CONTENTS

PUBLIC SERVICE SATELLITE CONSORTIUM	
Summary Chronology	A
NASA Release 1/5/73	В
OTP Memorandum 1/3/75	С
Senate Bill S.3542 5/74	D
OTP Letter 10/2/74	Е
Senate Letter to President 10/11/74	F
Senator Moss Letter 10/11/74	G
Draft HEW Educational Broadcasting Facilities Bill 10/11/74	Н
NASA Letter 10/30/74	I
OMB Letter 11/19/74	J
OTP Letter 1/10/75	K
OTP Memorandum 1/31/75	L
Domestic Council Letter 2/19/75	М
Eger Speech 2/20/75	N





SUMMARY CHRONOLOGY - PUBLIC SERVICE SATELLITE CONSORTIUM

- 1. January 5, 1973: NASA announces that ATS-G is cancelled.
- 2. January 6, 1973: OTP letter to NASA approving the decision.
- 3. January 9, 1973: NASC memo to OTP expressing concern that NASA may have gone too far.
- January 31, 1973: OTP letter to NASA requesting clarification of NASA's intentions about their future role in satellite communications.
- 5. <u>February 13, 1973</u>: NASA reply to above OTP letter providing requested clarification.
- June 1973: Testimony of R. Tenney Johnson (Gen. Counsel -NASA) reiterating NASA decision to phase down its communication satellite activities.
- 7. <u>September 4, 1973</u>: OTP letter to NASA suggesting an approach to help somooth out the potential problems of the phase down.
- 8. <u>September 27, 1973</u>: NASA reply concuring in the OTP proposed approach.
- 9. <u>November 14, 1973</u>: OTP letter to NASA forwarding a draft memorandum to all agencies implementing the phase down approach discussed above.



- 10. January 3, 1974: OTP memo to all departments and agencies entitled "NASA Communications Satellite Technical Support".
- 11. January 25, 1974: EIA letter to OTP forwarding a position paper of that organization opposing the phase down.
- 12. <u>May 29, 1974</u>: Senate Bill introduced sponsored by Moss/ Goldwater to fund ATS-F'. Hearings held on July 23, 1974. Administration in form of HEW and NASA opposed the bill.
- 13. <u>August 6, 1974</u>: OTP letter to NASA infroming them of our deep interest in having NASA and HEW work with OTP in pursuing the commercial alternative.
- 14. August 22, 1974: NASA letter to OTP indicating NASA interest in promoting such a commercial alternative.
- 15. August 28, 1974: NASA briefing to industry aimed at generating commercial interest in providing a commercial follow-on.
- 16. September 27, 1974: OTP letter to Domestic Council clarifying OTP's position regarding ATS-F'.
- 17. September 30, 1974: Western Union letter HEW expressing strong interest in providing a commercial satellite for about half the cost of ATS-F'.



- October 2, 1974: OTP letter to NASA opposing a pending deal between that agency and DOD for launching ATS-F'.
- 19. October 8, 1974: Hughes Aircraft letter to NASA offering to sell the Government a commercial satellite.
- 20. October 11, 1974: Letter to President Ford from thirteen Senators expressing over the opposition of the Administration to the President requesting a personal review of this matter by the President.
- 21. October 16, 1974: Mr. Staggers introduced HR 17406 into the House (forwarded by HEW on October 11).
- 22. October 30, 1974: NASA letter to OTP informing of the decision to mothball ATS-F'.
- 23. <u>November 19, 1974</u>: OMB letter to fourteen Senators explaining the reasons for opposing ATS-F' and expressing support for the concept of a user consortium.
- 24. January 10, 1975: OTP letter to selected agencies inviting them to a meeting on January 20 to discuss the possibility and desirability of forming an interagency committee to study the Federal role in and use of high powered satellite service. At this meeting there was general agreement that such a committee was needed, that it should be chaired by OTP and that a special charter should be drawn up by OTP.

- 25. January 31, 1975: OTP memorandum to selected agencies forwarding to them a questionaire gathering information about their specific needs for such service and about their R&D resources which might be appropriated applied to this effort.
- 26. February 20, 1975: Speech by John Eger to PSSC expressing OTP support of the user consortium concept.

MILESTONES CONCERNING THE PUBLIC SERVICE SATELLITE CONSORTIUM

- A. <u>November 4-5, 1974</u>: Meeting in Palo Alto, California to discuss the needs of higher education for the high powered satellite service.
- B. <u>November 7, 1974</u>: Meeting in Denver, Colorado to discuss the needs of all potential users of this type of service and to decide how the final organization should be formed.
- C. <u>December 18-20, 1974</u>: Meeting in Denver where first steps toward the final organization were taken. Here the name was chosen and the Steering committee was selected.
- D. January 21, 1975: Meeting of the Steering committee in Washington,
 D.C. to discuss plans for the organizational meeting to take
 place in February in San Diego.
- E. <u>February 19-21, 1975</u>: Organizational meeting in San Diego.
 By-laws approved and interim Directors chosen. Pledges taken from potential members.





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

> FOR RELEASE: 4:00 P.M. EST JAN. 5, 1973

RELEASE NO:

NASA PROGRAM REDUCTIONS

NASA is starting today to make a number of program reductions to adjust its activities in space and aeronautics to a lower spending level. These reductions are necessary as part of all the actions required to reduce total Government spending to the \$250 billion target set by the President for fiscal year 1973.

Every effort has been made to continue the essential elements for a balanced and productive space and aeronautics program within tight fiscal constraints. This includes retention of the Skylab experimental space station, the Space Shuttle, the Apollo-Soyuz Test Project, Viking, the Mariner Jupiter-Saturn mission, and many applications and aeronautics projects. NASA will proceed with development of a new front fan for reducing the engine noise generated by jet aircraft.

-more-

The actions announced today are being taken in the context of NASA's planning for FY 1974. Details of the revised programs and spending plans for FY 1973 and FY 1974 will be submitted to the Congress later this month. Today's actions are taken in advance of that time in order to save the maximum amount of money in this fiscal year.

The following is a list of major actions being taken by NASA:

- In <u>Manned Space Flight</u>, the manpower buildup on the Space Shuttle will be slowed down, with some resulting delay in the Shuttle's first orbital flight.
- In <u>Space Science</u>, work on the High Energy Astronomy Observatory (HEAO) project is being suspended for the time being.
- In <u>Space Applications</u>, NASA will phase out of its work on communications satellites.
- In <u>Research and Technology</u>, work on nuclear propulsion will be discontinued and work on nuclear power will be sharply curtailed. The Plum Brook station will be closed.
- In <u>Aeronautics</u>, an experimental Quiet Propulsive Lift Short Takeoff and Landing (QUESTOL) research aircraft

-more-

-2-

-3-

will be cancelled. However, quiet propulsive lift technology will continue to be developed.

Here are some of the reasons for making these specific reductions:

- The <u>Space Shuttle</u> is the key to the U.S. future in space, and its development will proceed. However, at the overall slowed pace of the U.S. space program, Shuttle development will also be slowed somewhat so that it will not require an inordinate share of the available resources.
- HEAO is designed to explore the unknown through the eyes of high-energy astrophysics. Although much is to be learned in this field, it is not essential to move out at any specific pace. Since HEAO is just now getting under way, it is possible to suspend work on this project without a great deal of wasted costs. During the period of suspension (expected to last at least one year), NASA will study ways to meet some of HEAO's objectives at lower costs. In the meantime, some work in high-energy astrophysics will continue with spacecraft such as the Small Astronomy Satellites.

-more-



NASA has been the catalyst in bringing into being a commercially viable <u>communications satellite</u> business. The technology of communications satellites is being developed further with the flight testing of ATS-F (Applications Technology Satellite) now scheduled for 1974. Further advances in satellite communications research and development can be accomplished by industry on a commercial basis without Government support. NASA will, therefore, phase out of its in-house and contracted communications satellite work, and will cancel ATS-G which is just now getting under way as a follow-on to the ATS-F project.

• NASA's <u>research and technology</u> program provides the building blocks for future space flight projects. Here new instruments are invented, new propulsion systems are developed, and satellite technology is advanced. The rate of development of technology for advanced space missions, however, can be slowed, consistent with the likely timing for such missions. In making these reductions, NASA is seeking to retain projects which are expected to pay off in the near term future and to make the reductions in those with much longer term

-more-

expectations. In particular, work on nuclear propulsion and large scale nuclear power sources is being terminated because all prospective applications are in the very distant future. And since NASA's Plum Brook station near Sandusky, Ohio, is the principal NASA installation devoted to the testing of nuclear power sources and related work, it will be closed.

In aeronautics, it is NASA's role to do the basic 0 research and technology required to maintain U.S. superiority in civil aviation, and to support military aviation developments. Much of this work is done on the ground--in wind tunnels, on computers, etc.--but some is done in flight with experimental aircraft. One of these experimental aircraft projects -- the QUESTOL, for experimenting with guiet propulsive lift technology for short haul aircraft for civilian use--is being cancelled because of its lower priority relative to other NASA aeronautical activities. Since this project is only just getting under way, there will be little wasted effort. Because of uncertainties in the timing of the need for commercial STOL aircraft in the 1980's, the QUESTOL project can be deferred at the present time.

-more-

-5-

Nevertheless, in order to keep the country's options for the 1980's open, NASA will continue work on a quiet propulsive lift engine and on research and technology applicable to STOL aircraft. NASA will also follow closely the progress of the Air Force's Advanced Medium STOL Transport program and will take advantage of information from that program.

-6-

These are the principal areas immediately affected by NASA's program reductions. Others will be affected to a lesser extent. In most cases, the necessary cut-back actions will be taken at once in order to gain the maximum possible savings.



OFFICE OF TELECOMMUNICATIONS POLICY EXECUTIVE OFFICE OF THE PRESIDENT WASHINGTON, D.C. 20504 January 3, 1974

DIRECTOR

MEMORANDUM FOR THE HEADS OF EXECUTIVE DEPARTMENTS AND AGENCIES

SUBJECT: NASA Communications Satellite Technical Support

As part of a Government-wide effort to reduce Federal spending, the National Aeronautics and Space Administration has decided to curtail its overall communications applications program. This decision has resulted in the phasing out of much of NASA's communications satellite work, particularly with respect to early commercial applications. A small group of communications satellite experts will be retained within NASA, to support primarily in-house requirements and to provide interagency advisory services authorized by statute.

A limited technical support capability will also be available to other agencies on a reimbursable basis. Included would be that research, development, and technical assistance provided by NASA to other agencies, where NASA has been selected because of a unique technical competence which NASA has developed in meeting its own needs and mission objectives.

In addition to providing services to agencies on a reimbursable basis, NASA will continue to support selected efforts in satellite communications which are aimed at satisfying broad national needs rather than those associated with specific agency programs. Such needs will be defined by OTP in consultation with other concerned or affected agencies. Specific requirements may be assigned to lead agencies for further definition and follow-on actions.

At the present time, NASA is assembling a work program for communications satellite applications, other than applications of early commercial interest. Any foreseen needs for NASA technical support in this area which are aimed at specific agency programs should be forwarded to NASA as soon as possible in order to be considered for inclusion in this program.

Clay T. Whitehead



930 CONGRESS 20 Session

S. 3542

IN THE SENATE OF THE UNITED STATES

MAY 29, 1974

Mr. Moss (for himself and Mr. GOLDWATER) introduced the following bill; which was read twice and referred to the Committee on Aeronautical and Space Sciences

A BILL

To authorize appropriations to the National Aeronautics and Space Administration for research and development relating to the seventh applications technology satellite, and for other purposes.

1 Be it enacted by the Senate and House of Representa-2 tives of the United States of America in Congress assembled, 3 That there is hereby authorized to be appropriated to 4 the National Aeronautics and Space Administration for 5 research and development for a seventh applications tech-6 nology satellite, \$41,700,000.

SEC. 2. When so specified in an appropriation Act, any
amount appropriated pursuant to this authorization may remain available without fiscal year limitations.

II



DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

STATEMENT BY MR. WILLIAM MORRILL ASSISTANT SECRETARY FOR PLANNING AND EVALUATION BEFORE THE COMMITTEE ON AERONAUTICAL AND SPACE SCIENCES UNITED STATES SENATE Tuesday, July 22, 1974

Mr. Morrill is accompanied by:

Mr. Charles M. Cooke, Jr., Deputy Assistant Secretary for Legislation (Education), DHEW

Dr. Albert L. Horley, Director, Office of Telecommunications Policy, DHEW

Mr. Chairman and Members of the Committee:

I am pleased to appear today in response to your request for testimony from the Department of Health, Education and Welfare on S. 3542, a bill which would authorize \$41.7 million to NASA for the launching of an ATS-7 communication satellite.

As I am sure the Committee is aware, the Department has been participating with NASA, the Veterans Administration, and the Corporation for Public Broadcasting in supporting a set of six Health and Education Telecommunications (HET) experiments using the recently launched ATS-6 satellite. Various local and regional agencies have done much of the actual planning and implementation of the program which now involves 20 different states and about 120 sites. The services being schools, professional medical education, telemedicine involving two-way video health aide/physicial consultation, in-service teacher training, and interhospital video consultation. Most of the people and areas served are remote and isolated and, thus, difficult and expensive to reach with quality traditional services.

The concepts and objectives which undergird our participation in the HET experiments on ATS-6 will, I belive, be useful in explaining our view of the new legislation which the Committee is considering. First, our review of the application of satellite technology to human service programs of concern to the Department led us to the conclusion that there were potentially sound applications, though the scope and exact nature of valid uses has not been definitively established. It is also our conviction that if the applications of satellite technology

Page 2

are really valid, the users or potential users will recognize their value and incorporate them in the programs or services they offer.

The problems of introducing a new technology are many. Even though paper studies may indicate beneficial applications, an actual demonstration is often needed to persuade or show potential users that the technology can produce effective results, lower costs or both. Indeed, the demonstration may, itself, provide the basis for discovering or extending possible applications. Further, the demonstration may be needed to overcome natural resistance to change and new methods. The application of communication satellites to the human services field presents yet another problem in that no one user is big enough to underwrite the whole costs of the service. The creation of mechanisms for aggregation of enough users to make the application possible is a new venture for both those who provide human services and those who might offer satellite communication services.

Our objectives in the HET experiments on ATS-6, therefore, are to demonstrate and explore valid applications of satellite technology in the human service field to develop the supporting institutional arrangements and also to explore mechanism for market aggregation. While these experiments are just now getting underway, we believe that the HET experiments can be expected to attain our objectives to a reasonable degree.

Our hopes and expectations beyond the HET experiments on ATS-6 have been that one of the non-governmental domestic satellite offerings would

Page 3

include capacity and plans to provide service to human services activities of concern to the Department in frequency ranges and at power levels which would permit the use of low cost ground equipment. We remain optimistic that such an approach will materialize in the future, just as we remain convinced that it is substantially better for the Department and other human service activities to use their resources to buy service rather than invest in satellite hardware and launching. But it is now clear that such a capability will not be available soon enough for the HET experimenters to be able to obtain continued service should they so desire after ATS-6 is moved over India.

The foregoing background is important to our reaction to the proposed legislation to authorize the launching of ATS-7. While it would be desirable to provide continued service to the current HET users if the applications which they are undertaking prove to be as valid as we hope, we do not favor the approach embodied in S. 3542 for the following reasons:

--- First, the ATS-7 as currently designed provides too limited a capacity, and too restricted a geographic coverage to permit expansion of the current set of experiments. Other technical changes would be needed in any event as the current ATS-6 satellite operates outside of the frequency bands internationally authorized for satellite communications by virtue of a special non renewable waiver from the Intra Governmental Radio Advisory Committee.

Page 4

-- Second, the ATS-7 represents an exceedingly expensive way to maintain capacity for current experimenters. If the satellite were in existence at no cost to the Department, we would, no doubt, continue to participate in its use at near current levels. If, however, we were called upon to contribute to the capital cost based on our share of the use -- estimated at somewhat more than \$10 million of the \$41.7 million total, we would not consider the benefits large enough to warrant continued participation. From a cost standpoint, there are other less costly alternatives, though we are not now recommending them. For example, it would probably cost only about \$1.2 million to reconfigure our ground terminals to use the Canadian Technology Satellite for HET experimenters, though it has disadvantages on other grounds. Third, we are concerned that the plan to complete and launch ATS-7 would serve as a disincentive to the participation of private communication carriers which we believe desirable in the longer run. The Department would much prefer human services user groups -- in cooperation with the Department -- to enter into agreements with such carriers to procure desired services rather than to fund directly another ATS satellite.

In conclusion, when all factors are considered, we believe it to be unwise to expend \$41.7 million to complete and launch ATS-7. We therefore recommend against the passage of S. 3542.

I thank you for the opportunity to present the Department's views on S. 3542 and I will be happy to attempt to answer any questions.

HOLD FOR RELEASE UNTIL PRESENTED BY WITNESS

Statement of

Dr. James C. Fletcher Administrator

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

before the

Committee on Aeronautical and Space Sciences United States Senate

Mr. Chairman and Members of the Committee:

I am pleased to have this opportunity to present NASA's views on S. 3542 -- a bill to authorize funds for NASA research and development for a seventh Applications Technology Satellite (ATS-F Prime).

Accompanying me today is Charles W. Mathews, Associate Administrator for Applications.

NASA takes great pride in the progress and success to date of the Applications Technology Satellite (ATS) program -our second and third generation experimental communications satellites.

From the beginning, this program has embodied our efforts to demonstrate useful applications of space technology for payloads in synchronous orbit and to provide basic design information for operational satellites, for communications and other applications.

As you know, on May 30 of this year the sixth satellite in the ATS program, called ATS-F before launch and now called ATS-6 -- the most complex, versatile and powerful communications spacecraft developed to date -- was launched into nearperfect orbit.

The primary ATS-6 mission objectives were:

- To obtain geostationary orbit;
- To erect a 30-foot antenna structure capable of providing a quality signal to small, inexpensive ground receivers;
- To measure and evaluate the performance of the antennas;
- To stabilize the spacecraft using a three-axis control system; and,
- Finally, with the above accomplished, to support and demonstrate broad-scoped, user-oriented experiments.

Now that ATS-6 is in orbit and working well, the overall <u>experimental</u> objectives are to demonstrate the viability of a direct broadcast link to widely-placed, small and inexpensive ground receiving units; aeronautical and maritime applications of space communications including position-location and traffic control; tracking and relay of data from lower earth orbiting spacecraft; and, weather observations. We also hope to acquire data for future space communications systems and to acquire new data on spacecraft control and in space science. The sixth ATS satellite will extend the scope and quality of over 20 experiments conducted by its predecessors, ATS-1 through 5.

As the Committee knows, current plans for use of ATS-6 call for it to be based over the United States for approximately one year from launch -- until late spring of 1975. At that time, as reflected in NASA's agreements with all of the user experimenters and in accordance with the agreement between the United States and India, the ATS-6 will be moved eastward to a location over Central Africa where it will be "visible" to the Indian subcontinent enabling the Indian Satellite Instructional Television Experiment (SITE) to begin. This location will also allow an increase of approximately 30% in in-flight communication and tracking during the 1975 Apollo-Soyuz mission.

Our current experiment plans are to operate all experiments, except the Indian SITE, while the ATS-6 is in view of the United States. With two exceptions, the user experimenters indicate that a year's duration will be sufficient to complete the experiments. However, in the case of two major user experiments, the Health/Education Telecommunications (HET) experiment and Maritime/Aeronautical Experiment (PLACE), the user experimenters have expressed concerns that the ATS-6 time period of one year is too short to allow definition of detailed requirements and procedures for future operational systems. They have also expressed concern over the loss of continuity in their experimental operations.

As things now stand, there are two ways in which the user experimenters' time and continuity problems may be alleviated.

First, there is the planned return to the Western hemisphere of ATS-6 in the summer of 1976 -- after completion of the Indian experiment. This, of course, depends on the continuing performance of the satellite. The spacecraft is now in A-one condition. The launch of this satellite was "near perfect"; this allowed us to save propulsion system fuel so that the amount of fuel now on board is more than ample to

return the spacecraft to its original position after SITE with a reasonable life expectancy of three additional years. Furthermore, the data received have validated all experiment operations and the quality of the TV transmission has been excellent. As of today, therefore, it is reasonable to expect that both the spacecraft and the payloads will continue to be in first class working order after SITE is completed.

A second possibility is use of the Communications Technology Satellite (CTS). This satellite is a cooperative effort of the United States and Canada, and is scheduled for launch in mid-December 1975. In accordance with this launch schedule, the CTS user experimenters will start their programming in the first part of 1976. All six components of the HET experiment have indicated their intent to participate in CTS experiments. This should help provide some additional experiment time and continuity in their activities.

Commercial alternatives should also be considered. Domestic communication satellites could be used to provide ATS-1 through 5 type services, namely audio point-to-point or voice broadcast telecommunication to small terminals. The technology is also currently available which would permit

commercial development of television broadcasting to low-cost, small ground terminals, as demonstrated by ATS-6. Of course, we do not know at this time if the commercial market exists to support these applications. The experiments on ATS-6 are intended to demonstrate the technical feasibility of these capabilities and to help determine their market potential.

With this background, let me turn to the legislation being considered today. S. 3542 would authorize \$41.7 million in NASA research and development funds for the purpose of preparing, launching and operating a seventh ATS spacecraft --ATS-F Prime. As in most cases, the money question cuts right to the bottom line of our comments here this morning.

Our current best estimate, considering the recent Air Force estimate of a \$4 million inflationary increase in the cost of the Titan III C launch vehicle, points to an overall cost of \$45.7 million. This estimate presupposes that ATS-F Prime would be given the green light by September of this year. This is a key date because NASA will stop work on the F Prime spacecraft and disband the NASA/industry ATS team at that time. The funds available to NASA do not permit us to continue these teams beyond that time; our decision to



continue work until September was a hedge against the possibility of an early failure of ATS-6. After September, a decision to continue would, of course, result in additional restart costs that are not included in the \$45.7 million estimate.

I have no doubt that an extension of the initial experimentation time with an ATS-6 type satellite would be of value to the user experimenters. Additional operating time would provide more valid results. Additional experimentation would also, of course, provide a stronger basis for defining operational service needs and for fuller development of practical operational procedures for using future systems. Finally, it could avoid or postpone the impact on the actual users of a hiatus in operations. I can appreciate that in the eyes of the user community an early, successful launch of ATS-F Prime would provide a way to help them solve these and other problems they face when the initial period of Western hemisphere experimentation with ATS-6 ends.

On the other hand, as a research and development agency, NASA must also recognize that experimentation time on ATS-6 is being made available in accordance with the user agency agreements essentially as planned, and that the experimentation that will be possible will advance each user well into readiness for an operational mode. For these reasons, even apart from budgetary constraints, it is NASA's view that the ATS-F Prime satellite should more properly be considered as a potential operational, or at least quasi-operational, vehicle as opposed to an experimental satellite like ATS-6.

8

We believe, therefore, that the user community should consider bearing the incremental cost of ATS-F Prime. To this end we have written to all the principal prospective domestic and international users to advise them of the status of the ATS-F Prime spacecraft and to ascertain their interest in user cost sharing. We have, of course, made it clear that the time for this decision is short and have asked for their responses by the end of August. It is possible that the current enthusiasm in the user community will translate itself into user commitments to fund ATS-F Prime.

In summary, NASA believes that the concept embodied in the design of the ATS-6 satellite system will prove to be another valuable use of communications from satellites in space. We also believe that the launch of the seventh ATS --ATS-F Prime -- could be a useful next step in applying this concept. However, if such a step is to be taken, we believe that the costs should be shared among the users. For this reason, NASA does not recommend enactment of S. 3542.

Mr. Chairman, this concludes my prepared statement.



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

OCT 02 1974

DEPUTY DIRECTOR

Honorable James C. Fletcher Administrator National Aeronautics and Space Administration 20546 Washington, D.C.

Dear Jim:

In light of the success of the ATS-6 it is only natural that those who realize the potential for such applications should feel a need to continue Lie program. It is quite understandable that their concern would center on the backup spacecraft as the means for achieving this continuity. Since it is already partially assembled, it is viewed by many as the most viable alternative.

Ironically the very success of the ATS program brings with it an increased responsibility to insure that those who have come to depend upon it are not let down when the "experiment" is over. I am particularly concerned about those who will come to rely on the ATS satellite(s) for the provision of critical medical services. In this rogard I fully agree with your view that any follow-on to ATS-6 should be considered as operational rather than purely experimental.

I believe that NASA and OTP, together with HEW, are of one mind in the belief that the ultimate solution to the problem of how to deal with rising expectations is to involve the private sector in the provision of these services. The immediate problem would therefore appear to be to develop ways of inducing the private sector to become involved in a substantive way. After much informal discussion between my staff and both the potential users and industry, I am in agreement with HEW that the launch of the backup satellite to continue the ATS-6 experiments would actually create a disincentive for industry in providing a long term solution to the users mentioned above.

The pending arrangement under which the Department of Defense would supply a launch vehicle without charge to this program is therefore of utmost concern to me. It would, as I understand it, result in the launch of this backup spacecraft on a schedule which would make it next to impossible to realistically consider other alternatives in which the private sector may play a greater role. It would also place in



orbit, for quasi-operational use, a satellite which both the Corporation for Public Broadcasting and HEW have testified is seriously inadequate to meet user needs.

I am also concerned that this spacecraft might result in having more high-powered satellites in orbit than are needed. Two other satellites, ATS-6 (after its return from India) and the CTS, are also scheduled to be in orbit during much of the same period being discussed for the ATS-7.

In view of these considerations, I would greatly appreciate it if you would defer action on the launch of the ATS-6 backup spacecraft until the government can examine more thoroughly the other courses of action which are available for the provision of such services.

Yours Truly,

John M. Eger Acting Director



LABOR AND PUBLIC WELFARE SENATE SILECT COMMITTEE ON SMALL DUSINESS SPECIAL COMMITTEE ON AGING

Mariled States Seriale WASHINGTON, D.C. 20510

October 11, 1974

Honorable Gerald R. Ford President The White House 1600 Pennsylvania Avenue Washington, D. C. 20500

J. GLENN BEALL, JR.

MARYLAND

Dear Mr. President:

Today, in twenty States and scores of communities from Appalachia to Alaska meaningful educational and health care benefits are being made available to large numbers of our citizens as a result of the Nation's substantial investment in space programs.

However, in the next few days action may be taken which will seriously limit or even lead to abandonl ment of this very promising endeavor.

The spacecraft providing this service is the first of a new generation of advanced communication satellites, ATS-6, launched May 30 by the National Aeronautics and Space Administration. Its purpose was to conduct a series of practical experiments and it has performed flawlessly.

One of the most important of these experiments involves the beaming of educational health care and medical consultation television programming direct to unique, lowcost receiving stations. The receivers are located in school houses, Veterans Hospitals, community buildings and health care facilities in isolated regions where terrestrial television coverage is not feasible. The Department of Health, Education, and Welfare, the Veterans Administration, the Corporation for Public Broadcasting and a number of national organizations are cooperating with NASA in this experiment.
Honorable Gerald R. Ford Page Two October 11, 1974

Previously NASA had planned to have a second ATS satellite to continue a two year period of evaluation and experimentation by the States participating in this educational health care effort. This was necessary because the United States has committed ATS-6 to move to India to pioneer educational television services in that nation in 1975. Now, unfortunately, the second satellite, ATS-F Prime, may be mothballed. This does not seem to be in the best interest of the nation.

The problem appears to be strictly a crossdepartmental one. ATS-F Prime, if launched, will supply urgently needed services to hundreds of thousands of deserving American Citizens. To complete and launch ATS-F Prime requires total expenditures of only fifteen million dollars plus a Titan III-C launch vehicle, which has already been procured and is contained in the Department of Defense inventory. After including the cost of the booster, total costs would be forty-five million dollars, amortized over five fiscal years.

After such a promising start we should not interrupt a service which will provide health and educational benefits to students, school teachers, and the sick. We the undersigned wish to bring the humane aspects of this matter to your personal attention.

J. Glenn Beall e Metcalf James I

Charles McC. Mathias

Frank C

Bill Brock



Honorable Gerald R. Ford Page Three Cetober 11, 1974 floyd K. Haskell CO Hugh Scott Mike Gravel

1.2.

1.2

.

Gale W. McGee du de

Mike Mansfield 12 1 Ted Stevens

Jacob K. Javits



FRANK E. MOSS, UTAM. CHAIRMAN WASTER, I STANUSON, WASH. BARRY GOLDWATER, ARIZ. S. JART 51. AINGTON, MO. DONN C. STENNIS, MISS. LOWELL F. WEICKER, JR., CONN. AD W. CANNON, NEV. HASKELL. COLO. . METZENBAUM, OHIO

DEWEY F. BARTLETT, OKLA. JESSE HELMS, N.C. PETE V. DOMENICI, N. MEX.

ROBERT F. ALLNUTT, STAFF DIRECTOR

United States Senate

COMMITTEE ON AERONAUTICAL AND SPACE SCIENCES WASHINGTON, D.C. 20510

October 11, 1974

The President The White House Washington, D. C.

Dear Mr. President:

The National Aeronautics and Space Administration launched the Advanced Technology Satellite-6 (ATS) on May 30, 1974. This satellite embodies many of the most advanced concepts of communications experiments in the world today. Of particular significance is the Health, Education and Telecommunications (HET) experiment, a cooperative effort between the Department of Health, Education, and Welfare, NASA, and the Federation of Rocky Mountain States, to transmit health and education programs to remote sites.

The HET experiment allows television transmission of academic, vocational and community education programs to small, low-cost receiving sites throughout the entire Rocky Mountain West and Alaska. It also allows for the first time long-distance, two-way educational television thereby permitting the students to ask questions of the instructors who are in the Network Control Center in Denver. Included in this experiment are various health communication programs which allow professors and doctors at recognized medical institutions to communicate with and train paramedics and medical students in isolated regions of Appalachia and Alaska.

The HET experiment on board ATS-6 will be available for continued use by 23 states through the 1974-75 school year. By previous international agreement the satellite is then to be repositioned for use by India. This will mean the loss of a unique experiment, unless the ATS-6 backup satellite, ATS-F Prime, is launched. The ATS-F Prime satellite is almost complete



The President October 11, 1974 Page Two

and now sits at Fairchild Industries in Maryland, awaiting use. However, NASA is presently without sufficient funds to launch ATS-F' and thus allow continuity of the HET experiment. Many of the users of the program have expressed concern about the loss of the HET experiment, which is proving itself to be highly beneficial.

Negotiations have been in progress between NASA and the Department of the Air Force to obtain a Titan-III-C launch vehicle. The Air Force is apparently quite interested in placing aboard ATS-F several communications experiments. However, those negotiations, which have been going on since late July, culminated in a letter which I received today from the Department of the Air Force stating that the Air Force cannot sacrifice other high priority programs which would require use of a Titan III-C launch vehicle and, therefore, cannot provide that launch vehicle for launching ATS-F Prime unless NASA will reimburse the Department of Defense the \$25 million required to replace it. This is not possible.

I am concerned that the HET experiment should be aborted in its infancy when it is providing health and educational benefits which, until now, have not been available. I am bringing this matter to your attention to urge your personal review of this loss.

Sincerely,

Frank E. Moss Chairman





DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

, October 11, 1974

Honorable Carl Albert Speaker of the House of Representatives Washington, D. C. 20515

Dear Mr. Speaker:

Enclosed for the consideration of the Congress is a draft bill "To extend the Educational Broadcasting Facilities Program and to provide authority for the support of demonstrations in telecommunications technologies for the distribution of health, education, and social service information, and for other purposes."

This bill has two basic purposes. First, the Department's direct support for over-the-air educational radio and television broadcasting facilities would be extended for a five-year period. Television broadcast coverage of these stations now extends to almost 78 percent of the population, while radio coverage is approximately 65 percent; extension of the facilities program for this additional period would permit the Department of Health, Education, and Welfare essentially to satisfy the original goals of the program while phasing down its direct support for construction of broadcasting facilities. Moreover, because the number of public television stations in the country represents a nearly complete and mature system, and because increased broadcast coverage is achievable. only at unacceptably high per-viewer costs as the 100 percent coverage level is approached, the funding criteria for the broadcasting facilities program would be amended to emphasize (1) the strengthening of the capability of existing facilities, (2) adapting existing facilities to additional educational uses, and (3) extending educational broadcasting services, with due consideration to equitable coverage of all areas of the country.

Secondly, the legislation would provide authority for a telecommunications program designed to demonstrate ways to meet the common needs of the health and education community.

Honorable Carl Albert

This legislation would provide a single broad authority in the Office of the Secretary to create the multi-user telecommunications <u>services</u> and facilities which will make it possible for health, education, and social service providers jointly to develop more efficient and economical means of meeting the nation's needs.

In order to accomplish this objective, the legislation would authorize the Secretary to carry out a program for the support--through grants or contracts--of demonstrations in the use and application of nonbroadcast telecommunications facilities and equipment (such as cables and satellites). Moreover, the legislation would provide the authority to assist in the initial application of communications facilities that are uniquely suited to the needs of the health and education community, including the purchase by grantees or contractors of necessary telecommunications services from commercial carriers.

Present cost projections for the bill total approximately \$35 million over five years.

I am also enclosing for your convenience a brief summary and analysis of the proposed legislation.

I urge prompt and favorable consideration of this proposal.

The Office of Management and Budget advises that enactment of this proposed legislation would be in accord with the program of the President.

Sincerely,

/s/ Frank C. Carlucci Acting

Secretary

Enclosures



-



D3D CONGRESS L

H. R. 17406

A BILL

To extend the educational broadcasting facilitics program and to provide authority for the support of demonstrations in telecommunications technologies for the distribution of health, education, and social service information, and for other purposes.

By Mr. STAGGERS and Mr. DEVINE

OCTOBER 16, 1974 Referred to the Committee on Interstate and Foreign Commerce

H. R. 17406 93D CONGRESS 2D SESSION

IN THE HOUSE OF REPRESENTATIVES

5 the heading as an as an an entrony in side a gained and

-month i have to main the manufacture of the main in the

OCTOBER 16, 1974

AND AND I LOW AND A LOW TO AN A TO A

the second secon

and the " beat Mr. STAGGERS (for himself and Mr. DEVINE) introduced the following bill; which was referred to the Committee on Interstate and Foreign Commerce

. 117481 a. m

11

11

1

1

.1.1.1

A BILL

To extend the educational broadcasting facilities program and to provide authority for the support of demonstrations in telecommunications technologies for the distribution of health, education, and social service information, and for other the she i purposes.

Be it enacted by the Senate and House of Representa-1 tives of the United States of America in Congress assembled, 2 That this Act may be cited as the "Telecommunications Facil-3 1.15 ities and Demonstration Act of 1974".

PURPOSE

SEC. 2. (a) Part IV of title III of the Communications 6 Act of 1934 is amended by striking out the heading of such 7 part and inserting in lieu thereof "GRANTS FOR NONCOM-8

I

4

5

MERCIAL EDUCATIONAL BROADCASTING FACILITIES; TELE COMMUNICATIONS DEMONSTRATIONS; CORPORATION FOR
 PUBLIC BROADCASTING".

4 (b) Subpart A of such part is amended by striking out
5 the heading of such subpart and inserting in lieu thereof
6 "Assistance for Telecommunications Facilities and Demon7 strations".

8 (c) Section 390 of such Act is amended to read as9 follows:

10

18

21

"DECLARATION OF PURPOSE

11 "SEC. 390. The purposes of this subpart are to assist 12 (through matching grants) in the construction of noncom-13 mercial educational television or radio broadcasting facilities 14 and to demonstrate (through grants or contracts) the use 15 of telecommunications technologies for the distribution and 16 dissemination of health, education, and other social service 17 information.".

APPROPRIATIONS

19 SEC. 3. Section 391 of such Act is amended to read as 20 follows:

"AUTHORIZATIONS OF APPROPRIATIONS

22 "SEC. 391. (a) There are authorized to be appropri23 ated for carrying out the purposes of this subpart such sums
24 as may be necessary for the fiscal year ending June 30,
25 1975, and for the five succeeding fiscal years.

"(b) Sums appropriated pursuant to this section shall
 remain available for payment of grants or contracts for
 projects for which applications, approved under sections 392
 and 392A, have been submitted prior to October 1, 1981,
 for construction of noncommercial educational television or
 radio broadcasting facilities or for telecommunications
 demonstrations.".

8 CRITERIA FOR BROADCAST FACILITIES CONSTRUCTION
9 SEC. 4. (a) Section 392 (a) (1) of such Act is amended
10 by striking out clause (C) and inserting in lieu thereof "(C)
11 a public or private nonprofit college or university,".

12 (b) Section 392 (d) of such Act is amended to read13 as follows:

"(d) The Secretary shall base his determinations of 14 whether to approve applications for grants under this section 15 and the amount of such grants on criteria set forth in regula-16 tions and designed to achieve (1) a strengthening of the 17 capability of existing noncommercial educational broadcast 18 stations to provide local services; (2) the adaptation of 19 existing noncommercial educational broadcast facilities to 20 broaden educational uses; and (3) extension of noncommer-21 cial educational broadcast services, with due consideration 22 23to equitable geographic coverage throughout the United States.". $\mathbf{24}$ at the second second

4

2 SEC. 5. The Communications Act of 1934 is amended
3 by adding after section 392 the following new section:

TELECOMMUNICATIONS DEMONSTRATIONS

1

4

21

22

23

24

"SEC. 392A. (a) It is the purpose of this section to 5 6 promote the development of nonbroadcast telecommunications facilities and services for the transmission, distribution, 7 and delivery of health, education, and social service informa-8 tion. The Secretary is authorized, upon receipt of an appli-9 cation in such form and containing such information as he 10 may by regulation require, to make grants to, and enter into 11 contracts with public and private non-profit agencies, organi-12 zations, and institutions for the purpose of carrying out tele-13 14 communications demonstrations.

15 "(b) The Secretary may approve an application sub16 mitted under subsection (a) if he determines:

"(1) that the project for which application is made
will demonstrate innovative methods or techniques of
utilizing nonbroadcast telecommunications equipment or
facilities to satisfy the purpose of this section;

"(2) that demonstrations and related activities assisted under this section will remain under the administration and control of the applicant;

"(3) that the applicant has the managerial and

technical capability to carry out the project for which
the application is made; and

3 "(4) that the facilities and equipment acquired or
4 developed pursuant to the application will be used only
5 for the transmission, distribution, and delivery of health,
6 of education, or social service information.

7"" (c) Upon approving any application under this section with respect to any project, the Secretary shall make a 8 grant to or enter into a contract with the applicant in an 9 amount determined by the Secretary not to exceed the 10 reasonable and necessary cost of such project. The Secre-11 tary shall pay such amount from the sum available therefor, 12 in advance or by way of reimbursement, and in such install-13 ments consistent with established practice, as he may 14 15 determine.

16 "(d) Funds made available pursuant to this section 17 shall not be available for the construction, remodeling, or 18 repair of structures to house the facilities or equipment 19 acquired or developed with such funds, except that such 20 funds may be used for minor remodeling which is necessary 21 for and incident to the installation of such facilities or 22 equipment.

23 "(e) For purposes of this section, the term 'non24 broadcast telecommunications facilities' includes, but is not

5

5

limited to, cable television systems, communications satellite 1 systems and related terminal equipment, and other methods 2 of transmitting, emitting, or receiving images and sounds or 3 intelligence by means of wire, radio, optical, electromagnetic, 4

prother means. 2 "(f) The funding of any demonstration pursuant to this 6 section shall continue for not more than three years from 7 the date of the original grant or contract. 8

"(g) The Secretary shall require that the recipient of 9 a grant or contract under this section submit a summary 10 and evaluation of the results of the demonstration at least 11 annually for each year in which funds are received pursuant 12 to this section.". 13



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

OFFICE OF THE ADMINISTRATOR

OCT 30 1974

-> mr. fyce

Mr. John M. Eger Acting Director Office of Telecommunications Policy Executive Office of the President Washington, DC 20504

Dear John:

I appreciate your recent letter discussing continuity of ATS-6 experimentation and your concern regarding a second mission. We in NASA share your concern, both in not wanting to disappoint the current experimenters and certainly not wanting to contribute to any delay in introduction of commercial services in these important areas. To this end, let me again assure you that we are fully prepared to lend our support to any Federal initiative designed to promote early availability of a suitable alternative.

Discussions with the Department of Defense regarding their provision of a launch vehicle arose out of an expressed interest by Department officials in an extensive experiment program using ATS-F Prime hardware. The program of interest would have required considerable modification and additions to the existing hardware, although the HET capability would have remained. Had this program materialized, the seventh ATS would have continued the experimental mode of its predecessors. We have just been informed, however, that the Defense Department has elected not to go forward with the experiment program discussed and will, consequently, be unable to furnish a launch vehicle.

We have, therefore, begun mothballing the remaining hardware and disbanding the residual work force. We anticipate no further activity involving this spacecraft.

Sincerely,

James C. Fletcher Administrator



Stenter

EXECUTIVE OFFICE OF THE PRESIDENT OFFICE OF MANAGEMENT AND BUDGET WASHINGTON, D.C. 20503

NOV 1 9 1974

The Honorable Lee Metcalf United States Senate Washington, D.C. 20510

Dear Senator Metcalf:

The President has asked me to respond to your letter of October 11, 1974, regarding the ATS-F prime satellite.

At the outset I wish to assure you that the decision to forego an ATS-F Prime follow-on satellite should not be interpreted as a negative judgement of the desirability of the educational and health care services that the ATS-6 satellite is now providing to remote locations in the Rocky Mountain area, Appalachia and Alaska. Indeed, the ATS-6 experiments have highlighted the worth of these important services. As I will explain later in this letter, there are alternative ways of meeting the nearterm experimental requirements for such services without relying on a NASA-funded ATS-F Prime.

You will recall that the Department of Health, Education and Welfare (HEW), in recent testimony before the Senate Aeronautical and Space Sciences Committee, expressed reservations regarding the ATS-F Prime as a follow-on to ATS-6. While recognizing the need for continuing the health and education satellite applications, Mr. William Morrill, Assistant Secretary for Planning and Evaluation, stated that the capacity and geographic coverage of the ATS-F Prime were too limited to permit expansion of the current services, that the ATS-F Prime was an expensive way to maintain satellite capacity for the present users, and that a launch of the ATS-F Prime might discourage the participation of private communications companies in providing the services.

It is important to keep in mind that the ATS-F Prime, which involves the same basic design as the ATS-6, is only one of several possible alternatives for continuing the development of satellite communications for the delivery of educational and health services to remote locations. In NASA's recent testimony before the Senate Aeronautical and Space Sciences Committee, Dr. Fletcher made reference



Herter

EXECUTIVE OFFICE OF THE PRESIDENT OFFICE OF MANAGEMENT AND BUDGET

WASHINGTON, D.C. 20503

NOV 1 9 1974

The Honorable Lee Metcalf United States Senate Washington, D.C. 20510

Dear Senator Metcalf:

The President has asked me to respond to your letter of October 11, 1974, regarding the ATS-F prime satellite.

At the outset I wish to assure you that the decision to forego an ATS-F Prime follow-on satellite should not be interpreted as a negative judgement of the desirability of the educational and health care services that the ATS-6 satellite is now providing to remote locations in the Rocky Mountain area, Appalachia and Alaska. Indeed, the ATS-6 experiments have highlighted the worth of these important services. As I will explain later in this letter, there are alternative ways of meeting the nearterm experimental requirements for such services without relying on a NASA-funded ATS-F Prime.

You will recall that the Department of Health, Education and Welfare (HEW), in recent testimony before the Senate Aeronautical and Space Sciences Committee, expressed reservations regarding the ATS-F Prime as a follow-on to ATS-6. While recognizing the need for continuing the health and education satellite applications, Mr. William Morrill, Assistant Secretary for Planning and Evaluation, stated that the capacity and geographic coverage of the ATS-F Prime were too limited to permit expansion of the current services, that the ATS-F Prime was an expensive way to maintain satellite capacity for the present users, and that a launch of the ATS-F Prime might discourage the participation of private communications companies in providing the services.

It is important to keep in mind that the ATS-F Prime, which involves the same basic design as the ATS-6, is only one of several possible alternatives for continuing the development of satellite communications for the delivery of educational and health services to remote locations. In NASA's recent testimony before the Senate Aeronautical and Space Sciences Committee, Dr. Fletcher made reference to several such alternatives, in addition to the ATS-F Prime, namely: (1) the planned return of ATS-6 in mid-1976 following the experiment in India, (2) the use of Canada's Communications Technology Satellite (CTS) scheduled for launch in December 1975, and (3) the use of commercial satellite services that would be offered by domestic satellite companies.

× 19

2

If satellites and the services they facilitate prove to be viable and beneficial, they should be provided on an operational basis by the private sector rather than by Government-owned satellites which are experimental in design. The Federal Government, with its responsibilities for effecting the improvement of health and education services, could play a stimulative and developmental role. In this regard, I call your attention to H.R. 17406, recently transmitted to the Congress, which would provide authority for HEW to conduct demonstrations, through the use of grants or contracts, in the use of nonbroadcast communications technology (including satellites) for providing health, education and other social service information to remote areas. This authority would enable the Federal Government to assist financially, health and education organizations such as the present users of the ATS-6 services in obtaining similar satellite communications capability from commercial sources.

The objective of such a telecommunications assistance program is two-fold. First, it would provide initial financial incentives. pursuant to the authority created by H.R. 17406, that would encourage commercial domestic satellite systems to provide channel capacity for the delivery of health and education information. These incentives, however, would be designed in such a way that the Government assistance would be phased out as the venture achieves self-supporting status. The second goal is to stimulate the interest of the various health and education organizations that might take advantage of the commercial satellite capability. In this regard, HEW and OTP are coordinating discussions with potential user groups concerning the formation of a consortium of potential users which would coordinate planning and serve as the centralized agent for the purchase of satellite capacity from one or more commercial systems.

In closing, I wish to assure you that the Administration recognizes the unique potential of satellite technology for

•

providing communication links for the delivery of health and education information to people living in sparsely populated areas of the country. We intend to continue on a course which eventually will make this capability available on a self-sustaining, operational basis. In view of your strong interest in the ATS-6 health and education communication project, I am confident that you will lend your support to this effort.

Warm personal regards,

Sincerely,

(Signed) Roy L. Ash

Roy L. Ash Director

cc: Identical letter sent to the following:

The	Honorable	Frank E. Moss
The	Honorable	Mike Cravel
The	Honorable	J. Gleen Beall, Jr.
The	Honorable	Lee Metcalf
The	Honorable	James L. Buckley
The	Honorable	Charles McC. Mathias
The	Honorable	Frank Church
The	Honorable	Bill Brock
The	Honorable	Floyd K. Haskell
The	Honorable	Hugh Scott
The	Honorable	Jacob K. Javits
The	Honorable	Gale W. McGee
The	Honorable	Mike Mansfield
The	Honorable	Ted Stevens





OFFICE OF TELECOMMUNICATIONS POLICY EXECUTIVE OFFICE OF THE PRESIDENT WASHINGTON, D.C. 20504 January 10, 1975

DEPUTY DIRECTOR

Honorable Frederick B. Dent Secretary Department of Commerce Washington, D.C. 20230

Dear Mr. Secretary:

New means for delivering health and educational services have been demonstrated through the Application Technology Satellite Program of NASA, with the participation of the Department of Health, Education and Welfare and other Federal agencies. The Office of Telecommunications Policy, with the Office of Management and Budget, HEW and NASA have supported a policy of encouraging the private sector rather than the Federal Government to provide telecommunications services for this purpose.

A major obstacle to the commercial viability of such a service has been the fragmented nature of the user communities. In an attempt to deal with this situation private users have joined together recently to form a "Public Services Satellite Consortium." The purpose of this organization is to develop a permanent basis for making high-power communication satellite services available to public and private institutions concerned with the delivery of health, educational and other public services.

The present use of the ATS-6 capacity by Federal agencies such as the Veterans Administration and the Indian Health Service suggests the possibility of continued and additional Federal uses. It is therefore appropriate to examine the possible benefits that might be derived from expanded Federal Government use of this type of service. There is also a need to coordinate Federal technical and funding support which may be provided to non-Federal users of such a service, to encourage the evolution of a viable user community. To this end, OTP plans to establish an interagency committee designed to coordinate Federal activities relating to this matter. A meeting to discuss recent developments regarding the availability of these services and the formation of the interagency committee will be held on January 20, 1975. I hope that you or your representative will be able to attend. The meeting will be held at the OTP offices, 1800 G Street, NW, Room 770, at 2 p.m. Please confirm your attendance with my secretary, Mrs. Dolores Rossiter, at 395-3252.

- 2 -

Sincerely, John Eger

Acting Director



OFFICE OF TELECOMMUNICATIONS POLICY EXECUTIVE OFFICE OF. THE PRESIDENT WASHINGTON, D.C. 20504 January 31, 1975

DEPUTY DIRECTOR

MEMORANDUM TO: Russell Drew, NSF Charles Fitzsimmons, HUD Charles Matthews, NASA William Morrill, HEW John Richardson, Commerce Robert Shamaskin, VA Richard Velde, Justice

SUBJECT:

Organization of an Interagency Committee to Coordinate New Communication Satellite Technology Applications

On January 20, 1975, a meeting was held to review recent developments concerning the domestic use of communication satellite systems and to discuss the interest of the Federal Government in this area. A list of attendees at this meeting is attached.

The technology under discussion at the meeting concerns the use of relatively high power satellites in conjunction with low-cost earth terminals. The current NASA-HEW experiments using the ATS-6 satellite to deliver instructional television and medical information to communities in remote areas are examples of applications of this technology. The success of these experiments has generated considerable interest in the creation of a commercial follow-on whereby this service could be provided on an operational basis by the private sector rather than through a government-owned system. Certain non-Federal entities are exploring the formation of a user consortium to implement such a follow-on system.

Those who attended the January 20 meeting agreed that an interagency committee should be established as a mechanism to coordinate Federal support of this effort. This committee would coordinate an analysis of potential Federal uses of a high power communication satellite service and investigate sources of Federal technical and financial support for the initiation of such a service. The results of this analysis and investigation would provide the basis for the development of a comprehensive plan that would facilitate both Federal and private sector application of this technology.

OTP was requested to draft a charter for the interagency committee. Work on this charter is in progress, and the first draft of this charter will be distributed soon for comments.

OTP was also asked to prepare a questionnaire assessing Federal interest and requirements in this area, a copy of which is attached. You are requested to complete this questionnaire on behalf of your agency. This preliminary information will be used as a basis for a more detailed analysis of agency requirements.

Agency responses to the questionnaire are requested by February 14, 1975.

Please return completed questionnaires to:

Mr. Charles C. Joyce, Jr. Assistant Director Office of Telecommunications Policy 1800 G Street, N.W. Washington, D.C. 20504

John Eger Adting Director

Attachment

cc: Robert Brown, VA Matthew Dillon, VA Wilbur Eskite, Commerce James Holland, HEW Albert Horley, HEW Richard Marsten, NASA Robert Powers, Commerce Allen Shinn, NSF Richard Stone, NSF

ATTENDEES

January 20, 1975

NASA

Charles Mathews, Associate Administrator for Applications

Richard Marsten, Director of Communications Programs

HEW

William Morrill, Assistant Secretary for Planning and Evaluation

James Holland, Special Assistant for Telecommunications

Albert Horley, Director, Office of Telecommunications Policy

VA

 Robert T. Brown, Chief, Data Management Directorate
 Matthew C. Dillon, Director, Communications Service
 Robert Shamaskin, Deputy Director, Learning Resources Service

COMMERCE

John Richardson, Acting Director, Office of Telecommunications Robert Powers, Office of Telecommunications

Wilbur Eskite, National Oceanic & Atmospheric Administration

HUD

Charles J. Fitzsimmons

JUSTICE

Richard W. Velde, Administrator, LEAA

NSF

Russell Drew, Director, Office of Science and Technology Policy

Dick Stone

Allen Shinn

OTP

John Eger, Acting Director

Charles C. Joyce, Assistant Director

Terril J. Steichen

Tom Keller

Phillip Balazs

QUESTIONNAIRE

Federal Government Interest in New Communications Satellite Technology Applications

Recent experiments by HEW, VA, and NASA using the ATS-6 satellite have deomonstrated the feasibility of a new communications satellite capability to enhance the provision of certain services. The experiments involved the delivery of instructional television or televised medical information to community receivers in rural, isolated locations across the country. Central to the success of these experiments was the effective use of low-cost (approximately \$5,000) ground receiving terminals.

Many other services could also benefit from this technology. In general, services which require the simultaneous distribution of broadband information or programming from one or a few central sources to a larger number of dispersed receivers on a regular basis are potential candidates for using this technology. Additional flexibility can be added to such a service system by allowing receiving sites a capability to record incoming signals for use at a later time or by offering some locations a limited capability to originate signals.

Technology is currently available to realize cost-effective configurations of such service delivery systems for many applications. A number of potential non-Federal users have organized a consortium to aggregate their requirements into a viable commercial market. There are many possible areas for Federal agency participation. This questionnaire is a preliminary attempt to guage Federal interests and requirements in this area.

Based upon the concept described above, we would appreciate your answers to the following questions. These questions form an initial effort to explore the potential of this technology for Federal applications. Your answers will not be viewed as a commitment by your agency to adopt or pursue applications of this technology in the areas considered. 1. What specific studies has your agency planned or completed which relate to internal Federal applications of the high power communication satellite technology described in the introduction to this questionnaire? (e.g., a study examining the options for transmitting broadband data or video training materials from a central office to regional offices.)

(List study title, project officer or other contact, phone number.)

2. What specific research, development, or demonstration programs has your agency supported or planned which have included or will include high power communication satellite technology? (e.g., HEW's education demonstrations with the ATS-6 satellite for Appalachia, the Rocky MOuntain area, and Alaska.)

(List title, project officer or other contact, phone number)

3. What specific program areas within your agency could potentially be used to support research, development, or demonstration programs related to high power communication satellite technology. Such program areas might deal with communication technology applications, information dissemination, educational programming, training, transition of service provision from public to private sector, response of public institutions toward applying new technology, etc. (e.g., National Science Foundation, Program of Research Applied to National Needs, Telecommunications area; or HEW, National Institute of Education, Task Force on Educational Productivity.)

(List program area, project officer or other contact, phone number)

4. What specific studies (other than those listed above) has your agency planned or completed which relate to the economic or technical feasibility of using broadband communications systems (not necessarily restricted to satellites) for information dissemination?

(List title, project officer or other contact, phone number)

5. What principal staff members in your agency (other than those listed in replies to previous questions) have or might have a potential interest in the application of high power communication satellite technology?

(List name, title, phone number)

6. What interagency committees or study groups do members of your agency participate in which might have an interest in the applications of high power communication satellite technology? (e.g., Interdepartment Radio Advisory Committee, Federal Interagency Committee on Education, Federal Interagency Media Committee.) 7. This questionnaire is being distributed to representatives of NASA, HEW, VA, Commerce, HUD, NSF, and Justice (LEAA). Do you know of specific agencies or programs in other departments which might have an interest in the applications of high power communication satellite technology as described in this questionnaire?

(List department, agency, contact (if known), phone number)

8. What specific privately-funded studies are you aware of which might be useful in suggesting or evaluating applications of the communication technology discussed in this questionnaire? (e.g., studies by the Ford Foundation, Markle Foundation, Rand, various universities, etc.)

(List title, author, source)

February 19, 1975

Dear Governor Andrus:

Your recent letter to President Ford expressed concern that the activities of the Office of Telecommunications Policy (OTP) would be curtailed in the coming fiscal year. You felt this would jeopardize the continuing effort of that Office in working with State and regional entities to bring the benefits of telecommunications service to rural areas of the United States.

After considering the role of OTP, we have determined that formulation of communications policy is a role best performed in the Executive Office. As you stated in your letter, this provides a focal point at the highest level of the Executive Branch to coordinate the activities of the Federal agencies that are supporting the development of telecommunications systems for health, education, and other public service purposes. I am aware and supportive of the efforts of OTP and other government agencies to facilitate Federal, regional, and State cooperation in this regard, particularly the current experimentation with communications satellites in the Rocky Mountain West, Appalachia, and Alaska.

These experiments have shown that communications technology has the potential of reducing the cost of improving the quality of health, educational, and other public services in sparsely settled areas and small rural towns and cities. It is appropriate for the Federal Government to further the partnership among States, regional organizations, nonprofit institutions, and private enterprise to bring the benefits of expanded public services, educational and cultural opportunities to the residents of our Nation's rural areas.

This Administration will continue to take the initiative to assure an even more effective partnership in serving our rural citizens. I am pleased to know you find OTP to have played an important leadership role in this effort.

Sincerely,

Geoffrey C. Shepard Associate Director Domestic Council

Honorable Cecil D. Andrus Governor of Idaho Boise, Idaho 83706 bcc: Mr. Henry Goldberg, OTP



REMARKS OF

15 012

4

147

John Eger, Acting Director

Office of Telecommunications Policy Executive Office of the President

Before the

Public Service Satellite Consortium Organizations Meeting

February 20, 1975

Royal Inn at the Wharf San Diego, California An astute observer of human events once made an observation which merits repetition for this group assembled today. He said: "There is nothing more difficult to take in hand, more perilous to conduct, or more uncertain in its success than to take the lead in the introduction of a new order of things."

Indeed you face formidable tasks -- you must define your needs, identify sufficient funds to establish an economic base, and strike an agreement which mutually benefits you and the supplier of satellite capacity. You already have made great strides. However, if you accomplish all these tasks, it could well result in a new order of things in both satellite communications and in the delivery of a whole array of instructional, medical, cultural and other public services.

I am pleased, therefore, to be here today to applaud your efforts to date; to observe that in all things worthwhile, seldom is the jounry fron concept to implementation as smooth or as direct as anticipated or hoped for; but most of all, to communicate our sincere belief that you are pursuing a worthy goal, a worthy idea, an idea whose time has come.

-2-

I hope you know, the Administration endorses the concept of a consortium of users joining together to make vital public services available via space technology. Among other reasons, we believe, and OTP policy supports the belief, that the Federal Government should not compete with the private sector in satellite service offerings. Accordingly, once a technology, such as the NASAdeveloped ATS-6, has been demonstrated successfully, and once applications for that technology, such as the HEW-sponsored Health/Education Telecommunications program, have been proven possible, that technology should be transferred to the private sector. For if the experiments have been successful, then it is to the public benefit that the user incorporates them into his on-going programs, and -- unburdened by Federal Governmental constraints -- that he begins to chart his own future for the provision of such vital services whether by satellite or any other technology.

About two years ago, NASA announced that once the ATS-6 experiment was completed, NASA would remove itself from the further development of space hardware already sufficiently refined for commercial applications. NASA Administrator James Fletcher told a Senate Committee last year that commercial alternatives should be considered in providing a follow-on to the ATS-6 and that the follow-on should "be considered as a potential operational, or at least quasi-operational, vehicle as opposed to an experimental satellite." The apparent success of the ATS-6 has therefore brought us to this point of public-to-private transition.

-3-

Likewise, having demonstrated that there are potentially sound educational and health applications using satellites, HEW made similar observations. It was noted, however, that in the human services field, no one user could immediately underwrite the whole costs of service. Consequently, OTP, in conjunction with HEW, undertook an evaluation of the feasibility of moving these experiments into the real and operational world and of transferring this activity from the Federal Government to the private and non-Federal sector. We sought a mechanism by which this transfer could be accomplished:

Your presence and show of interest here today I believe significantly increases the likelihood that the best mechanism is the user consortium -- for the consortium can provide public service satellite users with needed economies of scale, and satellite and service suppliers with enough business, to make such an undertaking a worthy and viable endeavor. In theory, at least, the aggregation of enough users acting in concert to buy commercial satellite services greatly enhance the possibility of a successful transfer.

In addition to the purely economic benefits of an aggregate of users, the consortium approach is attractive for another important reason. In an age when telecommunications cuts across nearly every aspect of our lives and when remote regions of our Nation are quite properly receiving renewed attention, satellite technology can in many instances provide health, education, social and entertainment services to these sparsely settled areas without greatly increased costs or use of transportation or energy resources. In the long term, further development of such satellite applications can indeed improve the quality of life in rural America, as well as for other sectors of these United States.

-5-

The future is bright, for as a practical matter, we know that an increase in the number of users in an effort such as yours should result in a corresponding decrease in the distribution cost per user and in a rise in the demand for program software translated into public services. However, we know, another practicality is that as the number of users increases so also does the diversity of user needs. The problem before you then becomes one of having to accomodate often widely varying individual needs, and of having first to satisfy immediate user requirements without foreclosing longer range objectives for future development.

As I indicated earlier, this, obviously, is no simple undertaking. As we all know, reaping benefits of any new technology, including satellites, ultimately turns on the question of dollars and cents. You must therefore meet head-on the major obstacle to satellite distribution of social services, which is not the technology itself, but rather the availability of resources. Regardless of how you characterize the task, the challenge ahead of you must include the difficult job of setting priorities, of sifting through important service demands and of matching them to the limited resources available. The challenges of course are yours. For Government should not dictate in so sensitive an area of private enterprise.

-6-

Understandably, however, a need exists for Federal assistance in identifying resources and defining the appropriate Federal role in support of your general endeavor. In its role is coordinator for Executive branch efforts in telecommunications, OTP has, as reported yesterday, already met with certain other Federal agencies to determine the level of interest they may have in making use of satellite services and to identify Federal resources that could be allocated to satellite services. A large part of this Federal effort is, of course, an attempt to eliminate duplication of efforts among potential Federal satellite users and to maximize effective working relationships between such groups, as yours and the Federal Government. To the extent practical, OTP will continue to serve enthusiastically as a focal point for Federal policy regarding your effort. We truly want to see you succeed in this endeavor. And, again, I wish to assure you of both our cooperation and assistance.

-7-

443

Thank you.