course not. I have been trying to make the point in some of my statements that policy must be determined with equal consideration given to technical communications matters and to the overall context of the needs of society and the structure of our economy. There is a tendency among ~~some~~ a few purely technical people to equate this position with the idea that the technical facts don't matter. I have never suggested such an idea at all.

Organization

Question: How big will the OTP be? Where will the staff come from?

Answer: Initially we plan to develop a staff of about 30 professionals. Some of these will be people who served formerly in the Office of Telecommunications Management. However, it is very important that we be able to bring in some new people to obtain the balanced staff we need. We must bring in some new talent in the areas of economics, laws, systems analysis and possibly other disciplines.

Question: What will happen to those in the Office of Telecommunications Management who are not involved in the OTP?

Answer: Some of the functions previously performed by the OTM will now be performed by the Department of Commerce. There may also be a need for a few people in the area within the Office of Emergency Preparedness. We will be sorting this out in the next month on a functional basis.

Question: What will be the role of the Commerce Department? How big will the Commerce activity be?

Answer: Commerce will be a primary source of technical and analytic support for the OTP. The principal focus for

Commerce support, at least initially, will be in the spectrum management area. The Secretary of Commerce will not be the final authority for spectrum assignments - that authority will be exercised by the Director of the OTP. However, Commerce will provide technical support, including the development of an improved data base and new analytical techniques for analysis of spectrum allocation and use. Existing research activities of the Department will be focused to contribute to this role.

We have not yet clearly identified just what ongoing activities within the Commerce Department will be identified as part of the Department's mission under this reorganization, so I can't say right now what the magnitude of this effort will be. However, we do know that the Department will need to hire 20 to 40 additional personnel within the next year with specialized analytical skills in spectrum management and engineering.

Relationships

Question: What will be the relationship of the OTP with the FCC?

Answer: The two offices will cooperate in those areas where there are mutual interests and concerns. No existing authority

or function of the FCC has been affected by the reorganization. There has been some concern voiced that my office would use the prestige of the Presidency to somehow overwhelm the FCC. Neither Chairman Burch nor I think that this will happen.

Question: What will be the relationship of the OTP with other elements of the Executive Branch?

Answer: The office will develop policies which will affect the development and operation of government communications systems, and will work with the Office of Management and Budget to see that these policies are reflected in plans, programs and management arrangements. However, the office will not assume any responsibilities for ~~operating~~ the operation of telecommunications systems.

Question: What will be the role of the OTP with respect to Presidential Communications?

Answer: The Office will not be involved in the day to day operation of any communications systems, including those which serve the President. However, I will be aware of the communications needs of the President, and will ~~assume~~ assure

that these needs are adequately reflected in the design of the government communications systems.

Question: Will the Director have access to the President?

Answer: I expect to have the same ~~means of~~ access to the President which are available to other Presidential appointees in comparable roles.

Programs

Question: The General Accounting Office has been critical of the progress made in unification of the National Communications System? What will you do about that?

Answer: I think the first important step here is to define the objectives more clearly. The forced unification of existing systems can be expensive and unnecessarily disruptive. Centralization of operating management and programming responsibilities reduces the incentives for users to weigh communications in relation to other goods and services required to accomplish their mission.

I think we need to find out and express clearly, the degree of unification which is needed to meet Presidential and national requirements, and to achieve overall economy and efficiency. Then we can assess more meaningfully where we stand and where we have to go. This will be one of the problems we will start to work on immediately.

Question: Will a National Electromagnetic Compatibility Analysis Facility (NECAF) be established? Will it duplicate or replace other facilities? What will it cost?

Answer: Improved analytical capabilities and support facilities, including a better data base, are needed to support the

management of the frequency spectrum. There is no question of this. In the past, this improvement has been visualized as sort of a carbon copy of the Defense Department's ECAC. This is not a bad way to start thinking about the problem, because ECAC has made some real contributions. I think we definitely need more people with modern analytic skills working on this problem, and I hope to see such a capability built up within the Commerce Department.

However, I want to review the alternatives for providing the data base and data processing support for this function within the government. It seems to me that the idea of a computer communications network may be applicable here. Such a network could link my office, Commerce, the FCC, the DOD ECAC, and possibly other users and sources of information on spectrum use and management. Such an approach would provide a focus for cooperative effort and would eliminate duplication of costly support facilities.

Until I have thoroughly examined the possibilities here, I am going to visualize our needs in terms of people, but not necessarily as a facility.

Policies

Question: How can your office protect the interests of the government as a user of communications and at the same time objectively consider the interests of the private sector and the public at large?

Answer: I do not see why this should be a particular problem. The government is a major user of the output of many industries: aviation, petroleum, construction, to give a few examples - and yet policies affecting these industries in various ways must be formulated. However, to try to address your concern specifically in this case, I would say that the various Departments and Agencies which procure telecommunications services, together with the Office of Management and Budget, should be the principal advocates and protectors of the government's interest in the procurement of telecommunications services and equipment, and in defining the government's needs for spectrum. ~~allocation.~~ The Office of Telecommunications Policy should be in a position to weigh these needs and interests against the interests of other sectors, and to make objective recommendations to the President.

The Govt is a user -- a consumer if you will -- of telecomm svcs. I think that puts us in a good position to evaluate the public interest & the [illegible] need for a [illegible] industry as well

As long as the ~~Office remains~~ proper role of the office is recognized, the fact that the government is a user -- a consumer if you will -- of telecommunication services should be beneficial; because it puts us in a good position to evaluate the public interest and to appreciate the need for a healthy industry as well.

Question: Do you favor the introduction of the maximum possible degree of competition in the communications industry?

Answer: Competition is, of course, the underlying principle in our economy, and we provide a public franchise for monopoly only when there are overriding reasons to do so. But there are, obviously, overriding reasons for a monopoly in the public telephone message service. We have to carefully evaluate the other types of services which are evolving in a very dynamic industry - including those in which computers and communications are being used together - and make judgments as to the existence of these overriding reasons. The FCC has been trying to sort these issues out lately, and we would have to cooperate closely with them in this area. My point is that until we can see the nature of future services much more clearly, we can't have hard and fast rules in this area.

Question: Do you favor the establishment of a single U. S. international telecommunications entirely, as recommended by President Johnson's telecommunications Task Force?

Answer: I am not convinced that such a move is necessary. The present competition between various technical approaches is producing some remarkable technical breakthroughs. Also, it is not obvious that our ability to deal effectively with foreign entities is seriously hampered by lack of a single commercial entity.

more What mean?

Question: The U.S. seems to be losing ground in its international position in the communications satellite field. We have agreed to internationalize the management of INTELSAT, and are now pressed with proposals which would allow small nations to hamstring what is essentially a commercial venture. What will you do about this?

Answer: Well, some nations wish to see international communications as an undertaking between soverign governments, and some see it as commercial venture. The U.S. cannot dictate the terms of a settlement on this point. Ambassador Washburn's staff has been doing its homework pretty well on this problem. I am not prepared at this moment to suggest any departure from the approach they have taken to try to achieve an effective and workable agreement.

But I do want to emphasize that the U.S. feels exceedingly strongly ~~that~~ Intelsat should be a commercial ~~venture~~ enterprise. We have the ITU & many other intl forums for discussion of policy among govts.

Question: What interest will your office take in the issues concerned with the relationships of computers and communications, and in the related issue of the privacy of computer data.

Answer: One of the principal features of current computer developments is that computers are increasingly performing the function of selecting and transmitting information from one location to another in response to requests. This has raised questions as to whether conditions result from this capability which warrant special government policies or regulation. It also raises questions as to whether data will be used for purposes other than the purpose for which it was originally collected, and thereby violate personal privacy. I think it is extremely important that these issues be thoroughly studied and understood and that policy options be debated and publicly discussed. I expect my office to be an active participant in these discussions, and to be a prime mover if necessary to see that suitable public policies and any necessary legislation is developed in these areas.

Confirmation Questions

General

Q. Why has it taken so long to name a Director?

Q. Does that mean you are second choice?

Q. The qualifications for Director cited in the President's message on reorganization called for someone with a broad telecommunications background. We had expected to see a prominent telecommunications official from industry or government nominated. How do your own qualifications match those cited by the President?

Q. Your predecessor, General O'Connell, received strong endorsement and support from this committee, yet he was never able to reach the President for his support on important policy issues. Don't you feel more direct access is essential, and what makes you think you will have better luck? Have you ever talked to the President about these problems during the past year? How many people will you have to go through to reach him?

Q. What about the Department of Defense? It is said to have dominated the OTM both through the detail of many military officers to the DTM staff and through the sheer magnitude of its own telecommunications operations and organization. Also,

it is reported to have simply ignored many efforts of the DTM to provide guidance in frequency assignments, lease of telecommunication services, and standardization of equipment. How do you expect to cope with this situation?

Q. The Acting Director of the OTM informed this Committee during its appropriation hearings that he has been unable to hire a GS-14 or assign a government frequency since April 20 when the OTP reorganization became effective, despite a heavy workload. Why was this situation allowed to exist, and just how important does the White House consider these telecommunications problems to be?

Q. We understand this new Office is supposed to expand the scope of Executive Branch activities in this field to include nongovernment communications and spectrum management in addition to dealing with government communications problems. This leads to several questions:

1) Won't this tend to duplicate and infringe upon the regulation of nongovernment communications by the FCC? With the vast resources of the Federal Government at your disposal (e.g., Commerce, DOD and NASA R&D activities in this field), won't your office simply be able to overpower the Commission with analysis and arguments on any issue it chooses?

2) How can you separate your involvement in Federal communication developments from these broader policy studies and recommendations you suggest? Aren't we just likely to see you pushing recommendations on the FCC and Congress which are motivated by government communication interests?

Spectrum Management

Q. President Johnson's Task Force on Communications Policy recommended that spectrum management for both government and nongovernment use be combined under a single Executive Branch agency. Is that your view, and if so, how do you expect to carry this out? How could you, as head of an agency vitally concerned with national security communications, be objective in making decisions between government and nongovernment allocations and assignments?

Q. It has been suggested in some quarters that we market the spectrum and get rid of all this governmental spectrum management bureaucracy. What do you think of this idea, and what do you intend to do about it? Would you include such vital spectrum uses as free and public broadcasting, national security

communications, police and other emergency communications, air navigation and control, etc., in such a spectrum market? How would you ensure that such vital needs were met?

Q. The FCC has recently established a schedule of licence fees intended to return to the Treasury an amount equal to their budgetary needs. What do you think of this idea? Are you prepared to adopt a similar arrangement regarding the management of government frequency usage?

Q. The Federal Government has consistently hoarded frequencies behind a cloak of national security, contingency needs, etc. They now have allocated some 50% of the entire spectrum, even though their needs are much less than the private sector, and seem to have established with the FCC an understanding that about half of all new allocations will be turned over to government. Is there any way to get some of these resources freed to meet vital public needs? What do you intend to do about this, and how will you get around the security/contingency barrier?

Q. The OTM, supported by the Commerce Department, DOD, other government agencies, and many outstanding engineering groups, have proposed the establishment of a National Electromagnetic Compatibility Analysis Facility. Do you support such a facility, and when can we expect some concrete results in this area?

Confirmation Q & A

Q. Various government agencies and industry groups have urged greatly increased expenditures for Federal telecommunication management activities, including the establishment of a National Electromagnetic Compatibility Analysis Facility and the adoption of a new spectrum engineering approach. What is your view of these suggestions?

A. In general, I feel there are great opportunities for increasing the capacity and utilization of the radio spectrum resource through improved technical analyses, standards, and procedures. At the same time, however, there is an urgent need to develop new spectrum management approaches which more accurately reflect the relative social and economic benefits of alternative spectrum uses; there is also a need to guard against over-involvement by any single spectrum czar in the day-to-day decision-making processes of those sectors of our society and economy which rely upon this resource -- among many others -- in the conduct of their affairs. I, therefore, feel that some further review of our overall approach to spectrum management is needed prior to establishing any single entity for regular electromagnetic compatibility analyses. At the same time, I feel that we should proceed immediately with the development of a capability for such analyses, for example, the development

of data collection and processing techniques, files on radio equipment and radio transmission characteristics, and the like. I would, accordingly, ask the Department of Commerce, which is to provide the technical and analytic support for the OTP, to undertake a significant program along these lines.

Q. There has been a lot of talk about "selling" the spectrum on the open market. The Rostow Task Force reportedly favored such an approach. Given the vital importance of spectrum use to such public services as broadcasting, public safety and emergency communications, aeronautical navigation and control, and national security communications, can you see how such a "spectrum market" would be in the best interests of the country?

A. There have admittedly been some far-out views on this issue, on both sides, I might add. Some economists have urged a completely free market with no public controls as a means of avoiding undue political or bureaucratic control of this resource. Some engineers and communicators, on the other hand, have urged enormous expenditure of public funds to "engineer" a complete solution to the problem of accommodating an increasing number of prospective radio services with a finite quality of spectrum resource. In my view, neither approach alone is either desirable or capable of being implemented. Much greater consideration of the relative social and economic benefits of alternative spectrum uses is certainly needed in the

management process; this may require some reliance on market forces and economic incentives for spectrum economizing, such as the recent FCC decision to raise the fees for radio licenses. At the same time, much can be done through improved engineering of spectrum assignments to accommodate greater numbers of radio services, often without significant costs to either the government or the users. One of my priority efforts will be to weigh the relative merits and applications of these two approaches, with the objective of recommending to the FCC and to Congress some potential blending of the economic and engineering approaches designed to achieve a more effective overall spectrum management process. I might add that one aspect of such a process which I feel would be most important is that it be equally capable of application to government and non-government spectrum uses, so that we can avoid any feeling of mistreatment by those on either side of this dichotomy.

Q. You have been cited as the principal author of the Administration's recent recommendation to the FCC on domestic satellite policy -- in which unlimited entry by common carriers, broadcasters, and others is proposed. Don't you feel such a policy, if adopted, would be likely to:

a) Create a chaotic jumble of incompatible satellite systems incapable of being interconnected in time of national emergency and of realizing the economies of scale of a single integrated system?

b) Permit AT&T to extend its virtual monopoly of terrestrial communication services to the satellite area as well, with the loss of great public benefits from the enlightened use of a technology made possible by vast expenditures of public funds?

c) Jeopardize both the economic viability of, and our avowed support for, a single integrated global satellite system under Intelsat?

d) Create serious problems for us in the international community, for example, charges that we will monopolize the international orbital space and spectrum resource and resultant efforts to establish tight international controls over these resources?

A. (a&b)

First, let me clarify one point regarding our policy recommendation to the FCC. We propose that entry into the domestic satellite field not be restricted by undue regulatory constraints

based on assumed economies of scale or limited availability of spectrum resources. That is quite different from the notion of "unlimited entry"; entry into this field will be inherently limited by the high costs involved, by the existence of competitive terrestrial alternatives, and by other valid regulatory controls on common-carrier investments, broadcast practices, and the like. Even without added regulatory constraints, these forces will tend to restrict entry to a relatively small number of telecommunication suppliers or users. We felt it most desirable, in the interest of maximum innovation and use of this technology, that entry not be further restricted beyond these natural and legitimate constraints.

(b) Now, as to possible domination by AT&T, we feel the policy recommended would adequately prevent such domination if AT&T did not indeed provide the most economical and reliable service for each of a wide variety of users. But if they were able to do so, without burdening other users of their satellite or terrestrial facilities, we could find no valid public-interest objection to such a result. We do not foresee such a development, given the wide variety of communication services satellites can provide, the wide range of user interests involved, and the apparent lack of overwhelming economies of scale

encompassing such a wide range of possible services. But we feel that, for at least an interim period, these questions can be sorted out by the private sector with far greater certainty and at less risk to the public interest than could be achieved by public policy decree, given the many uncertainties involved in projecting technological developments, relative costs, demand for as yet non-existent or poorly developed services, and the like.

Q. Wasn't someone else rumored for this job? Why didn't he get it? Does that mean that you're the second choice?

A. I understand that there were strong rumors circulating for several weeks during the time that candidates were being considered. I recall that Bill Niskanen's name was xxxxxg prominent. I also understand that during this period strong opposition developed to the nomination of anyone who did not have an extensive background in telecommunications. There really is no choice until the President nominates someone, so I don't consider myself to be a "second choice".

Q. Do you think the budget cut will be restored?

Q. Do you expect any trouble with confirmation?

Q. What will OTP really do?

A. It will do the fact finding and analysis necessary to identify the policy choices open to the givernment with respect to the telecommunications sector of our economy, and with respect to the government's own use of telecommunications services and equipment. It will assure that these choices are widely discussed, that all points of view are heard, and that decisions are reached in a timely manner. [illegible] The office will have unique contributions in the areas of management of the government portions of the frequency spectrum, and policy development for government use of telecommunications. It will cooperate with the FCC in some other areas, and some matters [illegible] undoubtedly [illegible] will continue to be addressed solely by the FCC.

Q. What is your opinion of Saturday morning TV shows for kids? How about Sesame Street?

A. One of the excruciatingly difficult problems in dealing with government policy in telecommunications is to recognize and deal with the impact of communications on our society without playing the role of censor. One way of coping with this problem may be to look at the relationship between industry structure, market structure, regulatory policies, channel assignments and the like and see what [illegible] influence variation in these factors might exert ~~some influence~~ on the diversity of programming and the responsiveness of programming to public needs and wants. I would not want to get into the position of debating the merits of individual shows.

Q. Do you and Dean Burch get along? What about Nick Johnson?

Q Are computers part of your responsibility?

(See my Q&A page 12)

Q. What will be the relationship between your office and the GSA, Pentagon and other government agencies?

(See my Q&A pagex 4)

Q How often do you plan to speak to the President?

A. Whenever we have a major issue worthy of his attention, or whenever he has a problem on which he wants my advice.

Q. Do you really think he'll take that much time away from more pressing domestic and international matters?

A. I think the President will take whatever time is required to address really important issues. One of my responsibilities will be to put telecommunications issues in perspective so that we can tell just how important they really are in the overall scheme of things. I don't plan to take to the President anything which really doesn't warrant his attention.

Q. You're only 31. What makes you an expert in this field?

A. There aren't too many experts in the field of analyzing and developing public policy in rapidly changing circumstances. There may not be any! (Go on to talk about own background and experience.)

Q. Who is your deputy going to be? Whenwill his name go up?

Q. Will you just be the front man and let the deputy run the office on a day-to-day basis?

A. Our respective roles will be developed as we get used to working together.. I would not want to say at this point just what the division of efforts would be.

Q Where will your office be?

(You will probably want to duck this for now but I suggest you make some moves to get your immediate office in the old EOB and the rest of your staff no further away than the new EOB)

Q Define telecommunications.

A. Rigid definitions are quite useless in a policy environment. They frequently get in the way and serve no useful purpose. Broadly speaking, and in layman's terms, I would say that currently the field of telecommunications includes all of the means of transmitting information, pictures, signals or what have you from one place to another at speeds approaching the speed of light. Included in this are the facilities to convert information to a form suitable for transmission, and to select, switch or otherwise channel the information to and from the desired parties.

Q. What is the spectrum? Who does it belong to?

A. One of the ways of transmotting information from one place to another at the speed of light is to produce electromagnetic waves capable of travelling through space to the distant point. Different transmitter-receiver pairs can use the same physical space by producing waves of different wavelengths. The spectrum consists of all of the wavelengths which are useful for such transmissions. These wavelengths must be divided up among all of the people who want to use them, and these assignments must be rigidly enforced to keep users from interfering with one anothers transmissions.

Under present laws, there is no private ownership of the spectrum. The FCC allocates the spectrum to users other than the federal government, and the Director , OTP, by delegation from the President, allocates spectrum to government users.

Q. Does that mean that you are going to solve the fight between the broadcasters and the CATV operatiors?

A. This is really a fight over other issues, not over spectrum needs.

Q. Are you going to get into the fight? How do you stand on the copyright bill now in the Senate.

A. It will take a little time to determine which issues are the most pressing and to develop the full staff capability needed to analyze these issues. I am not going to shoot from the hip on individual issues before doing my homework.

Q. Should candidates for federal elective office be given free TV time for their election pitches?

A. I'm sure that if I were running for office I would think so. I suppose if I were running a TV network I'd think ~~the opposite~~ not. I'm not sure that this is an area I would choose to go into. as Director of OTP.

Q Do you think that international communications companies should be merged?

A. (See my Q&A , p 10, 11. I will try to do more on this)

Q. When will Comsat pay a dividend?

A. Ask Joe Charyk.

Q. Do you favor Comsat being retained as INTELSAT's manager?

A. Yes.

Q. How many super grade jobs will your office have?

~~A. Initially about 15.~~

~~Q. Are any of them now filled?~~

A.

Who will be conferees be on House side.

FOR RELEASE ON DELIVERY TO THE SENATE FEBRUARY 9, 1970
AND THE HOUSE OF REPRESENTATIVES

Office of the White House Press Secretary

THE WHITE HOUSE

TELECOMMUNICATIONS REORGANIZATION

TO THE CONGRESS OF THE UNITED STATES:

We live in a time when the technology of telecommunications is undergoing rapid change which will dramatically affect the whole of our society. It has long been recognized that the executive branch of the Federal government should be better equipped to deal with the issues which arise from telecommunications growth. As the largest single user of the nation's telecommunications facilities, the Federal government must also manage its internal communications operations in the most effective manner possible.

Accordingly, I am today transmitting to the Congress Reorganization Plan No. 1 of 1970, prepared in accordance with chapter 9 of title 5 of the United States Code.

That plan would establish a new Office of Telecommunications Policy in the Executive Office of the President. The new unit would be headed by a Director and a Deputy Director who would be appointed by the President with the advice and consent of the Senate. The existing office held by the Director of Telecommunications Management in the Office of Emergency Preparedness would be abolished.

In addition to the functions which are transferred to it by the reorganization plan, the new Office would perform certain other duties which I intend to assign to it by Executive order as soon as the reorganization plan takes effect. That order would delegate to the new Office essentially those functions which are now assigned to the Director of Telecommunications Management. The Office of Telecommunications Policy would be assisted in its research and analysis responsibilities by the agencies and departments of the Executive Branch including another new office, located in the Department of Commerce.

The new Office of Telecommunications Policy would play three essential roles:

1. It would serve as the President's principle adviser on telecommunications policy, helping to formulate government policies concerning a wide range of domestic and international telecommunications issues and helping to develop plans and programs which take full advantage of the nation's technological capabilities. The speed of economic and technological advance in our time means that new questions concerning communications are constantly arising, questions on which the government

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must be well informed and well advised. The new Office will enable the President and all government officials to share more fully in the experience, the insights, and the forecasts of government and non-government experts.

2. The Office of Telecommunications Policy would help formulate policies and coordinate operations for the Federal government's own vast communications systems. It would, for example, set guidelines for the various departments and agencies concerning their communications equipment and services. It would regularly review the ability of government communications systems to meet the security needs of the nation and to perform effectively in time of emergency. The Office would direct the assignment of those portions of the radio spectrum which are reserved for government use, carry out responsibilities conferred on the President by the Communications Satellite Act, advise State and local governments, and provide policy direction for the National Communications System.

3. Finally, the new Office would enable the executive branch to speak with a clearer voice and to act as a more effective partner in discussions of communications policy with both the Congress and the Federal Communications Commission. This action would take away none of the prerogatives or functions assigned to the Federal Communications Commission by the Congress. It is my hope, however, that the new Office and the Federal Communications Commission would cooperate in achieving certain reforms in telecommunications policy, especially in their procedures for allocating portions of the radio spectrum for government and civilian use. Our current procedures must be more flexible if they are to deal adequately with problems such as the worsening spectrum shortage.

Each reorganization included in the plan which accompanies this message is necessary to accomplish one or more of the purposes set forth in section 901(a) of title 5 of the United States Code. In particular, the plan is responsive to section 901(a)(1), "to promote the better execution of the laws, the more effective management of the executive branch and of its agencies and functions, and the expeditious administration of the public business;" and section 901(a)(3), "to increase the efficiency of the operations of the government to the fullest extent practicable."

The reorganizations provided for in this plan make necessary the appointment and compensation of new officers, as specified in sections 3(a) and 3(b) of the plan. The rates of compensation fixed for these officers are comparable to those fixed for other officers in the executive branch who have similar responsibilities.

This plan should result in the more efficient operation of the government. It is not practical, however, to itemize or aggregate the exact expenditure reductions which will result from this action.

The public interest requires that government policies concerning telecommunications be formulated with as much sophistication and vision as possible. This reorganization plan -- and the executive order which would follow it -- are necessary instruments if the government is to respond adequately to the challenges and opportunities presented by the rapid pace of change in communications. I urge that the Congress allow this plan to become effective so that these necessary reforms can be accomplished.

RICHARD NIXON

THE WHITE HOUSE,

February 9, 1970.

# # # #

REORGANIZATION PLAN NO. 1 OF 1970

Prepared by the President and transmitted to the Senate and the House of Representatives in Congress assembled, February 9, 1970, pursuant to the provisions of chapter 9 of title 5 of the United States Code.

OFFICE OF TELECOMMUNICATIONS POLICY

Section 1. Transfer of functions. The functions relating to assigning frequencies to radio stations belonging to and operated by the United States, or to classes thereof, conferred upon the President by the provisions of section 305 (a) of the Communications Act of 1934, 47 U.S.C. 305 (a), are hereby transferred to the Director of the Office of Telecommunications Policy hereinafter provided for.

Sec. 2. Establishment of Office. There is hereby established in the Executive Office of the President the Office of Telecommunications Policy, hereinafter referred to as the Office.

Sec. 3. Director and deputy. (a) There shall be at the head of the Office the Director of the Office of Telecommunications Policy, hereinafter referred to as the Director. The Director shall be appointed by the President by and with the advice and consent of the Senate and shall be compensated at the rate now or hereafter provided for Level III of the Executive Schedule Pay Rates (5 U.S.C. 5314).

(b) There shall be in the Office a Deputy Director of the Office of Telecommunications Policy who shall be appointed by the President by and with the advice and consent of the Senate and shall be compensated at the rate now or hereafter provided for Level IV of the Executive Schedule Pay Rates (5 U.S.C. 5315). The Deputy Director shall perform such functions as the Director may from time to time prescribe and, unless the President shall designate another person to so act, shall act as Director during the absence or disability of the Director or in the event of vacancy in the office of Director.

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(c) No person shall while holding office as Director or Deputy Director engage in any other business, vocation, or employment.

Sec. 4. Performance of functions of Director. (a) The Director may appoint employees necessary for the work of the Office under the classified civil service and fix their compensation in accordance with the classification laws.

(b) The Director may from time to time make such provisions as he shall deem appropriate authorizing the performance of any function transferred to him hereunder by any other officer, or by any organizational entity or employee, of the Office.

Sec. 5. Abolition of office. That office of Assistant Director of the Office of Emergency Preparedness held by the Director of Telecommunications Management under Executive Order No. 10995 of February 16, 1962, as amended, is abolished. The Director of the Office of Emergency Preparedness shall make such provisions as he may deem to be necessary with respect to winding up any outstanding affairs of the office abolished by the foregoing provisions of this section.

Sec. 6. Incidental transfers. (a) So much of the personnel, property, records, and unexpended balances of appropriations, allocations, and other funds employed, held, or used by, or available or to be made available to, the Office of Emergency Preparedness in connection with functions affected by the provisions of this reorganization plan as the Director of the Bureau of the Budget shall determine shall be transferred to the Office of Telecommunications Policy at such time or times as he shall direct.

(b) Such further measures and dispositions as the Director of the Bureau of the Budget shall deem to be necessary in order to effectuate the transfers provided for in subsection (a) of this section shall be carried out in such manner as he shall direct and by such agencies as he shall designate.

Sec. 7. Interim Director. The President may authorize any person who immediately prior to the effective date of this reorganization plan

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holds a position in the Executive Office of the President to act as Director of the Office of Telecommunications Policy until the office of Director is for the first time filled pursuant to the provisions of section 3 of this reorganization plan or by recess appointment, as the case may be. The President may authorize any person who serves in an acting capacity under the foregoing provisions of this section to receive the compensation attached to the office of Director. Such compensation, if authorized, shall be in lieu of, but not in addition to, other compensation from the United States to which such person may be entitled.

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February 9, 1970

RESPONSIBILITIES OF THE OFFICE OF TELECOMMUNICATIONS POLICY

The Director of the Office of Telecommunications Policy develops the executive branch position on national telecommunications policy, coordinates the planning and operation of the telecommunications systems of the Federal government, discharges responsibilities assigned to the President in the areas of spectrum management and satellite communications, and performs emergency planning and control functions for telecommunications.

The Director serves as the President's principal advisor on telecommunications policy, including:

(1) Policies with respect to U.S. domestic and international communications industry.

(2) The allocation, use, and management of the radio spectrum resource for government use, and preparation of recommendations to the FCC on spectrum allocation for civilian use.

(3) The preparation of U.S. positions for international communication conferences, conventions, and organizations.

(4) Federal research and development programs in support of the above.

The Director assures that the executive branch position on telecommunication policy issues is effectively presented to the Congress and to the Federal Communications Commission in the form of legislative proposals, recommendations, and testimony as required, and that there is effective cooperation with the FCC on policy issues.

The Director's responsibilities for the planning and operation of Federal government telecommunications systems include:

(1) Development of government-wide standards for equipment and procedures, as required in the interest of economy or effectiveness.

(2) Evaluation of the ability of national communications resources adequately and efficiently to meet established national security and emergency communications requirements.

(3) Recommendations to the Bureau of the Budget concerning the funding of communications systems and research and development programs.

(4) Preparation of guidelines for the most economical procurement of Federal telecommunications services.

The Director exercises the authority, delegated by the President, to assign radio frequencies for use by the government. He is assisted in this responsibility by a new agency and by the Interdepartmental Radio Advisory Committee. He carries out the responsibilities conferred on the President by the Communications Satellite Act. The Director coordinates the development of plans and programs for the mobilization and use of telecommunications resources in an emergency, and prepares to administer national telecommunications resources in the event of war under the overall policy guidance of the Director, OEP.

The Director coordinates assistance in telecommunications matters provided by the Federal government to State and local governments. He appoints scientists, engineers, and economists from outside government to advise on telecommunications matters.

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TELECOMMUNICATIONS MANAGEMENT REORGANIZATION

These are some of the activities and functions in telecommunications management which will be assigned subsequent to the establishment of the Office of Telecommunications Policy in the Executive Office of the President:

Office of Telecommunications Policy

A. Statutory authorities vested in the President

1. Emergency functions under the Communications Act of 1934 exercised under overall policy direction of Director, OEP.

2. Functions conferred upon the President under the Communications Satellite Act of 1962, as amended.

B. Other functions now assigned by executive order or Presidential Memorandum.

1. Serve as President's principal adviser on telecommunications policy.

2. Conduct economic, technical, and systems analyses related to the Government's use of telecommunications and national telecommunications policy.

3. Establish program of analysis and research in support of U.S. participation in international telecommunications activities.

4. Make recommendations to the President through the National Security Council on national security and emergency preparedness aspects of telecommunications system.

5. Coordinate the development of policy, plans, and programs for emergency use of telecommunications resources -- under policy direction of Director, OEP.

6. Coordinate legislative proposals and recommendations to the Congress on telecommunications policy issues and Administration recommendations to the FCC on policy issues.

7. Coordinate Federal assistance to State and local governments in the telecommunications area.

C. The Secretary of Commerce

The Secretary of Commerce shall provide support to the Director of Telecommunications in the following ways:

1. Provide a centralized research and engineering capability for coordination of Federal frequency uses and assignments.

2. Develop and operate a national electromagnetic compatibility analysis facility.

3. Conduct research and analysis in telecommunications sciences.

# # # #

CLAY THOMAS WHITEHEAD

Clay T. Whitehead was born on November 13, 1938, in Neodesha, Kansas, and graduated from Cherokee County Community High School in Columbus, Kansas. He received his B. S. and M. S. degrees in electrical engineering from the Massachusetts Institute of Technology, majoring in communications theory and systems engineering. He later received his Ph. D. in management, also from M. I. T., with concentration on policy analysis, economics, and research and development management. While at M. I. T., he taught courses in electronics and political science. He was elected to the engineering and science honorary societies -- Tau Beta Pi, Sigma Xi, and Eta Kappa Nu.

Mr. Whitehead served in the U. S. Army for two years, attaining the rank of Captain, where he worked on Army chemical defenses and the threat to the U. S. from biological warfare.

Mr. Whitehead was at the Bell Telephone Laboratories for about a year during his undergraduate studies as a part of the M. I. T. -Bell Laboratories cooperative program. Prior to obtaining his doctorate, he was a consultant at the Rand Corporation, where he worked on arms control, air defense, and spacecraft engineering studies. After completing his Ph. D., he joined the Rand staff to plan and organize a policy research program on health services and other domestic policy areas. He has also served as a consultant to the Bureau of the Budget.

Following the election in 1968, Mr. Whitehead served on the President-elect's task force on budget policies and assisted on transition matters. He joined the White House staff in January 1969 where his responsibilities have included the space, atomic energy, and other technically related programs; maritime affairs, liaison with regulatory agencies; and several economic and organizational matters. Mr. Whitehead is a Special Assistant to the President.

~~Administratively Confidential~~

SUMMARY OF POSITIONS ON ISSUES

COMMERCIAL BROADCASTING

A. Stated Administration Positions

1. The three-hour limitation of FCC's prime time access rules should be reviewed.

2. ~~The number of prime time reruns should be reduced.~~

3. The number of prime time reruns should be reduced without regulation if possible.

4. Section 315 requirements should be repealed for either all or no Federal offices.

5. There should be no FCC requirements for "counteradvertising" independent of Fairness Doctrine.

6. Home game black out of TV carriage of pro-sports events should be lifted when stadium sold out.

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*OTP stated position.

B. Positions on Pending Issues

*1. There is a need for legislation providing license renewal stability.

*2. Regulatory controls on commercial radio should be lessened.

3. Joint newspaper and TV ownership in the same market should not be prohibited by FCC rule.

4. Commercials in children's programs should be eliminated or restricted by FCC.

5. Section 315's "equal time" requirements should be retained for all political candidates.

*6. The Fairness Doctrine should not be applicable to product ads.

*7. With proper modification of the Fairness Doctrine, there should be legislation requiring nondiscriminatory paid access for broadcast ad time.

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*OTP stated position.

*8. There should be legislative modification of case-by-case enforcement of the broadcasters' "fairness" obligations.

9. Federal policy should foster the creation of new commercial TV networks.

PUBLIC BROADCASTING

A. Stated Administration Positions

There should be a three to five year authorization and appropriation cycle for CPB, but not for several years.

B. Positions on Pending Issues

1. Neither CPB nor HEW should be given statutory authority to fund directly instructional TV programming for classroom use.

*2. There should be no Federal funding of CPB outside the appropriations process.

*3. CPB should not fund a fixed schedule network.

*OTP stated position.

*4. CPB should not fund any programming dealing with politically controversial issues.

CABLE TV

A. Stated Administration Positions

1. There should be no compulsory license for carriage of distance signals beyond FCC third report and order.

2. There should be either a pre-negotiated fee schedule or an arbitration clause in a new copyright statute.

3. There should be "distant signal" importation rules for cable carriage of AM-FM radio signals.

B. Positions on Pending Issues

1. There should be a review of whether professional sports interests need more control, through program exclusivity rights, over cable carriage

*OTP stated position.

of TV sports programs than afforded by making sports events copyrightable.

*2. In light of the Midwest Video case, there is a need for legislation to govern the long-term development of cable TV.

3. Appropriate division of responsibility for cable regulation among the Federal, State and local levels.

4. Federal regulation of cable should require: non-discriminatory rates, addition of capacity upon reasonable demand and vertical disintegration of the program supply, interconnection and transmission functions.

5. There should be no requirements for free cable channels, special services, or special access for certain interest groups.

6. There should be no cross-ownership restrictions imposed on broadcaster and print media ownership of cable systems.

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*OTP stated position.

7. There should be Government assistance when necessary to enable cable construction and various health and welfare cable services for rural residents and the urban and rural poor.

8. The Federal Government should sponsor a program to demonstrate effectiveness of public services and viability of selected commercial services via broadband systems.

9. Program restrictions on cable pay TV (anti-siphoning).

DOMESTIC COMMON CARRIER REGULATION

A. Stated Administration Positions

1. Domestic satellite services should be provided on an open entry, competitive basis.

2. Bell may offer such competitive services upon showing no cross-subsidization.

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*OTP stated position.

B. Positions on Pending Issues

*1. Data communication services should be provided on an open entry, competitive basis.

2. There should be no legal barriers to brokerage and resale of communications services.

3. Employment practices of regulated common carriers should be excluded from FCC jurisdiction.

4. Hawaii and Alaska should be considered contiguous States for interstate rate-making purposes.

5. There should be nationwide implementation of 911 as an emergency telephone number.

INTERNATIONAL COMMUNICATIONS

A. Stated Administration Positions

1. International agreements unnecessarily limiting the free flow of information over communication systems are contrary to U.S. interests.

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*OTP stated position.

2. International aeronautical and maritime mobile communication satellite services should be procured by the Government from commercial sources.

3. The U.S. will provide launch assistance for foreign communication satellites if consistent with the relevant International arrangements.

B. Positions on Pending Issues

*1 There should be legislation clarifying structure and regulation of U.S. international communications industry.

2. Special provision of common carrier stock ownership in Comsat should be eliminated.

3. Government participation in Comsat should be reduced or eliminated.

*4. There should be legislation outlining government-industry coordination for international negotiations regarding communication facilities.

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*OTP stated position

5. Western Electric should be allowed to sell in foreign markets.

LAND MOBILE

A. Stated Administration Positions

None

B. Positions on Pending Issues

1. Mobile communication services should be provided on an open entry, competitive basis.

2. Whatever we do now should be compatible with orderly evolution of widespread interconnected mobile telephone services.

COMPUTERS AND COMMUNICATIONS

A. Stated Administration Position

None

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*OTP stated position.

B. Positions on Pending Issues

1. Information services involving both information processing and communications should not be regulated, especially by the FCC.

2. There is a need for legislation defining private rights, insitutional arrangements and enforcement mechanisms suitable for information technology.

GOVERNMENT COMMUNICATIONS

A. Stated Administration Positions

1. The Federal Government should establish a single nationwide public warning system for civil defense and natural disaster use capable of activating warning devices in the home.

B. Positions on Pending Issues

1. There should be improved coordination of procurement and use of telecommunications facilities and services by Federal agencies, short of creating a single operating entity.

*OTP stated position.

2. The Federal Government should take maximum advantage of emerging competitive sources of supply for telecommunications equipment facilities and services.

OTHER

A. Stated Administration Positions

1. Facilities and procedures for the emergency broadcast system should be improved to make it more reliable, flexible and acceptable to the broadcast industry and the public.

B. Positions on Pending Issues

1. Procedures should be implemented to assure that proposed new Government communication-electronics systems do not interfere with other systems before government funds are obligated.

*2. Environmental and biological aspects of non-ionizing electromagnetic radiation should be determined.

*OTP stated position.